Lie detection during the investigative interviewing

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Abstract

An investigative interview is one of the most used criminalistics method for the purposes of detection, clarification and proving of criminal offenses. It is almost impossible to imagine a criminal investigation without gathering information from witnesses, victims or perpetrators of a criminal offense. The main objectives of the investigative interview are gathering as much information as possible about the circumstances of the criminal offense and, of course, gathering truthful information. In this sense, some methods, such as cognitive interview, can help improving interviewees recall and thus in gathering more information about criminal offense. On the other hand, the application of lie detection methods helps in evaluation of credibility of the gathered information. This ability to recognize lying can be a key factor for the success of the entire investigative interview.

Police officers, criminalists, prosecutors, lawyers, judges and all other subjects in criminal proceedings should be trained to recognize verbal and non-verbal indicators of deception. There are also important interviewing and interrogation skills because, on questioning tactics mostly depends appearance of indicators of deception. About the level of their education depend whether they will properly evaluate statements of victims, witnesses or suspects and then on the basis of these statements make the correct decisions. Therefore, the central part of this article is focused on scientifically based knowledge about lies and lying, i.e. on importance of accurate recognizing verbal and non-verbal indicators of deception. Namely, numerous scientific studies point out that legal professionals are not significantly better in lie detection than average citizens.

Keywords: lie detection, investigative interview, interrogation, indicators of deception.

1. Introduction

One of the most used criminalistics methods for detecting, clarifying and proving the perpetration of criminal offenses is an investigative interview. During the criminal investigation, information's are gathering from witnesses, victims or perpetrators of criminal offenses, and the main purpose of the investigative interview is to gather as much quantity and quality of relevant information as possible about the circumstances of the perpetration of the criminal offense and the participants. With that purpose some methods, such as cognitive interview, can help improve the recall of interviewees and thus to gather as much information as possible.

Existing scientific knowledge and experience in the area of lie detection can be very useful during investigative interviewing or interrogation. Scientific knowledge of verbal and nonverbal indicators of deception can help identify perpetrators deception attempts. Although this will not be undeniable evidence, police officers, prosecutors, and judges will still be able to assess whether a particular statement or part of it is potentially false. Then, they are in a position to, with appropriate interviewing tactics, further clarify the circumstances or take additional action to collect personal and material evidence that will confirm or confute statement or its part. In any case, there will be less chance that certain false statement will be taken into account as true and also less chance for making an important decision in criminal proceedings based on it.

Knowledges of lie detecting methods, besides the representatives of the above mentioned state bodies, will also benefit attorneys, because they will, in contact with their clients as well as during the gathering of information from persons, be able to make better evaluation of the credibility of such information's.

In that sense, the subject of the considerations in this article, along with the general characteristics of lies and lying associated with criminal proceedings, verbal and non-verbal indicators of deception, will also be the skills of investigative interviewing and interrogation as a presumption for the quality application of the lie detection methods.

2. Scientific based knowladges about lies, lying and lie detection
2.1. About lies and lying

When we talk about lying it is actually about changes in the way of verbal expression and behaviour of people that is typical for lying. It is necessary to determine what is considered to be lying for the purpose of understanding individual approach to detecting lies. Lies can be considered as deliberate statement or other form of communication (oral, written, nonverbal) that is given to another person or persons about something that the one who makes the statement knows that it is not true or just presumes it is not true or conceals information with intention to deceive another person. Also, lie can be successful or unsuccessful, depending on whether or not the deception has succeeded.

Lying is a human activity by which the lie is expressed. Mostly, people lie in two main ways, by concealing information and inventing or falsifying information. Research shows that people are more likely to lie by concealing information's, but also by using both ways of lying alternately during interviewing. When people are lying they pass through three different psychological processes: emotional, cognitive and control process (Vrij, 2008), and in that process indicator of deception can occur.

Also, during investigative interview or interrogation the appearance of indicators of deception is largely related to the questioning tactics. More about that will be written in the further section of this paper. First, it is necessary to define indicators of deception and how they can manifest during investigative interview or interrogation.

2.1.1.   Indicators of deception

Identifying lies is based on the statement content analysis or the so - called verbal indicators of deception and recognizing changes in person's behaviour or so - called nonverbal indicators of deception. It is necessary to stress that indicators of deception are not proof of lying. If they are properly interpreted, they are only clues that can help to correctly estimate the credibility of someone's statement. Also, they tell us that there is a possibility that a certain person concealed or fabricated some information's. Parts of statements in which indicators of deception appear will need to pay extra attention and to use appropriate tactics of asking adequate questions.

