

не порушить задоволення позову права та законні інтереси інших учасників ОСББ? З'ясовано ознаки порушень під час створення ОСББ як підстави для його усунення: такі порушення мають носити істотний, колективний характер і не можуть бути усунені в поточній діяльності ОСББ.

Обґрунтовано доцільність запровадження колективних позовів у національну систему, оскільки доведення факту колективного порушення прав співвласників багатоквартирного будинку під час створення ОСББ можливе лише за умови наявності конкретної спільноти співвласників. власникам багатоквартирного будинку надається юридична можливість звернутися до суду, оскільки конфлікт ґрунтується на однотипному порушенні прав таких співвласників.

Пропонується закріпити гарантії добровільного виконання рішення суду про ліквідацію суб'єкта господарювання шляхом надання державному реєстратору права звертатися до суду з позовною заявою про призначення посадових осіб суб'єкта господарювання, відповідальних за ведення суб'єкта господарювання. вийти з процедури ліквідації через певний строк з моменту реєстрації відомостей про процедуру припинення такого суб'єкта господарювання.

**Ключові слова:** організація співвласників багатоквартирного будинку, співвласник, ліквідація, ліквідаційна процедура, колективне порушення, колективний позов, державний реєстратор, гарантія

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## POLYGRAPH IN CRIMINAL PROCEEDINGS: PROSPECTS OF USE

**Abstract.** The problematic issues of using a polygraph in criminal proceedings, which are relevant for many countries, are considered. Based on the analysis of judicial practice and publications of recent years, including foreign ones, the solution of the following issues is proposed: what should be the form of application of polygraph in criminal proceedings (definition of investigative action); what is the basis for the use of a polygraph in criminal proceedings; who can be the direct authorized subject of the polygraph application; what should be the method of using a polygraph in criminal proceedings. Attention is drawn to the importance of resolving these issues for investigative and judicial practice in accordance with the laws of a country.

It is noted that the use of a polygraph requires the use of special knowledge in the field of psychology. Therefore, the use of a polygraph in criminal proceedings is possible only during

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the psychological examination of a person in order to obtain indicative information to solve the tasks set by the initiator of the examination. It is substantiated that the basis for the use of a polygraph is the nature of the tasks of the initiator of the examination in the absence of medical contraindications in the subject, as well as his written consent to the survey using a polygraph. Only a psychologist with a polygraph operator as a technical assistant can be the subject of the polygraph application and evaluation of the test results. The method of conducting a human study using a polygraph expert determines independently, based on the tasks formulated by the initiator of the examination.

It is noted that a separate study requires the preparation of a criminal psychological examination using a polygraph, defining its tasks, methods of conducting and evaluating its results. The solution of these problems in different countries will depend on the specifics of national legislation.

**Keywords:** *criminal proceedings, polygraph, psychological examination, polling*

**Introduction.** From the very beginning of the polygraph (scientific and technical means of diagnosing psychophysiological features of a person) invention, its active use began. Already in the early 2000s in the United States three main areas of its use formed:

- 1) hiring to law enforcement agencies;
- 2) employees check, especially in security-related professions;
- 3) crime investigation.

In Ukraine practice of using a polygraph in these areas gradually formed. A corresponding commercial market appeared: there are companies that produce (import) polygraphs, sell them, train specialists, provide services in conducting polygraphic examinations for hire. The corresponding specialty “polygraph examiner” also appeared. But the fact that polygraph testing of a suspect in a criminal activity usually requires the use of a different technique than screening a future civil servant, is often ignored. Montezinos (2010), J. Synnott, D. Dietzel, M. Ioannou (2015), note that when using the same equipment, these techniques have significant differences, as they must include different sets of tests (J. Montezinos, 2010, J. Synnott, D. Dietzel, & M. Ioannou, 2015).

The first and second directions of using a polygraph in Ukraine do not cause much controversy in the application of its ability to identify people who by their psychological qualities do not meet the requirements for a particular profession. The third area, which is the use of a polygraph to obtain evidence in criminal proceedings, causes discussions regarding possibilities of obtaining evidence, the form and subjects of application of this technical means. The international experience of the use of a polygraph by the police and the evaluation of its results by courts is also quite ambiguous and contradictory.

