







investigator should not accept such challenge; rather more productive response should be stated like he is not the first-person interview by the investigator. It is the experience and skill of the investigator to tackle the situation by making the narcissistic subject to be cooperative for fair assessment of his credibility and truthfulness so that relevant issues can be discussed.

### UNDERLYING PRINCIPAL OF BEHAVIOR ANALYSIS

There are three distinct different channels in which we communicate. An 'abecedarian principle of behavior symptom analyses is that Innocent subjects send the same communication on all three channels of communication. Deceptive suspects may send different message within the three channels of communication. One order of this possible symptom of deception is called 'incongruous behavior' because the suspect's non-verbal behavior contradicts what the suspect is saying on the verbal position. Emotional and cognitive components play important role in Deception framework. Emotionally the process of deception can initiate a stress reaction via guilt regarding the deceptive act or from fear of detection and the potential response to such a revelation. The resulting stress reaction manifests itself with the activation of the sympathetic nervous system. This activation drives a number of potential innate verbal, non-verbal, and paralinguistic behavioral responses designed instinctually as a component of the fight and flight system typically activated in times of stress.

### VERBAL BEHAVIORAL ASSESSMENT

At the time of interview on the basis of verbal Behavioral Assessment Expert can identify deceptive suspects who write their statements from creation rather than from real facts. Expert can ask questions in following different ways:

1. Open questions to get information from the suspects
2. Goal directed questions to force the guilty to lie
3. Projective questions to assess unconscious verbal cues
4. After - interview questions to find out the truthful subjects

During Interview generally deceptive Subject attempts to ignore the portion of time when the actual crime was committed. Any verbal statement given by the subject can be divided into three portions before the crime event, during the crime event and after the event. If the statement is balanced in three portions the probability is greater that the statement is true. If any portion of the statement is missing or incomplete, then the probability is greater that the statement is false. The usage of words is the third type of emotional sign. Anxiety and maybe lying might be signaled by one-word replies or needlessly elaborated responses. When questioned "Where is your friend's baggage?" a brief reply of "checked" or a long-winded description about what was in

the baggage could suggest anxiousness and probable fraud. In one important case of Murder during interview the statement written by a subject shows a great deviation from the balanced norm. Expert conclude the subject is telling lie and after other Forensic input it was clear that subject was involved in the case under investigation.

### EVALUATING THE PARALINGUISTIC BEHAVIOR

The paralinguistic is a part of communication and is considered to be the best source of deception indication during an interview in a criminal investigation as it is less controlled by conscious mind.

Various parameters on which paralinguistic behavior has been evaluated are being discussed below:

**Response latency:** Response latency is the length of time between the last word of question of the Expert and the first word of answer started by the subject. It is mentioned that the truthful subject takes very less time to answer where as a deceptive subject takes time to respond to any question. Generally delayed responses to any factual question should be considered doubtful. All parameters of response latency should be established by the investigator to determine whether the subject is truthful or deceptive. Deceptive subjects show consciousness during their delayed latencies and also try to disguise by stalling tactics. Deceptive subject sometimes tries to manipulate by repeating the same question asked by the investigator but truthful subjects are straight forward with their answers.

**Response delivery:** It is the clarity rate and pitches shown during the response by the subjects which are variable. It can be consistent or inconsistent within the verbal content of the person. The truthful subjects show high rate and pitch to relieve the events and to disclose the facts whereas the rate and pitch of deceptive subject decreases as they edit the information or manipulate the incident. A truthful subject speaks clearly in an appropriate manner to get his response understood by the investigator but the deceptive subject tries to hide information, talks quietly, mumble during his response.

**Early Responses:** It is another parameter to evaluate the paralinguistic behavior related to response timings. Truthful subjects show nervousness and anxiety with their early responses especially at the beginning of the interview while the deceptive subject show ambitious behavior to get prepared to lie in their answers and generally show early response during middle or end of the interview.

**Continuity of the Response:** The flow of content is very important to understand by the investigator what subject is conveying in his response. A truthful subject is spontaneous, maintains flow and continuity in his statement. A deceptive subject show stops and start behavior in which he starts with his answer but suddenly stops and changes the direction of his response.

## NON-VERBAL BEHAVIORAL ASSESSMENT

During Interview Deceptive Subject feel internal anxiety and different emotional state to Innocent Subjects. During Internal anxiety situation the Mind “turns the body off” and the subject will focus only on verbal level. The actual meaning of the verbal word may be modified by one or many Non-Verbal Cues such as facial expressions, micro-expression, Gesture and Posture and other bodily activities. Additional nonverbal cues indications of anxiety and possibly lying include continually touching themselves, such as plucking through clothing or rubbing the forehead, sitting in a stiff stance, or twisting and signaling continuously.

