Tools for the Detection of Lying and Malingering in the Medico-Legal Interview Setting

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In the medico-legal context, expert witnesses are required, under Practice Direction supplement CPR Part 35 for Experts and Assessors, to “indicate if ..... they are not satisfied that an opinion can be expressed finally and without qualification” (p.10). This declaration in an expert report for the Courts in the UK requires that the expert would have assessed the confidence they have in the opinion expressed in their report. Whilst experts preparing a medico-legal report will therefore draw upon their specific professional expertise as the basis for their confidence in the opinions expressed, few experts will have formal training in the assessment of deception, and not all will be readily familiar with the broader literature, theory and research relating to assessment of deception and malingering (e.g. Resnick, 1995; Rogers, 1997; Hall & Hall, 2006; Drob, Meehan & Waxman, 2009; Kramer & Gagliardi, 2009).

There is an established literature in psychology on "lying" which addresses key aspects relevant to the evaluation of an individual's presentation at interview (e.g. Vrij, Granhag & Porter, 2010; Vrij, 2008; Vrij, Akehurst, Brown & Mann, 2006; Vrij, Akehurst, Soukara & Bull, 2002). This psychological literature can play a key part in the necessary knowledge base for interviewers who must evaluate the validity of an individual’s reported difficulties, and assess the confidence they have in the interview process.

This article briefly reviews research relating to malingering, lying and deception in so far that it relates to the medico-legal setting.

Difficulties in lie detection

Extensive research has demonstrated that people are usually not good at detecting lies. In a comprehensive meta-analysis, Vrij (2008) showed that participants were able to correctly identify liars and truth-tellers between 45 and 60% of the time (where 50% can be expected by chance alone). Professionals, including members of the Criminal Intelligence Agency, have been shown to perform only slightly better than most other people (Ekman, O'Sullivan, & Frank, 1999).

People are generally poor at detecting lies for a range of reasons (Vrij, Akehurst & Mann, 2006; Akehurst, Kohnken, Vrij & Bull, 1996). Detection is a difficult task, as a typical deceptive nonverbal response does not exist (Vrij, 2008). That said, some nonverbal responses are more likely to occur during deception than others (see Vrij (2008) for a full review of research) however the differences are extremely small. For example, liars tend to make fewer movements with arms, hands and fingers than truth tellers (Vrij, Akehurst, Brown & Mann, 2006; Vrij, Akehurst, Soukara & Bull, 2002). They may speak more slowly, and pauses may be longer in length. One reason for these differences is that liars sometimes have to think harder than truth tellers (making up a plausible story is often more difficult than recalling truthful information), and a greater cognitive load results in a neglect of body language, reducing overall animation and increasing speech disturbances.

Furthermore, liars may be afraid that their behaviour will give their lies away, and therefore may try to suppress what they consider to be risky behaviours in order to avoid getting caught. Numerous studies have shown that people (including police officers, social workers and customs officials) hold the same erroneous beliefs about deceptive body language (Vrij, Akehurst & Knight, 2006; Vrij, Akehurst, Soukara & Bull, 2004; Vrij, Edward & Bull, 2001). For example, as there is a widespread belief that liars increase their movements, then liars will try to refrain from making too many movements. When people try to do this, however, they sometimes tend to over-control themselves, with behaviour that looks rehearsed and rigid as a result. An observer unfamiliar with an interviewee's normal behaviour, however, may not be able to assess whether the behaviour observed reflects atypical suppression.

The difficulties in placing confidence in an expert's ability to detect dishonesty in someone's behaviour (especially based on nonverbal behaviour) has led to efforts to identify aspects of what is said or written which might more reliably indicate attempted deception. A verbal veracity assessment tool used by some psychologists is Statement Validity Assessment (SVA). At the core of SVA is Criteria-Based Content Analysis (CBCA), a list of nineteen criteria which are thought to be more frequently included in truthful, as opposed to false, accounts (Steller and Köhnken, 1989). Criteria Based Content Analysis (CBCA) was developed as a systematic assessment of the veracity of written statements which directs the interviewer to active consideration of nineteen identified aspects of someone's description of an event or experience. Those key aspects can also serve as a guide to health professionals assessing information provided verbally at interview for medico-legal reports, although some adaptation may be required.

