Determinants and methods of diagnosing criminal proceedings participants false testimony in Ukraine

Детермінанти та засоби діагностики неправдивих показань учасників кримінального провадження в Україні

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Abstract
The purpose of the article is to determine the procedural and non-procedural methods of diagnostics false testimony of criminal proceedings participants’, which can be used in the investigation in Ukraine. The authors use general and special methods that allow obtaining scientifically sound conclusions and suggestions. The dialectical method, system-structural, generalizing, logical and statistical methods were used in the study. According to the results of the study, the number of criminal offenses initiated in Ukraine in connection with the provision of false testimony by victims and witnesses is quite large. If a person is convicted based on false testimony, a new criminal trial must be ordered in connection with the newly discovered circumstances. The authors determined that procedural methods of diagnostics false testimony include investigative (search) actions and forensic examinations, and non-procedural - various types of research, in particular, the use of polygraph and physiognomic research, as well as methods of analyzing nonverbal information. Re-interrogation, additional and simultaneous interrogation of previously interrogated persons, investigative experiment are the most effective procedural means of diagnosing false testimony. Non-procedural means of diagnosing false indications

Anotация
Метою статті є визначення процессуальних та непроцесуальних засобів діагностики неправдивих показань учасників кримінального провадження, що можуть бути застосовані під час розслідування кримінальних правопорушень в Україні. Автори використовують загальнонаукові та спеціальні методи, що дозволяють отримати науково обґрунтовані висновки та пропозиції. Зокрема, застосовуються такі наукові методи, як діалектичний, системно-структурний, узагальнюючий, логічний, а також статистичні методи (групування, аналіз кількісних показників). За результатами проведеного дослідження установлено, що кількість кримінальних правопорушень, розпочатих в Україні у зв’язку з наданням потерпілими та свідками неправдивих показань є досить великою. У разі засудження особи на підставі отриманих неправдивих свідчень, має бути призначені новій судовий розгляд кримінального провадження у зв’язку з нововиявленими обставинами. Визначено, що до процесуальних засобів діагностики неправдивих показань належать слідчі (російські) дії та судові експертизи, а до непроцесуальних – різного роду дослідження, зокрема, використання поліграфу та фізіономічні дослідження, а також методики

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require further research and scientific substantiation, including the development of a mechanism for training relevant specialists.

**Keywords:** interrogation, testimony, reliability, diagnostic methods, polygraph.

### Introduction

The testimony of a person is one of the procedural sources of evidence in the criminal proceedings of Ukraine. An investigator or coroner may obtain the testimony of victims, suspects and witnesses during the investigation of criminal offenses.

The victim's testimony in the criminal procedures is important to prove in different categories of criminal cases. Quite often, it is the only direct evidence of the accused's guilt. The victim gives evidence regarding the circumstances to be proved (Law of Ukraine No. 4651-VI, 2012). An integral part of the victim's testimony is his or her opinions and the assumptions made during the interrogation. This is admissible given that the victim is in most cases an eyewitness to a criminal offense, directly confronted with the criminal offense or the offender himself, and therefore more than anyone aware of the circumstances of the criminal offense causing him harm (Boiarov et al., 2020).

Eyewitness testimony is not always as reliable or as accurate as might be expected, given the weight that decision makers often attach to it (Nash et al., 2015, p. 642). Such theses are enshrined in the case law of the European Court of Human Rights. Thus, in Doorson v. The Netherlands, the ECtHR stated that a conviction could not be based solely or decisively on evidence, which the defense could not deny. In the case of Kornev and Karpenko v. Ukraine, the ECtHR stated that limited to the extent that it is incompatible with the guarantees provided for in Article 6 of the Convention". Thus, the testimony of witnesses is not conclusive evidence of the guilt of another person.

It should be borne in mind that when it comes to a witness or victim, they are warned of criminal liability for giving false testimony (Law of Ukraine No. 2341-III, 2001). According to the Office of the Prosecutor General of Ukraine, 684 criminal proceedings in this category of criminal offenses were registered in 2016, in 2017 - 724, in 2018 - 777, in 2019 - 902, in 2020 - 755, for the period from January to September 2021 - 517 criminal proceedings.

Obviously, when it comes to the victim witness, they are warned of criminal responsibility for giving deliberately false statements. However, it is not always possible to prove, since the testimony of a person may contain bona fide error, and a mandatory criterion of proving a criminal offense on the part of the witness or the victim is testimony given knowingly (Ponomarenko et al., 2020). Thus, establishing false testimony and recording it in procedural form is the main task of investigators and investigators during the investigation, in order to prevent the perpetrators from avoiding responsibility.