Facial action, the reaction of different body parts, wordings, and way of speaking are the four categories of indications. Although no one cluster may be deemed reliable as an indicator of deception, the collection as a whole is beneficial. To put it differently, any one of these signs will not go far in detecting deceit, but when used collectively, the chances of finding a liar are much increased. Frequent blinking is perhaps the most striking physical indication of mental discomfort. A spike in blinking rate gives a bad hedonic (thinking) attitude and maybe lying, until there is a neurological disorder of some kind of actual problem, such as a particle of grit stuck under the contact lens.

During ‘Behavior Analysis Interview’ Subject’s posture, gesture reveals his/her confidence, emotional involvement and Interest. The truthful subject’s posture will be upright in the chair and assure direct communication to the Expert. A deceptive Subject may crouch in the chair and appear distant and disinterested in the interviewing process. Lastly, an exceptionally high-pitched condescending tone, severe pitch fluctuation, or a stoic, monotone voice could all be symptoms of anguish and lying.

## LEGAL ISSUES

The role and function of judiciary and Forensic Psychologist are entirely different but to gain the common man of effective judiciary system Forensic Psychological techniques help the judiciary to draw conclusion. Courts have perceived many difficulties with expert evidence and the court must satisfy that evidence is relevant or not.

The report submitted in the court must be one which can affect rationally the decision arrived at. Forensic Psychologist make an observation on some aspect of the case based on the Forensic Psychological techniques submits the observation, result and inferences to the court and how to continue it with other scientific evidence that is the work of the judge and the jury.

A forensic psychological technique is the provision of psychological information for the purpose of deriving a legal decision.

BAI is an invaluable aid to investigation and it should be emphasized that it is an aid and it does not supplant or replace other method of investigation. The opinion of the Forensic Psychologist will have the persuasive value and needs to be read and interpreted in conjunction with other material evidences, interviews, interrogation reports and the professional opinion thereof.

It can be cited as the corroborative evidence. Besides, the same may be admitted subjected to judicial scrutiny and discretion. The expert witness by virtue of his/her education, profession, and experience is considered to have special knowledge of the subject beyond that of the average person. So that he/she may believe when he/she makes statement as it would be authentic and factual loaded with thorough knowledge, evidence, facts and figures.

Judicial officer assign the probative value of the evidence and it is based on facts of the case and it differs from case to case. Courts are not bound to accept the opinion of the Forensic Expert and the discretionary power has been given vide section 293(i) criminal procedure code. Forensic Psychologist deposes in the court as an Expert witness to provide professional Expertise based on his/her experience, education and profession. Along with other supporting material evidence and it have greater persuasive value and the report given by Forensic Psychologist used as corroborative evidence.

## CONCLUSION

Lying calls for the deceiver to maintain information straight, make the tale believable, and resist scrutiny.

In both corporate sector and police-crime investigations when a defendant declined to undergo a polygraph test, the BAI functioned admirably. Hundreds of examiners have been trained to perform behavioral assessment interviews, and their testimony verifies the interview's efficacy in prosecution and defense cases. During any interview process in crime investigation there are basically four opportunities, per question, to assess if the person is hiding something, troubled by a question, has some sort of guilty knowledge or lying.

There are three ways to catch liars: (1) by observing how they behave (2) by listening to what they say and (3) by measuring their physiological responses.

The interview of suspects generally forms an essential part of criminal investigation. The quality and fairness of those interviews are crucial to guarantee justice within the process and forms a successful investigation. To identify possible psychological vulnerabilities of a suspect, police officers have to apply the knowledge of psychology to their work. The role of Psychology based investigation techniques has become broader and all investigation agencies are much more aware about its importance in court room. A comprehensive psychology assessment to investigate crime

cases helps in assessing the involvement or innocence of an individual in an offence under investigation. Success of any investigating officer depends on how quickly and efficiently he is able to identify the genuine offender from the crime scene. During investigation police raise their level of interrogation skills and also supplement with the use of other aids to interrogation with the help of different Forensic Psychological techniques.

Police has lot of pressure from seniors, victim, media, public etc. to arrest the culprit, solve the case early. Behavioral Assessment Interview is used in early stages of any investigation to eliminate the suspects. It's another crucial role is to extract the truth from the individual who have committed the crime and concealing the information or providing misleading details. It is a structured interview technique designed to assist the investigator in forming an opinion about the suspect of his innocence or involvement in a crime by analyzing his verbal, non-verbal responses in a scientific manner.

There is no common or universal behavioral cue set that identifies deception across all individuals. The verbal, non-verbal responses are analyzed in a scientific manner based on the observation derived from Behavior Assessment Interview. While the presence of a universal cue would be convenient, the usage of behavioral information still can contribute a great deal to deception prediction if appropriately analyzed. For many years psychologists have done laboratory experiments in an endeavor to explain differences between the behavior of liars and of people telling the reality. By studying large groups of participants, researchers have identified certain general behaviors that liars are more likely to exhibit than are people telling the truth.