**Analysis of recent research and publications.** The international experience of using a polygraph by the police has a long history, which has generally received a positive assessment. Many publications note the widespread use of the polygraph in many countries (USA, Canada, Israel, Hungary, Russia and others) to obtain data that allow to identify suspect in crime commission and other data relevant to criminal proceedings. The practice of using a polygraph is based on the fact that it allows to detect unconscious reactions of the human body to certain irritation (questions, demonstrated items). For example, when a person answers questions and tells a lie, he/she experiences physiological changes – increased heart rate and respiration, increased blood pressure, increased sweating, and so on. The polygraph is able to record such manifestations with the help of special sensors. Such unusual for a given person reactions, recorded by a polygraph, give grounds to conclude when a person told the truth and when a lie. Quite a significant role in the active promotion of the widespread introduction of polygraph in the activities of law enforcement agencies and courts is played by commercial companies interested in expanding the market for their products and services.

But there are several negative aspects of using a polygraph, which are observed by lawyers, psychologists and journalists who deal with this issue

in many countries. J. Stromberg (2014) notes that the polygraph received an aureole of errorfree lie detector, but this is far from the case. There are no specific physiological reactions that can serve as indicators of untruth, the polygraph is able to detect only the state of anxiety of a person at a certain point of his/her testing. The same position is taken by the Singapore Bar Association (2018), providing its clients with recommendations on behavior when taking a polygraph test.

The active use of a polygraph by the police and the emphasis on its effectiveness are most often associated with the psychological influence on the suspect (accused) which is determined by prevailing notion of the infallibility of this technical means. The effectiveness of the polygraph is based on the idea that the interrogated person who is trying to hide the truth, even before the test can change his/her position and tell the truth. This does happen sometimes because a person believes that his/her deception will still be detected by a "lie detector". That is, a positive result is achieved not as a result of using the "outstanding" scientific and technical capabilities of the polygraph, but due to the psychological impact of the very fact of using the "lie detector".

This attitude to the use of the polygraph by law enforcement agencies raises well-founded objections. Thus, A. Katwala (2020) notes that polygraph tests can be easily transformed from a means of verifying other evidence into a way of pressuring the accused to provide information that can already be used to obtain evidence in a biased manner. An analysis of the practice of using a polygraph in British Columbia (2016) states that the Supreme Court of Canada in one court case stated that the results of the use of a polygraph cannot be presented in criminal proceedings because they violate established rules of evidence, are not necessary and lead to complications and confusion that can undermine justice. The ambiguity of the results of polygraph testing of participants in criminal proceedings, the possibility of violation of the rights of the accused and the established rules of evidence is recognized as an obstacle to the recognition of such evidence in courts of many countries where the polygraph is still used by police. At the same time, it is recognized that one of the areas in which law enforcement agencies can effectively use a polygraph is the control of convicts. This is especially true for sexual offenders. What is meant here is a system of supervisory and social-educational measures for convicts in the execution of certain types of criminal punishments not related to imprisonment (probation). J. Wood, E. Alleyne, C. Ciardha, & Gannon (2019) emphasize that the polygraph allows the police to obtain information which is used by the police and the probation service to manage the risks that may be posed by the offender while in society. Other authors also point to the sphere of control over sex offenders released from serving a sentence under a license as to direction of quite effective use of a polygraph by the police (O. Miller, 2020, O. Bowcott, 2020, M. Graham, N. Wragg, R. O'Donnell, 2021). The same tendencies of using a polygraph in criminal proceedings have appeared in Ukraine, what is quite logical. It all started with an attempt to use the polygraph in operational and investigative activities and in criminal proceedings for interrogation purposes. The results were similar to those in other countries. From time to time, a "lie detector" was used to persuade a person who initially intended to conceal certain information to give truthful testimony. The fact and results of the use of the polygraph were recorded in the certificate, interrogation report, conclusion of psychophysiological examination. Thus, by exploiting the notion of the polygraph's infallibility in detecting lie, it was possible to obtain important information that could be used to obtain evidence. On this basis, the expression "pass a polygraph test" became very popular, which was interpreted as a method of obtaining evidence in criminal proceedings. This practice has found support among Ukrainian researchers (Yu. Orlov, 2014, I. Pirig, V. Kaiko, & L. Vardanyan, 2018, O. Motlyakh, 2015, 30-37). But Ukrainian courts treated the results of polygraph testing differently. In some cases, they recognized such results as a source of evidence, and in others,

they did not even recognize the conclusions of psychophysiological examinations conducted by “polygraph specialists”. At the same time, the courts referred to the absence of such expert specialty in the current regulations, as well as the absence of polygraph examiners in the state Register of certified forensic experts (O. Dufenyuk, & A. Kuntiy, 2016, p. 124).