Criteria Based Content Analysis:

General Characteristics

1. Logical structure
2. Unstructured production
3. Quantity of details

Specific Contents

4. Contextual embedding
5. Descriptions of interactions
6. Reproduction of conversation
7 Unexpected complications during the incident
8. Unusual details
9. Superfluous details
10. Accurately reported details misunderstood

11. Related external associations
12. Accounts of subjective mental state
13. Attribution of perpetrator's mental state

Motivation-Related Contents

14. Spontaneous corrections
15. Admitting lack of memory
16. Raising doubts about one's own testimony

17. Self-deprecation
18. Pardoning the perpetrator

By way of illustration, verbal cues of deceit, such as, '*description of interactions', 'unusual details'*, and '*reproduction of conversation'* are less likely to be present in fabricated stories, because they are typically difficult to fabricate. A further criterion, *unstructured production* in CBCA refers to the scattering of information throughout an interviewee's description of difficulties as opposed to presentation of details in a structured, coherent and chronological order. For example, a truthful interviewee may start by explaining the core of the event ("It was a horrific, and I haven't been able to drive my car since"), may then describe the beginning ("I had stopped at a roundabout, and was leaning on the steering wheel while I waited for the lights to change"), may then give information about events that happened later ("There was a terrible screech of his brakes just before he hit me"), and then go back to the beginning ("I was going to pick up the children from school before he ran into the back of me"), and so on. It is suggested that an interviewee who is lying is more likely to give his or her account in a rehearsed and chronological manner.

Similarly*, 'superfluous details'*, an individual's description of details in connection with an accident or event which are *not* essentially relevant to any understanding of the event or for apportioning of blame, such as someone's report that they had been concerned only for the collection of their children from school, are less likely to be observed in liars who are keen to stick to the main topic of the interview. For a detailed review of issues relating to the reliability and validity of the CBCA technique, see Horowitz, Lamb, Esplin, Boychuk, Krispin & Reiter-Lavery (1997), Blandón-Gitlin, Pezdek, Lindsay, and Hagen (2009) and Vrij (2005).

Statement Validity Assessment also includes an additional series of issues which might be addressed by an interviewer to assist in detection of endeavour to deceive, as well as offering guidelines for reflection on the quality of the interview itself. Again, some adaptation may be required for the medico-legal context.

Statement Validity Assessment Checklist:

Psychological Characteristics
1. Inappropriateness of language and knowledge
2. Inappropriateness of affect
3. Susceptibility to suggestion

Interview Characteristics
4. Suggestive, leading, or coercive questioning
5. Overall inadequacy of the interview

Motivation
6. Questionable motives to report
7. Questionable context of the original disclosure or report
8. Pressures to report falsely

Investigative Questions

9. Inconsistency with the laws of nature
10. Inconsistency with other interviewee's description of difficulties
11. Inconsistency with other evidence

Whilst the SVA guidelines may assist interviewers in so far that they serve as reminders of some key issues that might usefully be considered, it remains essential that the interviewer actively addresses such issues within the context of the interview setting. Thus, it must be remembered that liars and truth tellers might display the same or similar responses. For example, individuals seeking compensation may present their story in a relatively structured way due to their having presented that story previously in various settings. This could be confused with the behaviour of liars.

Truthful individuals in compensation settings may experience strong emotions too. For example, they may be anxious, fearing inappropriate disbelief by interviewers, rejection of valid information by interviewers, and, in some cases potentially, anxiety in the presence of authority figures. Annoyance at procedures due to the inconvenience imposed on individuals can complicate interpretation of presentation.

Errors in reporting may be associated with the extended duration of the litigation process, such that individuals may genuinely have difficulty in recalling detailed information with regard to events which may have occurred some three, five or even seven years previously. Anxiety as regards their fearing inability to recall important information may disrupt their behaviour.

Another assessment tool, Reality Monitoring (RM) can also be used to examine the quality and credibility of detail included in a statement (Johnson & Raye, 1981). This approach is based on the proposal that memory characteristics of experienced events differ qualitatively and quantitatively from characteristics of fabricated events. Thus, it is suggested that memories originating from true experiences should include higher frequency of perceptual information (visual details, sounds, smells, tastes and physical feelings related to the event), contextual information (information regarding when and where the event happened), and affective information (details about emotional reactions to the event) than accounts based on fabrication. It is suggested that fabricated accounts would involve more information requiring cognitive operations, such as details about thoughts, reasoning, and inferences of events (e.g. "I must have had my coat on as it was very cold that night") than truthful accounts.

Malingering

The forensic psychology literature on lying has tended to focus on a conception of dishonesty as active, deliberate and clear cut – either what you say is wholly true or wholly untrue. In medico-legal settings, however, the detection of partial truth may be particularly relevant. Resnick (1995) distinguished between;

Pure malingering; feigning non-existent disease
Partial malingering; exaggeration of existing symptoms

False imputation; falsely ascribing real symptoms to unrelated cause

Resnick (1997) additionally suggested that some broader aspects might be considered as the clinician seeks to test the validity of the claims made at interview. He identified the following;

Motivation to exaggerate
Irregular employment and job dissatisfaction
Previous claims for injuries
Lack of co-operation at interview
Psychological test results

These issues might be relevant to the identification of increased risk of dishonesty in relation to reporting difficulties. However, such issues may not necessarily be associated with deliberate and conscious endeavour to deceive.

Ferrari et al., (1999) suggested that the prognosis for injuries in medico-legal settings can also be affected by broader contextual aspects, such as: blame, expectations and labelling, attention to symptoms, social factors, litigation and the sick role.