The report given by Forensic Psychologist on the basis of 'Behavioral Analysis Interview' and the interpretation help the Law enforcement agency to draw a logical conclusion as to whether the subject is guilty or not. Behavioral Analysis Interview technique is a non-accusatory investigative interview technique that allows an examiner to collect information from the suspect to infer whether his statement is truthful or otherwise.

This technique saves time, properties and verifies that the information provided is accurate. To be a good interrogator the Investigating officer need to be a good actor and must have an insight of human psychology. Police officer should be able to act according to age, profession and intellect of the individual suspect. It has been recognized that the examiner's skill has an important effect on the validity of Behavioral Analysis Interview. Examiner's experience is an essential element reported by investigators and has often been used to explain differences in accuracy rates. As a Police officer and I.O. of many cases, Behavioral assessment interview techniques helped in verifying statements of accused,

suspects, witnesses and complainants. The interpretation given by the Expert helped to come to a logical conclusion as to whether the subject is guilty or not. Behavioral Assessment Interview Technique allows the interviewer to assess nonverbal and verbal behavior without the need of attachments to make accurate determinations of truth or deception. As neither Supreme Court, nor the NHRC guidelines restricts the applicability and utility of the Behavioral Analysis Interview. No permission of the Court is required for its administration, except written informed consent of the suspect.

In India during a short span of years' Behavioral Assessment interview has provided scientific support in criminal investigation in many cases of national and international importance. The Behavioral Assessment Interview in conjunction with other forensic reports and other material evidence provided to further lead to the investigation. With the help of much Forensic Psychological technique various criminal cases have been successfully solved by the Investigating officer and accepted in various courts as corroborative evidence. In India, a good beginning was made by different Forensic Science Laboratory by providing the facility of different Behavioral Analysis Interview for the crime investigation purposes.

Behavioral Analysis Interview are applicable by law enforcement professionals in criminal and civil cases to investigator or identify the deceptive person and to exclude the innocent person from the list of the suspects through noninvasive analysis of verbal, nonverbal, behavioral and psychological cues. Psychological based Investigation techniques will help to obtain maximum understanding of the crime that has been committed from in all possible angles, so that justice can be done to the innocent and the real criminal is punished in criminal trials.

## REFERENCES

1. Bond CF Jr, DePaulo BM (2006) Accuracy of deception judgments. *Pers Soc Psychol Rev* 10: 214-234.
2. Davis M, Markus KA, Walters SB, Vorus N, Connors B (2005) Behavioral cues to deception vs. topic incriminating potential in criminal confessions. *Law Hum Behav* 29(6): 683-704.
3. DePaulo BM, Lanier K, Davis T (1983) Detecting the deceit of the motivated liar. *J Pers Soc Psychol* 45: 1096-1103.
4. DePaulo BM (1992) Nonverbal behavior and self-presentation. *Psychol Bull* 111: 203-243.
5. Ekman P, Frank MG (1993) Lies that fail. In *Lying and Deception in Everyday Life*, M. Lewis, and C. Saarni, Eds. G.P, NY, pp: 184-200.
6. Ekman P, O'Sullivan M, Frank MG (1999) A few can catch a liar. *Psychol Sci* 10(3): 263-266.

7. Goldstein AM (2007) *Forensic psychology: Emerging topics and expanding roles*. Hoboken, N.J.: John Wiley & Sons.
8. Hocking JE, Leathers DG (1980) Nonverbal indicators of deception: A new theoretical perspective. *Commun Monogr* 47: 119-131.
9. Hovarth F, Jayne B, Buckley J (1994) Differentiation of truthful and deceptive criminal suspects in Behavior Analysis Interviews. *J Forensic Sci* 39(3): 793-807.
10. Langfeld HS (1921) Psycho-Physical Symptoms of Deception. *J Abnorm Psychol* XV: 318-328.
11. Miller G R, & Burgoon J K (1982) Factors affecting assessments of witness Credibility in N. L. Kerr and R. M Bray (Eds.), *from psychology of the courtroom* NYA, pp: 169-194.
12. Porter S, Brinke LT (2008) Reading between the lies: Identifying concealed and falsified emotions in universal facial expressions. *Psychol Sci* 19(5): 508-514.
13. Vrij A (1995) Behavioral correlates of deception in a simulated police interview. *J Psychol* 129: 15-28.
14. Vrij A, Edward K, Bull R (2001) Police officers' ability to detect deceit: The benefit of indirect deception detection measures. *Leg Criminal Psychol* 6: 185-196.