2.1.2. Verbal indicators of deception

Verbal communication is taking place through voices, words, sentences, and other linguistic elements. Considering verbal indicators of deception, it should be mentioned McCornack's Information Manipulation Theory (IMT). That theory is based on the principle of cooperation in information exchange and basic communication maxims set by famous British linguist Paul

Grice. Respect for the four communication maxims - information (amount of exchanged information), quality (accuracy of exchanged information), clarity (the way in which information is exchanged) and the relevance of revealed information is an assumption for proper communication, while covert violation one or more of them means the probability that this is a false statement. (Levine, 2001)

An important background to McCornack's theory is also found in the communication setting of German psychologist Theo Herrmann, which suggests that the person who makes the statement determines what to say and which information will be disclosed. Accordingly, a person who is lying may assume how that other person will interpret a part of his/her statement and choose some segments that will finally mislead him. (McCornack, Morrison, Paik, Wisner and Zhu, 2014) According to that, researches have shown that some language constructs are more commonly observed during lying. For the purpose of this paper, we will point to several verbal indicators of deception, which, should be interpreted according to a specific communication situation.

Most scientists agreed about these verbal indicators of lying: smaller number of self-referring words, especially personal pronouns "i", "me", "my" (Van Swol and Braun, 2014, Vrij, 2008) that, during their statement, associate person with some circumstances, actions or events, or trying to distance person from them. As a substitute for self-referring terms, people often use generalizing terms like "always", "everyone", "everybody" (Vrij, 2008: 101), which are used for diverting attention from certain persons who, for example, might be perpetrators of a criminal offense and extend the circle of potential suspects. It's specific that the statement of the person who speaks the truth is characterized by impeccability, relevance and clarity in relation to the indirect, distancing and ambiguous responses of the person who is telling lies (Vrij, 2008).

During investigative interview, in questioning phase, or during interrogation, also relevant indicators of deception are slower speech in critical parts of the statement when the witness or defendant comes to the segment when he tells a lie, hesitations in answering on a relevant question, repeating questions or simply ignoring or skipping the asked question, repeating particular words or sentences.

2.1.3. *Nonverbal indicators of deception*

Most information from our environment we obtain through our sense of sight as a dominant one, so during lie detection we mostly rely on visual information's. We observe the behaviour of people in our environment, we compare it with our experiences and knowledge of how people who lie or who tell the truth behave and on that basis we make our assessment. During that, mostly unconscious actions, movements of body parts and facial expressions are the main object of our observation. The visibility of such nonverbal indicators of deception is stronger when the intensity of psychic stimuli is stronger. Considering nonverbal indicators of deception, we will limit ourselves to only two dominant psychological processes in lie detection and these are cognitive processes and emotions.

The interpretation of nonverbal indicators of deception based on cognitive theory starts from the setting that lying induces a certain degree of cognitive load (Adams - Quackenbush, 2015), which can affect certain behavioural changes. Those changes manifests as verbal and nonverbal indicators of deception and the intensity of changes are more expressive when the significance of lie is more important to that person (high stake lies). Vrij et al. (2008) in their research, found correlation of speech errors, slower speech and response to questions, fewer contextual details, hesitation in answering, repeated words, and stuttering with the cognitive load caused by lying.

These indicators appeared more frequent when people are lying. On these findings are based some interviewing tactics such as giving statement in reverse order, asking unexpected questions, strategic use of evidence which have purpose to increase a cognitive load, and consequently increase number and intensity of indicators of deception. In that sense we can also observe increasing eye blinking rate when people cannot tell the truth, gaze aversion, moving focus from the interviewer or eye movement reducing. (Walczyk, Harris, Duck and Mulay, 2014: 32; Vrij and Sharon, 2008) Along with these changes, the person is trying to use different tactics such as repetition of questions, pauses filled with slow word pronunciation, prolonged voices, crutch words etc.