**The purpose of this article** is to address controversial issues of using a polygraph in criminal proceedings and to determine ways to resolve them.

**Formulation of the main material.** Of course, such situation can not be acceptable. It seems that for the courts to recognize the results of the use of a polygraph as evidence, a clear solution to the following problematic issues is required:

- what should be the form of application of the polygraph in criminal proceedings (determination of investigative method);
- what is the grounds for the use of a polygraph in criminal proceedings;
- who can be the direct authorized subject of the polygraph application;
- what methodology of using a polygraph should be applied in criminal proceedings.

The solution to these problems is seen in the following. First of all, it is necessary to treat the use of a polygraph as an examination (diagnosis) of the inner world of the person, where the polygraph acts as a tool, a technical means of recording psychophysiological reactions of the person to certain incentives (irritations). The manifestation of these reactions is recorded in the form of drawings with curved lines (polygrams), which need to be evaluated using special knowledge in the field of psychology. In addition, it should be noted that such an examination requires special conditions. Such conditions should exclude the impact on the examined person of external irritations (bright light, noise, vibration). Experiments with a polygraph in an ordinary room showed that most of the examined men were strongly psychologically influenced not only by the questions asked, but also by the knocks of women’s shoes in the hallway (G. Karpyuk, 2012, p. 13). Therefore, testing a person using a polygraph is possible only in a specially equipped laboratory. Thus, answering the question about the form of application of the polygraph in criminal proceedings, it can be argued that such a form can only be a forensic examination. The Ministry of Justice of Ukraine has determined that such an examination is a forensic psychological examination. In accordance with the approved scientific and methodological recommendations, during the psychological examination in order to obtain indicative information, a questioning can be conducted using a special technical means – a computer polygraph. The aim of such questioning is to obtain indicative information on: the degree of probability of the information reported by the respondent; the completeness of the information provided by the respondent; sources of information received by the respondent; the respondent’s ideas about a certain event; other indicative information needed to construct clues for investigation of certain events (On the amendment to the order of the Ministry of Justice of Ukraine, Order of the Ministry of Justice of Ukraine).

As for the grounds for the use of a polygraph in criminal proceedings, they are also reflected in the scientific and methodological recommendations of the Ministry of Justice of Ukraine on forensic psychological examination – the expert may conduct a questioning using a computer polygraph, based on the questions posed by the initiator of the forensic examination. In this aspect, another important condition is the presence of the written consent of the person who is questioned with using a polygraph, based on the provisions of Part 2 of Art. 28 of the Constitution of Ukraine, which prohibits medical, scientific or other experiments on humans without their free consent. In other countries, this issue is resolved in accordance with national law.

We also must add that the condition of the examined person must be considered, which may interfere with obtaining reliable examination results (acute period of



somatic diseases, acute pain, intoxication, etc.). A person may consciously put him/herself into a condition that will not allow the expert to obtain reliable information, for example, before testing the examined person can drink alcohol, use drugs or take certain pharmacological drugs. This is the way to deceive the polygraph. It seems that a preliminary medical examination of the examined person should be a prerequisite to forensic psychological examination.

As for who can be the direct authorized subject of the polygraph testing, the following should be noted. Since it is a forensic psychological examination, its implementation is entrusted to an expert psychologist, who must meet the following requirements specified in Art. 10 of the Law of Ukraine "On Forensic Examination": higher education in the field of psychology; education and qualification level not lower than the specialist; passing special training and obtaining the qualification of a forensic expert in the specialty "Psychology".

Since such an examination involves the use of a complex technical means – a computer polygraph, turning of which has significant influence at reliability of the results of the examination, another specialist should be also involved – operator of the polygraph (polygraph specialist). The polygraph operator is a technical assistant of the expert who performs the function of managing the hardware and software complex during the questioning. Therefore, the use of the term "polygraphologist" seems incorrect.

