

POLYGRAPH EXAMINATION IN THE CONTEXT OF EXPERT EVIDENCE IN CRIMINAL PROCEEDINGS

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Abstract: The article describes the current legal status of the polygraph examination method in the context of expert evidence in criminal proceedings in the Czech Republic, England, and Wales, with a focus on the method of language interpretation. The aim of the article is to provide a description of the existing knowledge as well as the valid and effective legislation and case law in the field of expert proof in criminal cases. The basic research design is to use the language interpretation method to describe the current law and the case law of the Polygraph Examination Method, considering the Guideline for Evaluative Reporting in Forensic Science (2015) and guidelines for best practice in forensic science and the European Network of Forensic Science Institutes (ENFSI) for expert assessment of forensic sciences.

Keywords: Law, polygraph, lie detection, expert evidence, criminal proceedings, code of criminal procedure, physiological responses, criminal law regulation.

1 Introduction

In the Czech Republic, the method of polygraph examination, i.e. instrumental sensing, recording, and evaluation of physiological values (Dohnalová and Štěpánková, 2019), started to be used in criminal proceedings in the early 1980s. The workplace of polygraph examination has consolidated and built its position within police forces; up until now, polygraph examination is carried out at the Institute of Criminology, where the application of this method has been tested in practice.

In terms of competence, (within) the Police of the Czech Republic, even after the amendment of the Act on Experts and the implementing provisions (Act No. 254/2019 Coll. On Experts, Expert Offices and Expert Institutes; Decree No. 503/2020 Coll. On implementing the expert activities; Decree No. 504/2020 Coll., on remuneration for expert activity; Decree No. 505/2020 Coll., which sets out a list of expert disciplines in the individual branches of expertise, other certificates of professional competence, certificates issued by professional chambers and specialization studies for disciplines and branches of expertise; Decree No. 370/2022 Coll., which amends Decree No. 504/2020 Coll., on remuneration for expert activity), even in 2023, polygraph examination shall be carried out exclusively at the Institute of Criminology and only for the purposes of criminal proceedings. The scope of jurisdiction to carry out the examination is governed by the binding regulation of the President of the Police No. 77/2009 Coll., which regulates the subject matter, functional, and local jurisdiction of the expert departments of the Police of the Czech Republic, which specifies the focus and goal of the polygraph examination. This examination is executed for the bodies of the Police of the Czech Republic and law enforcement authorities (both departmental and non-departmental). The output of the examination in the written form is the Report on the Performance and the Result of Polygraph Examination (Dohnalová and Štěpánková, 2019; Annex to the binding regulation of the President of the Police, 2009).

The procedural aspect of the application of polygraph examination is not regulated by a separate legal norm but the basis could be the provisions of the Criminal Code (Section 89 (2) of the Act No. 141/1961 Coll., on Criminal Court Proceedings (Criminal Code), as amended, when *“anything that can contribute to the clarification of a given matter can serve as evidence, in particular the testimony of the defendant or witnesses, expert opinions, things and documents that are of importance for criminal proceedings and investigation.”* Given that in the Criminal Code, evidence is listed only

demonstratively, the result of a polygraph examination cannot be excluded through the interpretation of this provision.

The goal of the paper is thus to provide a description of valid and effective legislation and case law of the polygraph examination method in the context of expert evidence in criminal proceedings. As part of the goal, there will be a primary comparison of the position of the polygraph examination method in the legal system of the Czech Republic, England, and Wales (Kotsoglou and Oswald, 2021). In conclusion, the analysis of the current legal status of the polygraph test as part of expert evidence within the limits of an objective teleological and axiological interpretation (Melzer, 2011), taking into account the Guideline for Evaluative Reporting in Forensic Science (2015) and guidelines for best practice in forensic science and the European Network of Forensic Science Institutes for expert assessment in forensic science, which is used both for improving the quality of forensic science in European countries and exchange of information in forensic science (Fürst, Šímková, Zimmer, and Fürstová, 2022).