Rogers (1997) provided a list of factors a clinician might usefully consider in interview, which to some degree overlap with the CBCA and RM criteria. Rogers suggested that a clinician look out for:

Rare symptoms (honest respondents might describe symptoms that a malingerer might not know about),
Indiscriminate symptom endorsement (confirming presence of all symptoms asked about),
Obvious symptoms (observable signs of difficulty),
Improbable symptoms (unlikely difficulties in the context),
Attention to presence of improbable combinations of symptoms,
Presence of symptoms of improbably extreme severity

Lanyon (1997) has suggested that, in assessing likelihood of malingering, an individual's accuracy of knowledge about a disorder is important, and investigators might usefully consider whether or not someone is familiar with information about the experiences and symptoms they report which would not be readily known. The assessor might also consider whether someone presents information consistent with common expectations for an injury or disorder which in fact do not reflect empirical validity. The assessor can also look for exaggeration of difficulties typically associated with an injury at a level above and beyond that expected among individuals genuinely experiencing the identified difficulty.

In addition, a clinician has the opportunity to review other sources of information such as medical records, and any other expert reports. Extensive and detailed questioning at interview will provide the opportunity to evaluate the validity of the informant's story (Vrij & Easton, 2002).

Psychological tests may be of assistance, and can serve to alert the clinician to the possibility of inconsistency in presentation, but frequency of false positive and false negatives needs to be borne in mind. Further, Maguire, Harvey and Shores (2001) have suggested that pure malingerers (those inventing history of pain, for example) may tend to produce similar scores to those of "real" pain patients on psychometric tests, whilst partial malingerers (those exaggerating existing pain) tend to substantially over-endorse symptoms.

It is therefore beholden on the clinician to interpret the information before them at interview, rather than rely uncritically on tests and assumptions. Edens, Otto, Buffington, Tomicic, and Poythres (2001) for example, challenged the idea that deception can be readily detected by clinicians on the basis that malingering will be unsophisticated. Their research showed that successful malingerers (asked to feign a mental disorder) tended to;

Endorse a lower rate of legitimate symptoms
Avoid overly unusual or bizarre symptoms
Base their responses on their personal experiences

Helping clinicians reflect on the confidence in the opinion they have formed.

The opinion of an expert witness should be based on cited evidence and result from a comprehensive assessment. The structure of the interview, the relevance of areas covered, the recognition of limits of expertise, and the awareness and consideration of alternative interpretations of evidence must be taken into account. Reference to relevant research, use of interviewing guidelines, and appropriate use of psychometric and other objective aids to assessment, may serve to give weight to an opinion.

On reviewing the literature on lying, Vrij, (2008) suggested three different ways of catching a liar. First, by observing non verbal behaviour, second by analysing what is being said, and third, by examination of physiological responses. However, the first two areas are beset with difficulty in practice, and so the emphasis is placed in the medico-legal personal injury environment on assessing what is said, and, where appropriate, undertaking other investigations such as physical examinations, psychometric tests and interpretation of video filming, (Vrij and Easton, 2002).

Expert witnesses in the medico-legal setting can make their task easier if they encourage their clients to talk, and thus examinations should not be rushed. They may start with general open questions, offering the client the opportunity to begin their story, which then becomes the focus for requests for elaboration. Someone who is endeavouring to mislead wholly or in part will have to think of plausible answers to the questions put to them, avoid contradicting themselves, and give information which is consistent with everything which the observer knows or might find out. It will often be useful to ask the same question at different stages in the assessment interview, as contradictions might (although not necessarily) indicate deceit. Recent research also suggests that unanticipated questions (see Vrij et al, 2009) and questions that elicit additional cognitive load (see Vrij, Granhag, Mann & Leal, 2011) may help distinguish between fabricators and truth-tellers.

Where deception is suspected, the assessor might most appropriately seek to rule out alternative explanations for the suspected responses, rather than over-zealously making accusations of lying.

Conclusion

In the clinical setting, careful observation targeting the deception cues detailed above, extended interview probing, without revealing all available information, together with such additional tests as may be appropriate, may increase the chance of detecting malingering. However, the only way to be confident about the veracity of an interviewee's report is to thoroughly investigate the issue, and search for collateral evidence (medical reports, statements of independent witnesses, forensic evidence) which supports or contradicts claims made.

There is an extensive literature which might be appropriately consulted by the expert witness. In the first instance, the following sources might provide a useful overview of the key themes: Resnick (1997 & 1995); Rogers (1997); Steller and Köhnken (1989) (Criteria Based Content Analysis/ Statement Validity Assessment); Johnson & Raye (1981) (Reality Monitoring) and Ferrari et al (1999).

Awareness of the relevant literature and/or formal training in the relevant techniques may be a requirement for expert witnesses in the future. Some of the existing techniques described here may need to be adapted to the medico-legal setting. In the interim, however, the expert assessor's attention might usefully be directed to the literature on some key issues which appear relevant to both the forming of opinions and to the expert's expression of confidence in their opinions.

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