At the same time, the urgency of timely detection of false testimony is due to the fact that according to the current criminal procedure legislation of Ukraine in case of establishing the fact that the verdict is based on knowingly false testimony of witnesses, victims, suspects, criminal proceedings should be reviewed on the basis of newly discovered circumstances.

As for the suspects, they often give false testimony. According to our analysis of the materials of investigative and judicial practice, such actions of suspects are recognized by the court as a way of protection during the evaluation of evidence (in 67% of criminal proceedings). However, it should be emphasized that when a suspect gives evidence that does not correspond to the established circumstances in the criminal proceedings, such versions of the defense must also be verified and refuted. In this case, it can be
argued that the prosecution has made an objective assessment of the testimony received.

False testimony is not always intentional, so a separate study requires factors that affect the ability to objectively perceive the circumstances and provide a person with full credible testimony. The issues of modern possibilities of those means that can be used to verify the accuracy of the testimony of participants in criminal proceedings also remain debatable. Therefore, the authors investigated the means of verifying the testimony of participants in criminal proceedings, which can be used by investigators during the pre-trial investigation, taking into account the theoretical works of domestic and foreign scientists, as well as foreign experience, based on analysis of criminal proceedings and questionnaires.

Methodology

The study used a set of general and special methods, which was the key to achieving this goal. The logical method became the basis of this study and allowed to determine what procedural and non-procedural measures can be used to diagnose false testimony of victims, witnesses suspected at the stage of pre-trial investigation of criminal offenses. The system approach determines the order of application of these methods and allows to study the researched problems. The dialectical method allows to establish the purposes of research in dynamics and interrelation, to find out separate aspects of realization of investigated means of diagnostics of false testimonies of participants of criminal proceedings. The method of systematic analysis of legal provisions allowed to classify the means of diagnosis of false indications into procedural and non-procedural. The method of generalization and statistical methods (grouping, analysis of quantitative indicators) were used to determine the most effective investigative (search) actions that should be used to establish false testimony. In addition, the method of generalization allowed to determine the determinants that affect the ability of a person to give true, complete and objective testimony.

Literature Review

Methods of verifying the testimony of participants in criminal proceedings, as well as evaluating their testimony have been the subject of research by many scholars. Among Ukrainian scientists should be noted the works of Kolesnikova (2017); Liash (2017); Lozynska & Shekhvatsov (2020), Lushpiienko (2017), who studied the issues of determining the reliability of witness statements. The issue of establishing false testimony and neutralizing conscious untruth studied Pavliuk (2020); Prodanets & Horbanov (2021).

Ukrainian scientists make a significant contribution to the study of the problems of verifying the testimony of criminal proceedings participants. Scientists are concentrating their efforts on the study of tactical features of interpolations, investigative experiments, certain types of forensic examinations. Kohut (2018) and Pasko (2021) studied certain features of interpolations, Protsenko (2020) and Nehrebetskyi (2021), studied certain aspects of verification and evaluation of testimony by conducting investigative experiments, and others.

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Foreign scientists have repeatedly studied similar problems. Thus, Sheahan, Pica, Pozzulo & Nastasa (2017), Wilcock, Crane, Hobson, Nash, Kirke-Smith & Henry (2019), Budyakova (2020), Longstaff, & Belz (2020), Henry, Crane, Fesser, Harvey, Palmer & Wilcock (2020) and others are devoted to the study of determinants influencing the process of identification and provision of complete and objective indications.

Possibilities of separate researches in questions of diagnosis of a lie are opened by Street, C. N. H. (2015), Howgego (2019), Polubinskaya (2021). Some aspects of the analysis of nonverbal information were revealed by Metenkova and Metenko (2014). Some aspects of the survey were studied by Swanner, Meissner, Atkinson, and Dianiska (2016). Thus, some aspects of our research have been repeatedly studied in the studies of some scholars, but a comprehensive study taking into account the investigative and judicial practice of
Results and discussion

Interrogation is a complex investigative (search) action, which consists in carrying out a set of cognitive and certifying operations that can be conducted by an investigator, prosecutor, employee of an operational unit, a judge and in some cases an investigating judge. Studies of typical interrogation situations allowed researchers to establish such types of testimony as reporting true testimony, conscientious error of the interviewee, inconsistencies in the testimony of the interviewee, reporting false testimony, refusal to testify (Kohut, 2018).