The basic research question is thus formulated as follows:

(a) What is the current legal status of the polygraph examination method in the context of expert evidence in criminal proceedings in the CR within the limits of an objective teleological and axiological interpretation?

In terms of evidence, the polygraph examination method within the decision-making practice of courts has an unclear position, which will be specified using an objective teleological and axiological interpretation.

2 Literary research

Expertise, or expert activity, is used at the moment when general knowledge in a field is no longer sufficient and the given field has advanced to such an extent that specialization is necessary (Křístek, Bürger and Vučkay, 2021). For each such field, this occurs at a different time. From the perspective of science, there is thus no single universal moment. Dörfl, Krysl, Lehká and Visinger (2021) state that evidence through expert opinion is a complex process in which the established procedure and rules need to be respected and the legal formal requirements need to be met so that the application of expert opinion or expert statement is following with the procedural rights of the participants and the principle of a fair trial is fulfilled. Expert opinion needs to be seen as a means of expressing professional conclusions on the facts the experts were supposed to clarify in this way (Vacura, 1976).

Evidence, including expert evidence, is a comprehensive set of procedures in criminal proceedings, which includes theoretical professional knowledge and many years of practical experience of law enforcement authorities, including other entities (Baláž and Palkovič, 2005). The legal status of the polygraph examination method in the Czech Republic, England, and Wales is the subject of this paper. As an example, Paul, Fisher and Voigt (2020) state that although providing material and visual results, in the German legal system, a polygraph examination is classified as part of expert opinion and cannot be considered separate evidence, which, in legal terms, corresponds to the Czech legal status of this polygraph examination method, according to which its conclusion must be recognised as supporting evidence combined with other evidence in a complex chain, not as separate evidence or the only evidence (§ 89 of the Code of Criminal Procedure, Dohnalová and Štěpánková, 2019).

In contrast, in the guidelines for polygraph examination in England and Wales (Polygraph Examination Instructions, PEI), Kotsoglou and Oswald (2021) state that the evidence obtained

through the application of the polygraph examination method should be considered low-weight and inconclusive by the court compared to the information obtained through questioning. Furthermore, Kotsoglou (2021) argues that the polygraph examination method cannot be standardized due to the complexity of the interview as a discursive phenomenon and its application is a low point in the long-term effort to ensure that the criminal justice system adheres to its own promulgated principles. The lack of standardization requires ad-hoc improvisation, which means that the term “test” is actually a misnomer.

The polygraph examination method is based on the assumption that emotional responses (Ekman, 2016) associated with false testimony cause significant physiological changes and behaviour with limited conscious control. Emotional distress triggers specific changes in the activity of parasympathetic and sympathetic systems, which are key for detecting false responses and misrepresenting information. Lying, or actively suppressing the truth in order to appear innocent often requires a significant amount of concurrent mental processes (Palen et al., 2021; Verschueren et al., 2021). Moreover, lying requires greater cognitive effort than speaking the truth (Sandham, et al., 2021; Nahari et al., 2019; Geven et al., 2018). Neurocognitive research confirms that both suppressing the truth and fabricating lies are manifested by increased activation of specific brain regions responsible for cognitive control (Koller et al., 2022; Geven, et al., 2018).

In addition to polygraph examination, there has recently been conducted research on lie detection using speech content analysis (Vrij, Fisher, Leal, 2022; Nahari et al., 2019), EEG analysis (Abdulaziz Alarfaj, Abeer, 2022; Hanan Ahmed Hosni Mahmoud, 2022), and scientific research verifying the validity of lie and truth detection principles (Mac Giolla et al, 2021; Vrij, 2019; Klein Selle et al., 2018; Klein Selle et al., 2018) and their application in the field of criminal law. The purpose and importance of evidence consist in the fact that it is the only way to procure the factual basis for a decision that can be and must be procured by law enforcement authorities (Fryšták, 2021).