Emotions are connected with lying too. Some emotions are more related with lying. For example, these can be fear about been caught, feeling guilty about lying and feeling excitement for successful lies (Ekman, 1989). They manifest in increased sweating, increased blood pressure and heart rate, pupil spreading and other. Such changes can be measured by instrumental methods. Most known method is polygraph examination during which machine measures physiological changes in the body such as redness, sweating, tremor, muscle cramps and others. Presence of certain emotions can also be observed by observing the person's face and body. (Ekman, 1992)

But it is necessary to stress that the presence of these physiological changes does not mean at the same time that a person is lying. These changes may be associated with an increased level of stress that may arise due to numerous other circumstances. Therefore, proper interpretation of circumstances for appearance of certain physiological changes is a fundamental task during interviewing.

There is a widely accepted between scientists that verbal indicators of deception have a more significant role in detecting lies (Vrij, 2008, Warmelink, 2012, Granhang and Hartwig, 2015 and many others), and that nonverbal indicators of deception may be helpful in supporting this process. The best results can be achieved when both groups of indicators of deception are taken into consideration. Vrij and associate also pointed in their research on verbal and nonverbal behaviour in children and adults that: "… combining verbal and nonverbal lie detection methods is a worthwhile method of lie detection." (Vrij, Akehurst, Stavroula and Bull, 2004).

2.2. Lie Detection Accuracy and Its Importance for Criminal Proceedings

Numerous scientific researches across the globe indicate that people's ability to recognize lies is very limited. Bond and DePaulo (2006) found that people were able to correctly estimate in average 54% of cases whether the statement was true or false. Within that, they recognized correctly 47% false statements and 61% true statements. Still, it may be expected that professionals from different segments of the judicial system will have better results in recognizing lies than other citizens. However, research results show that they do not differ in this regard from other citizens. This is also confirmed by the research carried out by Garrido, Masip and Herrero (2004), in which 121 police officers and 146 students participated, and in which case no difference in the ability to recognize lies between these two groups of individuals was established. Also, Vrij (2004) points that he rewied ten lie detection studies with professional lie catchers and the average total accuracy rate (i.e., accuracy scores for detecting truths and detecting lies combined) was rather low, exactly 55%. That result was very similar to the total accuracy rate (57%) found with laypersons, such as observers, as college students. He also mentioned that professional lie catchers often feel more confident in their ability to detect truths and lies although they don't seem to be better lie detectors than laypersons. But some groups of

professional lie catchers can be better than others such as members of the Secret Service for example or professionals who are specially trained.

Reason for such poor performance of professionals' is in the fact that they are not sure which indicators they should observe and have false beliefs about indicators of deception. (Vrij and Semin, 1996) That conclusion supports Strömwall and Granhag (2003) research about verbal and nonverbal indicators of deception which detect police officers, prosecutors and judges, conducted in Sweden. Research has shown that are some differences between these professions. In comparison with judges and prosecutors, police officers relied more on nonverbal indicators of deception than on verbal ones; for example, they had wrong belief that liars make more gaze aversion or body movements then truth tellers. (Granhag and Strömwall, 2004) Also, Porter and Brinke (2009), during research of verbal, nonverbal and vocal indicators of deception, found significant disagreements of Canadian judges regardless to which indicators of deception they take as relevant during statements validity assessment.

For final result of investigative interviewing it is important that judicial professionals are able to detect deception. That is the main reason why police officers, criminalists, prosecutors, attorneys, judges and all other subjects in criminal investigation and criminal proceedings should be specially educated and trained to recognize verbal and nonverbal indicators of deception. On this depends whether they will properly evaluate the witnesses or defendant's statements as credible, and then on that basis make the correct decisions.

3. Application of the lie detection methods in investigative interview

Communication between judicial professionals and citizens during criminal proceedings is very different from other forms of social communication. During criminal investigation judicial professionals mostly use investigative interviewing as form of communication and at later stages they use more formal forms of communication called interrogation. Investigative interview usually has these main phases: planning and preparation, introduction, free recall, questioning, final phase and evaluation (Pavliček, 2013). Structure and tactics of investigative interviewing and interrogation are significant for the quantity and quality of information that will be collected. Often, results of investigative interview and interrogation are determined by the quality of planning and preparation. Preparation, along with organizational-technical aspects, includes information's about all relevant facts in the specific case, as well as determination of questioning strategies and tactics. It is particularly important during the preparatory phase of the investigative interview to set up specific goals and identify the relevant topics. Specially, during investigative interviewing or interrogation of the defendant, special attention should be dedicated to the analysis of the potentially incriminating information's and facts as well as of their use.