The question of the methodology for using a polygraph in criminal proceedings during a forensic psychological examination is problematic. The issue is that currently in Ukraine there is no tested and approved in the prescribed manner a single methodology of interviewing a person using a special technical means – a computer polygraph. The study of publications on this issue gives grounds for the conclusion that the general methodology should include two stages: 1) identification of the normal background level of psychophysiological activity of the human body (neutral questions leading to guaranteed true answers and control questions which are uncomfortable for the examined person and lead to anxiety state of the examined person); 2) identifying the nature of the examined person's body response to verification questions coming from the investigation subject matter (N. Azarova, 2016, 198 p.), psychophysiological methods of research and examination using a polygraph: the curriculum of the refresher course of the Faculty of Psychology and Social Work (Odessa National University named after I. Mechnikov). Physiological responses to test questions are compared with responses to neutral and control questions, on the basis of which the expert concludes about the subjective significance for the person of these questions in the context of the test.

The expert independently determines the methodology and procedure for conducting a specific examination of a person with the use of a polygraph, depending on the tasks formulated by the initiator of the forensic examination. The findings of the examination are purely plausible and indicative and are only one among other sources of information to be verified and evaluated, along with another set of data obtained concerning the examined person.

**Conclusions.** Summarizing the above, we can draw the following conclusions:

1) the use of a polygraph in criminal proceedings is possible only in the framework of the forensic psychological examination of a certain person in order to obtain indicative information to address tasks of the initiator of the forensic examination;

2) the grounds for the use of a polygraph is the nature of the tasks of the initiator of the forensic examination in the absence of medical contraindications for the examined person, under condition of his/her written consent to the questioning with the polygraph use;

3) the subject of application of the polygraph and evaluation of the examination results (testing) is an expert psychologist, whose technical assistant is the

operator of the polygraph;

4) the methodology for conducting forensic examination of particular person with the use of polygraph is determined by the expert independently, based on the tasks formulated by the initiator of the forensic examination.

It seems that these provisions can serve as guidelines for deciding on the initiation of a forensic psychological examination with the use of polygraph. Issue of preparation to such an examination by one or another party of criminal proceedings, determination of its tasks, methods of conducting and evaluation of its results requires further research. The solution of these issues in different countries will depend on the specifics of national legislation.

#### *Conflict of Interest and other Ethics Statements*

The authors declare no conflict of interest.