The goal of the paper is a primary description of the existing knowledge as well as the valid and effective legislation (Act No. 254/2019 Coll., On Experts, Expert Offices and Expert Institutes and implementation regulations; Act No. 141/1961 Coll., On Criminal Procedure (Code of Criminal Procedure); Act No. 40/2009 Coll., Criminal Code) and case law in the field of expert evidence in criminal proceedings, with a focus on the method of polygraph examination and its application in the context of evidence in criminal proceedings.

For the purposes of this paper, a basic comparison of differences in the position of the polygraph examination method in the legal systems of the Czech Republic and Great Britain will be carried out. The next part of the paper focuses on the analysis of the current legal status of the polygraph examination method in the context of expert evidence using the method of objective teleological and axiological interpretation (Melzer, 2011) while considering the Guideline for Evaluative Reporting in Forensic Science (2015) and best practice in forensic science and the European Network of Forensic Science Institutes ENFSI (Fürst, Šímková, Zimmer and Fürstová, 2022).

3 Data and methods

The basic research design is to use the method of language interpretation to describe the current legal status and case law of the Czech Republic in the context of evidence using the method of polygraph examination and the comparison of differences in the legal regulation of the polygraph examination method in the Czech Republic, England, and Wales. Using objective teleological and axiological interpretation (Melzer, 2011), an analysis of the current legal status of the polygraph examination method in the context of expert evidence in the CR (as a method

to measure the basic physiological responses measured within the polygraph examination) will be performed.

The classification of a polygraph examination as a criminalistic method admissible in criminal evidence is based on the criminalistic-systemic approach (Bradáč, 1997). This approach is based on the assumption that an offender when committing a crime acts on the environment in which they commit the crime, and the environment acts on them. This interaction enables the determination of a number of parameters (in our case, the basic physiological responses) that subsequently characterize the offender and form a basis for the final identification of the offender and the assessment of the credibility of statements and testimonies.

This systemic approach will be the basis for performing the analysis of the legal status of polygraph examination using the method of objective teleological and axiological interpretation while considering the Guideline for Evaluative Reporting in Forensic Science (2015) and best practice in forensic science and the European Network of Forensic Science Institutes (ENFSI) for expert assessment in forensic science (Fürst, Šímková, Zimmer and Fürstová, 2022).

As for objective teleological interpretation, the purpose is of particular importance, as it is the driving force in lawmaking. Its existence is even a prerequisite for legal law-making. The argumentation through the purpose of the interpreted statement is primarily based on whether the interpreted statement is unclear (in our case, in terms of the legal status of the polygraph examination method within evidence) and at the same time, whether the purpose to be achieved is known. The method of objective teleological and axiological interpretation is value-neutral and can thus be used to achieve an objective recent interpretative goal that allows adapting the valid and effective law to changing objective conditions even without the intervention of legislators (Melzer, 2011).

4 Evidence in criminal proceedings in the Czech Republic

The amendment to the Code of Criminal Procedure by the Act No. 265/2001 Coll. repealed the legal regulation on when an expert opinion must be requested and the specification of simple cases when a specialist statement is sufficient. The amendment modifies the issue of expertness in criminal proceedings as follows: “*Expert opinion is requested if specialist statement is not sufficient due to the complexity of the issue being assessed*” (§ 105 (1) of the Code of Criminal Procedure). However, this modification does not always apply, namely in cases where the engagement of an expert is requested by the Code of Criminal Procedure and in cases of expert opinions on medical conditions, which cannot be prepared without prior examination of medical documentation by an expert (§ 105 of the Code of Criminal Procedure; Šámal, 2013).

The main goal of executing expert activity is thus to present expert conclusions on a disputed factual issue in the form of an expert opinion. The activity is primarily focused on expert evidence in criminal proceedings, the principles of asking questions to experts, and the systemic prerequisites of expert activity.