The subject of our study is false testimony. These include all those that do not meet or do not fully meet the criterion of reliability. In turn, we understand the reliability of the testimony as their property, which consists in their compliance with the real facts and circumstances relevant to the criminal proceedings and in full agreement with other evidence obtained during the investigation and which during their evaluation by the subject of evidence are beyond reasonable doubt.

False testimony is not always intentional, as there are determinants that affect a person's ability to adequately perceive the circumstances and reproduce them objectively and fully. The investigator should be aware of and consider them when assessing a person's testimony. These include gender, age, mental characteristics of the person, being in a state of alcohol or drug intoxication, etc.

Researchers who studied gender differences in witness memory and related differences in perceptions and feelings, in a neutral but potentially threatening context, found that women were more accurate than men in details about strangers, and less accurate than men on the details of the environment. Women are more anxious, but they are more receptive to the sex of a stranger in such conditions (Longstaff, & Belz, 2020).

Researchers are studying the relationship between people's age and their memory. According to a study conducted by Canadian scientists, adolescent witnesses reported fewer descriptors of offenders than adults, with adults reporting facial features more accurately, and adolescent eyewitnesses being more accurate in describing clothing. At the same time, the researchers found that no age differences were found in the study of the accuracy of identification (Sheahan et al., 2017). An important factor influencing the possibility of perception and further reproduction of the circumstances of the event is the state of alcohol or drug intoxication. So far, little is known about the underlying mechanisms responsible for the harmful effects of alcohol on memory performance, but most studies have shown that mild or moderate alcohol intoxication can lead to less complete, but not necessarily less accurate memory data. Higher doses of alcohol can increase the number of error messages. In this regard, we support the position of scientists, who emphasize that police officers should interrogate intoxicated witnesses as soon as possible after the incident, because studies have shown that the detrimental effects of time are greater than the effects of alcohol on data eyewitnesses (Gawrylowicz, & Bartlett, 2021, p. 379).

Marijuana also has a negative effect on memory and the ability to be identified by eyewitnesses (Pezdek et al., 2020).

In addition to these factors, the ability to perceive certain circumstances and further provide objective evidence may be affected by some features of the psyche such as: suggestion, especially in the case of minors (Lozynska & Shekhavtsov, 2020, p. 155), shock, stress, mental disorders (Henry et al., 2020), conformity, features of memory (Budyakova, 2020), etc.

Methods of diagnosing untruths in the testimony of victims, witnesses and suspects may be different. Some scholars point out those investigative actions, covert investigative (search) actions, judicial procedural actions of a search-cognitive nature and other procedural actions, due to which testimonies are obtained and verified, are means of determining the authenticity of testimonies. The search and cognitive potential of procedural actions should be determined and used in not only the direction of gathering evidence, but also their verification. Moreover, tactics, their combinations that are used during their conduct and tactical operations are ways to determine the reliability of the testimony (Lozynska & Shekhavtsov, 2020, p. 174). In general, we support this position, but we believe that covert investigative (investigative) actions cannot be considered a means of establishing false testimony, as the procedure for conducting them involves restricting certain legal rights and interests of persons against whom they are conducted. In addition, covert investigative (search) actions are carried out in cases where information about the criminal offense and the person who committed it cannot be obtained in any other way (Law of
The most common means of establishing false testimony is interrogation. Interrogations can be repeated, additional, and to clarify the contradictions of already interrogated persons - simultaneous interrogations of two or more persons. In our opinion, interrogations, in order to neutralize a person's insincerity, should be conducted only by an investigator or an investigator in charge of an investigation or by a senior group of investigators. In addition, taking into account the above determinants that may lead to a conscientious error of the interrogated, the investigator must take into account the individual typological features, typological qualities, mental state of the interrogated at the time of interrogation and his life experience, etc. (Kohut, 2018), which if possible should be established before the interrogation.

Repeated and additional interrogations should be aimed at clarifying the testimony of the interrogated, eliminating gaps and inaccuracies in case of a good faith error of the interrogated, updating the information forgotten in the memory of the interrogated. Investigators or investigators may ask a person during an interrogation the cause of his or her internal mental tension, increased nervous activity, or inappropriate behavior. The maximum detail of the testimony contributes to the detection of untruths; in particular, the meticulous attitude of investigators to obtaining testimony during the initial interrogations proves its effectiveness. Detailed readings are an important information field for verifying readings.