Introductory phase can be used for identification of interviewee, giving legal and procedural instructions, communicate expectations, assessing psychological aspects of communication, especially cognitive and communication abilities. In that sense it is also important to evaluate interviewees communication skills. During introductory phase it is also important to establish a good rapport mostly with conversation about some neutral topics.

In free recall phase interviewee speaks without interruptions about facts which are familiar to him. In this phase interviewer apply technics of active listening with its minimal suggestive activity. In assessing the truthfulness of the statement during this investigative interview phase, some criteria of the Statement Validity Assessment (SVA), as one of most popular lie detection method, can be useful. This method is well known as most relevant method used in assessing the credibility of statement during the criminal procedure. It is focused on the analysis of verbal

indicators, but not the indicators of deception than on the indicators of truth telling. Starting from Undeutsch's hypothesis that true statement differs from false by content, structure, and quality, basic segment of this method is Criteria Based Content Analysis (CBCA), which consists of 19 criteria. (Amado, Arce and Furina, 2015). Some criteria of that method may be useful at this stage of the investigative interview especially amount of information provided in the statement, amount of details in person's free recall, structure of statement, quantity of irrelevant facts etc. (Amado, Arce and Furina, 2015). During free recall, interviewee often lies by concealing information's, so that should be also taken into consideration.

The next phase of the investigative interview is questioning phase. Observed from the aspect of lie detection, the central part of the investigative interview and questioning is a tactic of asking questions. Properly chosen and formulated questions are a way of fully clarifying the circumstances of the perpetration of a criminal offense, but also tool for revealing lies. These are pushing interviewee from easiest way of lying through concealing information's to active lying by falsifying facts. That usually leads to the increased number of verbal and nonverbal indicators of deception.

Another method, such as Behaviour Analysis Interview (BAI) developed by John Reid is also useful for lie detection. Main part of this method makes a set of 15 standardized questions, that are designed to induce changes in the behaviour of interviewed and interrogated persons during process of lying (Masip and Herrero, 2012; Vrij andGranhag, 2012). This set of questions is essentially a combination of irrelevant, relevant, projection, and control questions. Usually such questions, with appropriate adaptations, are used during polygraph examination.

Next method that is also very useful in lie detection is Strategic Use of Evidence (SUE). This method, along with other similar methods, is more oriented on the ways of using clues and other evidences during investigative interview and interrogation for statement validity assessment or even for getting defendant confession (Hartwig, Granhag and Luke, 2014). The starting point for this lie detection method is based on the hypothesis that the fundamental difference between the truth tellers and liars is in the way how they refer to relevant information's about criminal offense (Hartwig, Granhag and Luke, 2014). To early evidence disclosure gives a lying person an opportunity to prepare a appropriate excuse and thus to diminish the value of evidence. (Jordan, Hartwig, Wallace, Dawson and Xhihani, 2012) Same authors suggest that gradually but not too late, evidence disclosure has better effects for getting confession. Unlike confrontational interviewing techniques such as Behavioural Analysis Interview (BAI), the Strategic Use of Evidence (SUE) method is one of the information gathering methods (Granhag, Strömwal and Hartwig, 2007: 28). After questioning phase, investigative interview continues with final phase and ends with evaluation phase.

4. Conclusion

Investigative interview or interrogation is very different from conversation what we have with our colleges, friends or families. Investigative interview has specific structure, goals, tactics and consequences. Every criminal investigator must to be trained for such complex task. Especially is important to stress the role of interview preparation phase and questioning tactic. The quantity and quality of collected information's depends on length of time that we take for preparation. For more complex interviews or interrogations, the preparation must be written. Unfortunately, inadequate preparation is one of the common problem in practice about which depends the poor results of the interviewing process and less successful detection of lies. Also it is important to prepare open ended, detailed, unexpected, relevant, control, projective and other appropriate

questions for questioning phase of interviewing. About quality of these questions depends whether we will be successful in statement validity assessment or how much indicators of deception will occur.

Although there are more than hundreds indicators of deception, every judicial professional has to be able to recognize the most common ones. In this regard, more emphasis should be placed on verbal indicators of lying for which numerous scientific researches have shown greater value in detecting lies than when it comes to nonverbal indicators of lying.

There are investigators who are talented to detect lies, but most of them are not. Often, their perception of lie detection ability is completely different from their actual ones. Progress in lie detection on judicial system level can be made only through specialised education and training of all judicial professionals involved in criminal investigation and criminal proceedings.

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