In addition to decision-making, evidence is one of the most important procedural activities of law enforcement activities, as it enables the determination of the factual basis for decision-making so that the goal of criminal proceedings is achieved (§ 1 of the Code of Criminal Procedure; Fryšták, 2021). The primary goal, in accordance with the law, is to detect the perpetrator (§ 113 of the Code of Criminal Procedure), who fulfils the characteristics of a crime under substantive criminal law, to investigate the crime, and to bring the accused to the court that shall decide on guilt or innocence; if the person is found guilty, to impose a penalty, a protective measure, or to waive the punishment. Subsequently, the execution of the sentence or protective measure is carried out, if imposed by the court. The

goal of criminal proceedings is not only “the fair punishment of the perpetrator” but also the execution of a due process of law (Sections 1 and 36 of the Charter of Fundamental Rights and Freedoms and case law of the Constitutional Court). In accordance with this goal, the goals of criminal proceedings are also specified, mainly the truthful establishment of the facts, the conviction of the perpetrator, and the imposition of adequate punishment or waiving of punishment (Šámal, 2013).

Depending on the nature of a given case, the goal can also be the imposition of protective measures on the person involved, the accused, or a decision on non-pecuniary damage, restitution for unjust enrichment in adhesion procedure, or a decision on compensation for damages. The objectives of criminal proceedings (submitted to law enforcement authorities in accordance with § 12 (1) of the Code of Criminal Procedure) are intertwined, complementary, and connected to each other so that the goal of the criminal proceedings is achieved. Besides the decisions of the general courts, i.e., the national case law, international standards need to be considered, which are represented by the decisions of the European Court of Human Rights and the Convention for the Protection of Human Rights and Fundamental Freedoms (Fryšták, 2021).

5 Evidence as activity closely related to criminalistics

Criminalistics analyses the principles of the origin, duration, and termination of traces of crime, significant information, and forensic evidence in order to protect citizens and the state against crimes and develops practices or methods that lead to successful prevention and detection of crime (Musil, Kratochvíl, Šámal et al., 2007). As a forensic discipline, criminalistics develops practices and methods that would lead to the prevention, investigation, and detection of crime by applying the knowledge of natural and technical sciences in order to fight against crime (Musil, Kratochvíl, Šámal et al., 2007; Musil, Konrád and Suchánek, 2004). Procedural legal regulations in relation to criminalistic procedures, methods, and technical means are set out in the Code of Criminal Procedure but are often only framework or not regulated at all (they are often regulated in internal acts of the Police of the Czech Republic, such as the binding directive of the President of the Police of the Czech Republic No. 100/2001, on criminalistic-technical activities of the Police of the Czech Republic, or the binding directive No. 313/2017, on scent identification) (Fryšták, 2021).

Legal and admissible criminalistic methods for practice are considered only those meeting the following criteria (Pješčak et al., 1981):

- a) They are objectively competent, strictly scientific in nature, thus leading to the knowledge of objective truth in criminal proceedings,
- b) They can be used to evaluate the facts being evidenced as well as the legality of the procedure according to the generally applicable principles of criminal proceedings,
- c) They are used to obtain or verify new or existing facts that are important from the perspective of criminal law,
- d) They are not expressly forbidden in the Code of Criminal Procedure and are based on its fundamental principles,
- e) The implementation of these methods complies with the guarantees explicitly provided for by the Code of Criminal Procedure on ensuring the legality of implementing similar acts explicitly specified in the Code of Criminal Procedure (“...in particular, the guarantee to ensure the right of the defendant to defence” Fryšták, 2021).

6 Use of polygraph examination in criminal proceedings in the Czech Republic

Information about the successful application of a lie detector in the USA was not unnoticed even in Czechoslovakia, where the term “lie detector” was first used in the professional literature in 1937 in the article by Karl Kent in the third issue of the journal Czechoslovakian detective (Kohout, 2008). Nowadays, the method of polygraph examination is popular in the field of law,