The sequence of interrogations during an investigation is important to determine the veracity of a whistleblower's testimony (Lozynska & Shekhavtsov, 2020). The investigator or coroner should not be prejudiced against the testimony of a person. The fact that a person has acquired the procedural status of a victim does not mean that his testimony is true. The same applies to witnesses, conditionally speaking, on the part of the victim, and vice versa - in no case the testimony of witnesses who are close, familiar to the suspect, and the testimony of the suspect, which contradicts other testimony, should not automatically be perceived as untrue. It is possible to claim the presence of false information in the testimony of a particular participant in criminal proceedings only based on the results of the assessment of the totality of evidence obtained in criminal proceedings.

The purpose of conducting simultaneous interrogations of several already interrogated persons is to obtain additional factual data that highlight the true course of the circumstances of the criminal offense related to the subject of evidence, on which there are significant discrepancies in the testimony of previously interrogated persons (Kotiuk, 2016). Before deciding to conduct a simultaneous interrogation, the investigator must be satisfied that one of the two persons to be interrogated at the same time has given truthful testimony. It is not possible to conduct a simultaneous interrogation between two persons whose testimonies differ significantly, but the investigator has grounds to believe that they do not correspond to reality. During the simultaneous interrogation, the person who gives truthful testimony must be the first to answer the question, in which case a strong psychological influence will be exerted on the person who knowingly gave false testimony. At the same time, it should be noted that of the simultaneous interrogations we analyzed, only in 44% of cases the person who, according to the investigator, gave false or erroneous testimony, changed his position and confirmed the testimony of another person.

A search can also be a means of diagnosing false testimony. In the criminal proceedings studied by us, the situation with negative results, when material objects weren't found in the place indicated by the interrogated or the wanted person appeared in 37% of cases of searches. At the same time, a negative search result should not automatically be considered as an argument for the falsity of a person's testimony about the presence in a particular home or other property of material objects relevant to criminal proceedings, connection of that person with a criminal offense or wanted person. Only after confirmation through other investigative actions that the seized material object is an instrument of a criminal offense, there are the grounds for determining the testimony of the person are reliable (Lozynska, & Shekhavtsov, 2020).

Identification allows solving several important tasks. The first task is to obtain data on the relationship of a person, object or corpse with the event of the criminal offense under investigation. The second task is to check the testimony of the previously interrogated person about the appearance and signs of the person who committed the criminal offense, the victim, the witness, the thing, as well as about the
circumstances under which he saw this person or thing.

Such an investigative (investigative) action as an examination can also be used to establish false information in a person's testimony. The investigator or coroner must interrogate person in detail, focusing on the possibility find answers to different questions to verify a person's testimony through this investigative action. For example, whether there are special signs, injuries, if so, what exactly and where; whether there are particles on the body of certain substances that a person could take out of the scene or bring to it; whether there are signs on the body of the person being examined that indicate his / her professional affiliation and traces of struggle; what is the number of lesions, their type, shape, nature and location, etc. (Topchii & Karpenko, 2015).

An investigative experiment is quite effective in diagnosing lies in the testimony of interrogated persons.

During the investigative experiment is often checked: a) the probability of the existence of individual phenomena in the past; b) whether a certain person in certain conditions could perceive this or that event or object (for example, whether the witness in the conditions described by him and from the specified distance could see the fact of transfer of a certain object from one person to another, whether the person being in one room, hear a conversation that took place in another room, etc.); c) the ability to perform certain actions in these conditions (in general or by a specific person), including professional and other human skills (to penetrate a certain way into the room, to make a certain object, to determine by ear the nature of damage to units, etc.); d) the objective probability of an event or action (whether a certain substance may spontaneously ignite under appropriate conditions, whether the object may fall from a height to the very place where it was found); e) the establishment of individual circumstances - the mechanism or sequence of an event in general or its individual stages, how a certain event occurred, the time required to perform a certain action (Balitskyy, 2015). In addition, given the fact that most crimes are committed under the influence of alcohol and drugs, the investigative experiment often manages to restore the person's memory so much that the investigator receives detailed information about seemingly completely forgotten facts. The person not only recalls certain facts, but also corrects them, rejecting everything that does not agree with the real situation, clarifies certain information, and gives a justification for what was reported during the interrogation (Kuntii, 2019, p. 393).

It is important during the investigative experiment that the actions of the interrogated person are independent, and hints and leading questions from other participants in the investigative action are completely excluded. Observation, interview, experiment, comparison, audio and video recording methods are used during data verification. The application of these methods provides an opportunity to verify existing and new data on criminal offenses (Protsenko, 2020). The need for video recording is because the results can be useful for verification of data by experts during a comprehensive forensic psychiatric examination, because with video viewing experts will be able to analyze the behavior of the suspect (victim), his movements and gestures that may affect the results. Video recording during an investigative experiment is used to conduct a procedural action in general, but also to verify data transmitted non-verbally, which may contain at the disposal of the investigation or the court important forensic information. If necessary, an appropriate specialist can be involved in explaining the content of such messages (Protsenko, 2020).