#### **References**

- Katwala, A. (2020). *Lie detectors are creeping into UK policing and they still don't work*, <https://www.wired.co.uk/article/>.
- Azarova, N. (2016). *Polygraph: a review of modern US methods. part 1. Algorithms for the formation of standardized tests*. Moscow: University Book, 198. (in Russian).
- Can evidence of a polygraph test be used in court? (2016). *Provincial Court of British Columbia*, <https://www.provincialcourt.bc.ca/>.
- Can You Say No to a Lie Detector Test in Singapore? And Other FAQs (2018). *Singapore legal advice*, <https://singaporelegaladvice.com/>.
- Dufenyuk, O., & Kuntiy, A. (2016) Judicial practice of evaluating the results of the use of a polygraph at the stage of pre-trial investigation. *Juridical scientific and electronic journal*, 2, 123-125, [http://www.lsej.org.ua/2\\_2016/36.pdf](http://www.lsej.org.ua/2_2016/36.pdf). (in Ukrainian).
- Wood, J., Alleyne, E., Ciardha, C. & Gannon, A. (2019). *An Evaluation of Polygraph Testing by Police to Manage Individuals Convicted or Suspected of Sexual Offending*, <https://www.kent.ac.uk/school-of-psychology/downloads/>.
- Montezinos, J. (2010). Use of Polygraph in Law Enforcement Internal Affairs Investigations. *Polygraph*, 39(3), 127-138, <https://www.ojp.gov/ncjrs/virtual-library/abstracts/>.
- Synnott, J., Dietzel, D. & Ioannou, M. (2015). A review of the polygraph: history, methodology and current status. *Crime Psychology Review Volume*, 1(1), <https://www.tandfonline.com/doi/full/>.
- Stromberg, J. (2014). *Lie detectors: Why they don't work, and why police use them anyway*, <https://www.vox.com/2014/8/14/5999119/>.
- Karpyuk, G. (2012). The human factor: saving and deadly. *In the name of the law*, 41(5843), 10-13 (in Ukrainian).
- Graham, M., Wragg, N., & O'Donnell, R. (2021). *Lie Detector Polygraph Testing for Sex Offenders*, <https://www.stoneking.co.uk/>.
- Motlyakh, O. (2015). Some problems of psychophysiological examination with the use of a polygraph and II results in criminal proceedings. *Current issues of theory and practice of using a polygraph: a collection of articles* (30-37). Kyiv. (in Ukrainian).
- Miller, O. (2020). *Sex offenders reveal more risk-relevant disclosures through polygraph testing*, <https://www.kent.ac.uk/news/society/24698/>.
- On forensic examination: Law of Ukraine 4038-XII of 25.02.1994 (with subsequent changes as of 17.08.2021)*, <https://zakon.rada.gov.ua/laws/show/4038-12>. (in Ukrainian).
- On the amendment to the order of the Ministry of Justice of Ukraine of 08.10.1998, 53/5. Order of the Ministry of Justice of Ukraine of 27.07.2015, 1350/5*, <https://zakon.rada.gov.ua/laws/show/z0915-15>. (in Ukrainian).
- Orlov, Yu. (2014). Used polygraph during pre-trial humanity. *Scientific Bulletin of the National Academy of Internal Affairs*, 4, 172-186. (in Ukrainian).
- Bowcott, O. (2020). *Lie detectors should be used to monitor sex offenders, UK study says*, <https://www.theguardian.com/uk-news/2020/mar/18/>.
- Pirig, I., Kaiko, V., & Vardanyaan, L. (2018). Possibilities of using scientific and technical principles in interrogation. *Scientific Bulletin of Dnepropetrovsk State University of Internal Affairs*, 3, 126-131. (in Ukrainian).
- Psychophysiological methods of research and examination using a polygraph: the curriculum of*

*the refresher course of the Faculty of Psychology and Social Work* (2019). Odessa: Odessa National University named after I. Mechnikov, <http://onu.edu.ua/pub/bank/userfiles/files/>.  
*The Polygraph and Lie Detection*. (2003). Washington, DC: National Academy of Sciences. <https://doi.org/10.17226/10420>.

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**ПОЛІГРАФ У КРИМІНАЛЬНОМУ ПРОЦЕСІ:  
ПЕРСПЕКТИВИ ВИКОРИСТАННЯ**

**Анотація.** Розглядаються проблемні питання використання поліграфа у кримінальному провадженні, актуальні для багатьох країн. На основі аналізу судової практики і публікацій останніх років, у тому числі зарубіжних, пропонується вирішення наступних питань: якою повинна бути форма застосування поліграфа у кримінальному провадженні (визначення слідчої дії); що є підставою для застосування поліграфа у кримінальному провадженні; хто може бути безпосереднім уповноваженим суб'єктом застосування поліграфа; якою повинна бути методика застосування поліграфа у кримінальному провадженні.

Підкреслено, що:

1) використання поліграфа у кримінальному провадженні можливе лише в рамках судово-психологічної експертизи певної особи з метою отримання орієнтовної інформації для вирішення завдань ініціатора судово-медичної експертизи;

2) підставою для використання поліграфа є характер завдань ініціатора судово-медичної експертизи за відсутності медичних протипоказань у обстежуваній особі за умови її письмової згоди на опитування з поліграфом. використання;

3) суб'єктом застосування поліграфа та оцінки результатів обстеження (тестування) є експерт-психолог, технічним помічником якого є оператор поліграфа; 4) методика проведення судово-медичної експертизи конкретної особи з використанням поліграфа визначається експертом самостійно, виходячи з завдань, поставлених ініціатором судово-медичної експертизи.

Автори вважають, що ці положення можуть слугувати орієнтиром для вирішення питання про початок судово-психологічної експертизи з використанням поліграфа. Вирішення цих питань у різних країнах залежатиме від специфіки національного законодавства.

**Ключові слова:** кримінальне провадження, поліграф, психологічна експертиза, опитування

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