in the process of personality traits studies, including fundamental research (Iacono, Ben-Shakhar, 2019; Kosyanova, 2014). In the Czech Republic, the method of polygraph examination (measuring and recording physiological responses – polygraph interrogation) started to be used in criminal proceedings at the beginning of the 1980s. The early 1990s are associated with a sharp increase in crime related to the social events of that period in the CR, which was also reflected in an increased number of requests for conducting a polygraph examination. In this period, the highest percentage of requests was recorded within the operational and investigation activities of the police and reports on the execution of polygraph examinations had a character of supporting operational material. With the gradual increase in the number of requests for conducting this examination after the initiation of criminal prosecution, the results of polygraph examination have become a part of case files and were consulted with prosecutors, who subsequently evaluated them during the preparation of indictment (Dohnalová and Štěpánková, 2019). This method and its further development are similarly addressed in other states as well (Iacono, Ben-Shakhar, 2019). The number of requests for polygraph examination nearly tripled in the years 2005–2014, with the lecturing activities of polygraph examiners in the police environment as well as on the premises of other institutions and bodies playing a significant role. The fact that polygraph examination is required by “new policemen” around 2010, there was a very rapid generational turnover of experienced criminologists, who had been using this method since its implementation), had also a significant impact on the increasing number of requests. The trend of the growing number of requests for polygraph examination is also recorded in the field of financial and economic crime and cybercrime (Dohnalová and Štěpánková, 2019).

In the context of legislation, the following factors need to be comprehensively included in the area of polygraph examination (Dohnalová and Štěpánková, 2019):

- a) jurisdiction,
- b) procedural status,
- c) indictment, judgment, resolution,
- d) psychological assessment,
- e) processing,
- f) Act no. 361/2003 Coll., on the Service of Members of the Security Corps.

In terms of jurisdiction, the Police of the Czech Republic carries out polygraph examinations only at the Criminalistic Institute and exclusively for the purposes of criminal proceedings. The scope of jurisdiction to carry out the examination is governed by the binding directive of the President of the Police No. 77/2009, which defines the focus and objective of a polygraph examination. This examination is carried out for the needs of the Police of the Czech Republic and legal enforcement authorities (departmental and non-departmental). The written output of the examination is the Report on the Performance and the Result of Polygraph Examination (Report on the Performance and the Result of Polygraph Examination; annex to the Directive of the President of the Police). The procedural aspect of the application of a polygraph examination is not regulated by a separate legal norm but it is based on the provisions of the Code of Criminal Procedure, according to which “*everything that can contribute to the clarification of the case being investigated, in particular the testimony and statements of the accused and witnesses, expert opinions, objects and documents relevant for the criminal proceedings and examination may serve as evidence*” (§ 89 (2) of the Code of Criminal Procedure; Dohnalová and Štěpánková, 2019).

Since the Code of Criminal Procedure provides only an indicative list of evidence, it is not possible to exclude the result of a polygraph examination by interpreting this provision. There have been cases when the result of a polygraph examination was considered by the court as other documentary or indirect evidence, or it was stated by the court that the method used had contributed to the conviction of the suspect or the clarification of a given case. The result of

polygraph examination was recognised as corroborative evidence combined with other evidence to make a coherent chain, not as the only or separate evidence (§ 89 (2) of the Code of Criminal Procedure; Dohnalová and Štěpánková, 2019).

This approach is fully applied in accordance with the principle of free evaluation of evidence, since it is not possible to ignore the statement of the Supreme Court of the CR, according to which *"The results of the so-called lie detector test cannot be used by the court as evidence in deciding a criminal case"* (Collection of Judicial Decisions and Statements of the Supreme Court of the Czech republic/Collection of decisions of the judicial authorities The Supreme court of Czech republic no. 8/1993). Other judgments are judgments of the courts of first instance (Dohnalová and Štěpánková, 2019):