In order to establish false evidence, the appointment and conduct of such forensic examinations as psychological examination using a polygraph should be considered promising. In our opinion, such an approach in the investigative practice of Ukraine is not yet sufficiently tested. At the same time, some foreign scholars emphasize that polygraphs (lie detectors) have completely discredited themselves (Howgego, 2019). Some point out that people make for poor lie detectors. They have accuracy rates comparable to a coin toss, and come with a set of systematic biases that sway the judgment. (Street, 2015).

It should be noted that currently in the practice of law enforcement agencies in many countries around the world are used not only traditional lie detectors (polygraphs), which measure certain physiological indicators that indicate a strong emotional reaction of the subject when he lies (pulse rate, blood pressure, sweating), etc., but also lie detectors, which are aimed at studying cognitive processes that are studied using functional magnetic resonance imaging. That is, they do not investigate secondary emotional reactions, and this makes this type of lie detector virtually unaffected by possible attempts to deceive him. In addition, this method establishes
neurobiological correlates of lies and untruths, rather than their external manifestations, which makes its results more accurate (Polubinskaya, 2021). Thus, given that the judicial authorities of Ukraine as procedural sources of evidence do not recognize the results obtained from the use of the polygraph, we believe that they can be used to verify the testimony of a person to diagnose false testimony and the implementation another task.

At the same time, along with the indicated areas of psychological examinations in the context of our study, we cannot avoid psychological studies of individual characteristics of perception, attention and memory of the victim, witness and suspect. The methods of such examinations registered by the Ministry of Justice of Ukraine include the Complex technique of research of psychological features of attention and sensorimotor reactions, the Complex technique of research of psychological features of memory (test of visual and auditory memory, short-term, operative memory, memory for numbers, images etc.), a comprehensive method of studying the psychological characteristics and individual properties of perception (volume, constancy, illusions, identification, etc.). Psychological examination of these methods can provide data on individual characteristics of perception, memory and reproduction of information by a person (Lozynska, & Shekhavtsov, 2020). Moreover, if in the criminal proceedings there is information about the presence of psychiatric pathologies in the interrogated, then to address the ability of a person to correctly perceive the circumstances relevant to the criminal proceedings and give truthful testimony about them, a psychiatric examination is conducted.

Physiognomic researches should be considered as a perspective direction in research of false indications. Psychologists have proved that in the process of communication between the investigator and the person he interrogates the character traits of the latter are manifested differently, depending on the type of personality. Sanguine more often than other representatives are friendly to the investigator, instantly respond to questions asked, make comments, make suggestions. Melancholic are hostile to the investigator, afraid, unwilling to communicate, introverted. Phlegmatic are persistent, they try to end the conversation as soon as possible, irritable, react violently to the stimulus. Sanguine are slow in the interview, the psyche is slow, and the reaction to the proposal to describe the circumstances of the event in detail is slow (Savchenko & Korolysyn, 2016). At the same time, the lack of scientifically substantiated information on this topic makes it impossible to use such research as a procedural form of means of diagnosing false evidence.

**Conclusion**

Summing up, it should be emphasized that a person may give false testimony intentionally, and in some cases - due to a good faith mistake of the interrogated. The process of perception of certain circumstances of a criminal offense in each individual is individual, which is influenced by certain factors. Gender, age, mental disorders, alcohol or drug intoxication, predisposition, stress, conformity, memory, etc. may be determinants of defective and biased evidence of a criminal offense.

Diagnosis of untruth in a person's testimony can be made through the use of procedural and non-procedural means. Procedural means include investigative (search) actions and forensic examinations provided by the current criminal procedural legislation. The most effective of them are interrogation (repeated, additional, simultaneous interrogation of several already interrogated persons) and investigative experiment. Searches, examinations, identification, comprehensive forensic psychiatric and forensic psychological examinations may also be conducted for this purpose. Non-procedural means of establishing false indications in Ukraine at present are: the use of polygraphs, physiognomic studies, as well as various types of research aimed at analyzing nonverbal information.

Thus, the researched issues are relevant and therefore require further thorough research. Special attention should be note to non-procedural forms of diagnosis of false indications, as well as the development of methods for training relevant specialists who will be authorized to conduct such research.

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