- a) *"This documentary evidence closes the circle of indirect evidence that represents a coherent and undisturbed chain"* (Judgment of the Regional Court in České Budějovice 16 T 32/2006),
- b) *"Documentary evidence also includes a report on polygraph examination of the defendant based on which he/she was "convicted"* (Judgment of the Regional Court in Hradec Králové 4 T 85/94),
- c) *"...conclusions drawn on the basis of the evidence taken fully correspond with the conclusions ad results of the polygraph examination..."* (Judgment of the Regional Court in Ústí nad Labem 28 T 3/94),
- d) *"In addition to the aforementioned evidence, the court had based its decision also on the results of the polygraph examination of the defendant" ... "The court believes that the results of the polygraph examination of the accused had led to the detention of the accused. The court is aware of the fact that these results cannot be the only evidence on the defendant's guilt or innocence but can be used as other evidence."* (Judgment of the Regional Court in Hradec Králové 7 T 9/2009)

Furthermore, it is necessary to present the decisions of the Court of Appeal and the resolutions of the Police (Dohnalová and Štěpánková, 2019):

- a) *"...the results of the polygraph examination are currently not considered even indirect evidence but rather a clue and certain guidance for law enforcement authorities, mainly in preparatory proceedings."* (Judgment of the High Court in Prague 7 To 88/2009)
- b) *"Based on the gathered documentation, the interrogation conducted, and in particular based on the contribution of the conducted polygraph examination, ... the informant voluntarily presented themselves at Criminal Police and Investigation Department (SKPV) and supplemented the initial statement there in accordance with § 158 (6) of the Code of Criminal Procedure..."* (Resolution of the Police of the CR, Regional Police Directorate, the Central Bohemian Region, SKPV OOK ÚO Kladno).

"Increasing probative value" of the result of the polygraph examination (also known as "processing"), one of the possibilities, is its incorporation into a psychological expert opinion (Dohnalová and Štěpánková, 2019):

- a) *"Given the results of the polygraph examination and psychological examination, it is very likely that the special credibility, i.e., the credibility of the statements, is also reduced."* (EO in the field of health care, psychiatry, specialisation: clinical and forensic psychology, the Police of the Czech Republic, Central Bohemia Region)
- b) *Polygraph examination recorded a number of responses that call into question the answers of the examined person to the questions directly related to the crime. Based on the results, it clearly shows that the examined person was particularly tense when answering the questions concerning the circumstances of the assault on the victim, the meeting with the witness, and handing*

over the jewellery. The low values of emotional strain measured on indifferent topics are in contrast with the measured values on the questions where the answers can be considered threatening to the interviewee." (EO in the field of health care, clinical psychology, the Police of the Czech Republic, Ústí nad Labem)

Act no. 361/2003 Coll., on the Service of Members of the Security Corps (§ 92 f) also states that " ...The officer shall: ... take a polygraph examination at the request of a service official..., if required so by the important interest of the service."

7 Polygraph examination in England and Wales

Under the Offender Management Act, 2007, Her Majesty's Prison and Probation Service (hereinafter also referred to as "HMPPS") currently uses polygraph tests in order to monitor sex offenders, both post-conviction and post-traumatic, which is typical mainly for the USA as the so-called Post Conviction Sex Offender Testing (hereinafter also referred to as "PCSOT") (Grubin et al., 2023), and especially to monitor those released on licence and to manage compliance with their licence conditions. The scope of the polygraph test is expected to be extended by similar provisions of the Domestic Abuse Act, 2020, and the Anti-Terrorism Act. The second bill also includes polygraph testing as a method of monitoring compliance with Terrorism Prevention and Investigation Measures (hereinafter also referred to as "TPIM") and leaves open the possibility that statements made during the compulsory polygraph testing may be used to secure a TPIM following the end of an offender's licence (Hall, 2020; Kotsoglou and Oswald, 2021). As an alternative, oculomotor deception testing was tested in the USA, which uses the method of cognitive load to assess the credibility of offenders (Mundt, Smith and Ambroziak, 2022).

In England and Wales, Kotsoglou and Oswald (2021) base their investigation of arguments used by polygraph proponents and deployers on the following rationales and arguments, which can be divided into the following main categories:

- a) The utility argument – the polygraph examination is used only for obtaining other information that needs to be considered,
- b) The argument of corroboration rule – the result of a polygraph examination is additional information that needs to be taken into account,
- c) The non-oppression argument – besides detecting false statements, the interviewed person can freely decide to provide information without being subject to any form of oppressive behaviour,
- d) The containment argument – concerns related to the application of the polygraph examination from a criminal justice evidential perspective cannot be used in the context of probation, investigation, or TPIM,
- e) The expertise argument – persons that are trained in using a legitimate and valid (scientific) method are highly regulated by legislation,
- f) Argument on human rights – although articles on human rights can be used, any infringement can be justified.

According to ACPO (the Association of Chief Police Officers) from 2013, there are three types of circumstances under which an investigation can be frustrated:

- a) If someone has been eliminated from the examination as a direct use of a polygraph or on the basis of lines of enquiry following a polygraph test. It could be argued that the examination was flawed because of excessive reliance on invalid techniques,
- b) If a suspect is implicated from polygraph evidence, it could be argued that the investigation followed the lines of enquiry strongly influenced by "confirmation bias" on the basis of faulty technology,

- c) If a victim of a crime is considered untrustworthy on the basis of the polygraph test, it would be a mistake to merely drop those enquiries.

The ACPO further states that there are no typical clues to detect a lie, whether through non-verbal behaviour, verbal behaviour, or physiology, which can be used in the criminal justice system of the UK to distinguish between a lie and truth consistently and accurately. Furthermore, it is stated that it is the responsibility of the competent authorities to decide on which methods to use in the field of policing and which do not fall in the context of an investigation or security clearance, provided that information obtained through their application is not part of a chain of evidence.

In this field, the legislative framework includes Polygraph Rules (2009), which govern the qualification of polygraph examiners trained by the accredited American Polygraph Association, as well as the administration and control of the test, and, most importantly, the ways in which the results are interpreted to the offenders and their legal representatives.

As Kotsogolou (2021) states, in terms of the deception in the polygraph examination, it is highly unlikely that confessions obtained based on the polygraph examination would survive the two-stage reasoning process of a judge of a criminal court (Section 76 (2) and 78 PSACE). Defence counsels tend to rely on because the courts have not clearly specified which sections their decision to exclude the given confession is based on. It is only required that the breach of provisions is "significant and substantial". It shall also be noted that Section 76 (2) a) PSACE, which has replaced the rule of voluntariness at common law, separating the veracity of the confession from its legitimacy. A sharp reaction of polygraph proponents would focus on the meaning of "oppression". The remit of "oppression", which is partly defined in Section 76 (8) PSACE, includes deception. The question thus is whether it can be said that there is necessary quality and availability of law governing the use of polygraph examination and whether the interference with Section 8 was in accordance with the law. The Court of Appeal in Bridges accepted a "relativist approach" to the quality of the law, stating that the more serious the qualifying offence, the more precise and specific the law must be to justify it. (2020 EWCA Civ 1058, (83))

8 Conclusions

Qualified objective teleological interpretation of the legal status of polygraph examination in the Czech Republic

In the context of a qualified objective teleological interpretation, this chapter deals with the purpose of the legal regulation in the Czech Republic, since the purpose of the interpreted provision cannot usually be derived directly from the wording of the law (cf. the introductory provision in § 1 of the Act No. 111/1998 Coll. On Higher Education Institutions and on Amendments to Other Acts – the Higher Education Act), since the rule of interpretation, which is currently a legislative commonplace specified in the Government's Legislative Rules (Section 39 (1)) states that *lex moneat, non doceat* (the law warns, not teaches) (Melzer; 2011).

Based on the above, it is possible to determine the legal purpose and answer the research question: "What is the current legal status of the polygraph examination method in the context of expert evidence in criminal proceedings in the CR within the limits of objective teleological and axiological interpretation?"

(a) The Czech Republic and the legal status of polygraph examination within the limits of objective teleological interpretation

It is necessary to follow up mainly on the primary mechanism of criminal law regulation, i.e., to highlight the fundamental and essential vagueness of the legal regulation of the polygraph examination method. The procedural aspect of the

application of polygraph examination is not regulated by any separate legal norm. Therefore, it is only possible to draw on the provisions of the Code of Criminal Procedure, according to which "anything that can contribute to the clarification of a given matter can serve as evidence, in particular the testimony of the defendant or witnesses, expert opinions, things and documents that are of importance for criminal proceedings and investigation" (§ 89 (2) of the Code of Criminal Procedure; Dohnalová and Štěpánková, 2019). Furthermore, it is necessary to proceed from the purpose of criminal proceedings, which is based on the fundamental principle that the primary purpose is not only "the just punishment of the offender", but also due process (Sections 1 and 36 of the Charter of Fundamental Rights and Freedoms and the case law of the Constitutional Court). In accordance with this purpose, the objectives of criminal proceedings are also determined, especially the truthful establishment of the facts, the conviction of the actual perpetrator, and the imposition of an appropriate punishment or waiver of punishment (Šámal, 2013).

If proceeding only from § 89 (2) of the Code of Criminal Procedure, in terms of the purpose of the provision, polygraph examination could be considered equal to other independent evidence in judicial decision-making. However, it is also necessary to consider the following factors (in particular, the legal regulation of the purpose of the criminal proceedings, the case law, and decisions of courts) significantly affecting the purpose of the polygraph examination as expert evidence:

- 1) Jurisprudential nature of decision-making within polygraph examination - "This documentary evidence closes the circle of indirect evidence which forms a complete and undistorted chain." (Judgment of the Regional Court in České Budějovice 16 T 32/2006),
- 2) Due process of law (Sections 1 and 36 of the Charter of Fundamental Rights and Freedoms and the case law of the Constitutional Court) – the procedural aspect of the use of polygraph examination is not regulated by any separate legal norm.
- 3) Polygraph examination method is not sufficiently and legally defined and examined. The correct methodological procedure defined by Melzer (2011) as a procedure whose result is subsequently reviewable and thus controllable. According to Popper (1997), it is not necessary for a scientific system to be singled out in a positive sense; however, it is necessary that its logical form shall be such that it can be singled out by means of empirical tests in a negative sense. It is necessary for an empirical scientific system to be refuted by experience.

9 Research limitations

Melzer (2011) further argues that in the case of normative sciences, refutation of experience is not an option; however, refutability of a specific result is one of the evidence of the scientific nature of this result. Therefore, a rational *legal methodology guarantees the predictability of judicial decision-making*, which is one of the primary prerequisites of the *rule of law*.

Therefore, when dealing with the scientific methodology of expert evidence, it is necessary to proceed primarily from the ENFSI Guideline for Evaluative Reporting in Forensic Science. The standards included in the Guidelines presuppose that the preparation of an evaluation report (as mentioned above, in terms of the polygraph examination, it is the so-called Report on the Performance and the Result of Polygraph Examination (Result of Polygraph Examination; Dohnalová and Štěpánková, 2019; Štěpánková et al., 2008), in any expert examination that has the nature of comparison (i.e., also in the case of a polygraph examination that analyses the difference between a true statement and an atypical response, false-insincere response, activation manifestations and others (Štěpánková et al., 2008) within the physiological responses of the person being examined), i.e., the expression of the degree of

agreement/difference. The court, when evaluating the conclusions of forensic examination, uses probability as a measure of uncertainty, which means that the essence of the matter is perfectly expressed here. The norm directly specifies that every statement made by the expert to the court, and which bears a certain degree of uncertainty must be accompanied by the expression of the degree of such uncertainty – *the only plausible measure of uncertainty is probability, which, however, is not used in the Report on the Performance and the Result of Polygraph Examination within the methodology of this examination.*

Therefore, it follows from the above that:

Polygraph examination as evidence within expert evidence, although fulfilling *the elementary purpose of § 89 (2) of the Code of Criminal Procedure – also set out in the explanatory memorandum (“the list of evidence specified in § 89 (2) is not exhaustive and thus other types of evidence can be used“)*, cannot be used as direct evidence.

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