

Judges' Attitude Towards Scientific Evidence

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»The judges' abilities to scientific evidence evaluation is still far away from the ideal.«

Edmond Locard, *L'enquete criminelle et les methodes scientifiques* (1920)

This article deals with the state of judges' knowledge of forensic science and their ability to evaluate scientific evidence. The results of surveys comparing the forensic knowledge of judges, defence counsel, jurors, students, and ordinary citizens, conducted in various countries, are presented, and the study focuses on the survey of Polish judges carried out in 2009. The findings are pessimistic; a great many judges do not possess adequate and sufficient knowledge for the assessment of scientific evidence. The same concerns their knowledge on eyewitness testimony. Further research should be conducted on other populations of judges in various countries. The study presents an exhaustive comparison of the results of the surveys in question, and it could make judges aware of the need to increase their forensic knowledge, and criminal justice supervisors to create proper education and training programmes intended exclusively for judges. Some remedies are proposed to improve the accountability of judges: court-appointed experts, meta-opinions, experts on eyewitness identification as well as forensic education and training of judges.

Keywords: scientific evidence evaluation, judges' knowledge, eyewitnesses, testimony

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1 Introduction

Stephen Breyer, a judge of the US Supreme Court, wrote some fifteen years ago: »Scientific issues permeate the law (...). The law must seek decisions that fall within the boundaries of scientifically sound knowledge and approximately reflect the scientific state of the art (...). I believe that in this age of science we must build legal foundations that are sound in science as well as in law. Scientists have offered their help. We in the legal community should accept that offer, and we are in the process of doing so. The result, in my view, will further not only the interests of truth but also those of justice.« (Breyer, 1998: 537–538)

On 28 June, 1993 the Supreme Court of the United States issued a judgment which has revolutionised the perception of scientific evidence throughout the world. Naturally, this judgment affects both the judiciary and the forensic science community. Although the ruling in question concerned a civil case (*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 1993),

this precedent has paradoxically played a most important role in criminal proceedings. The Supreme Court dismissed the appealed verdict and sent the case for a renewed hearing by the Court of Appeals for the 9th District. This court, taking into account over 30 epidemiological studies carried out on upwards of 130,000 persons, and guided by directives of the Supreme Court, dismissed the action in January 1995. On 2 October 1995, the Supreme Court rejected a motion by plaintiffs for a renewed hearing of the case.

However, it is not of the slightest significance who won in this case, the plaintiff or the defendant; it is important what the »nine just men« ruled on assessment criteria of scientific evidence.

The Supreme Court determined that in Federal Courts, the hitherto *Frye* standard, of general acceptance in a given field of knowledge (see *Frye v. United States*, 1923), would be replaced by the Federal Rules of Evidence. When assessing evidence, the adjudicating court should, in particular, be guided by the following criteria: falsification, review and publication, diagnostic value, standardisation, general acceptance.

The Court more precisely defined its standpoint in successive rulings, *Electric Company v. Joiner* (1997) and *Kumho Tire Company Ltd. v. Carmichael* (1999), reaching the conclusion

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that according to *Daubert* criteria, applied flexibly, not only should the scientific evidence and methodology of research be evaluated, but also the conclusions of expert opinions.

The *Daubert* standards have not been formally adopted either in state courts or in federal courts of the District of Columbia; in particular in the latter, the *Frye* standard of »general acceptance in a given field«, which was established there in 1923, has dominated since that date. However, by mid-2004 as many as 41 states had accepted evidence rules based on the Federal Rules of Evidence. The departure of the courts from the traditional procedure for assessing admissibility of evidence in the form of a pre-trial hearing in the context of *Frye* or *Daubert* criteria on testing the evidence reliability in the trial itself through cross-examination can also be observed (Keierleber & Bohan, 2005). However, the opinion that »the *Daubert* test remains problematic and controversial because of the burden it puts on judges, not trained for this task, to make judgments about the scientific validity of evidence« can also be encountered (Wecht, 2005: 534).

Nevertheless, forensic evidence plays a consistent and robust role in judicial proceedings (Peterson, Hickman, Strom, & Johnson, 2013).

2 American judges' opinions about the scientific evidence evaluation

Irrespective of the trial evidence standards, the key issue remains as to how they are understood and applied in practice by judges in particular civil and criminal cases. This matter was the subject of a survey of 400 American state judges conducted in 1998, i.e., 5 years after standards from the *Daubert* case had come into force (Gatowski et al., 2001)

Somewhat over one-half (205) of the respondents adjudicated in states observing the Federal Rules of Evidence and the *Daubert* standard, whilst the remainder (195) presided in states loyal to the *Frye* standard and its hybrids. In terms of forensic education of judges, 209 (52%) considered that they had been appropriately trained to assess scientific evidence, while the remainder were more pessimistic (realistic?) in this matter. However, in the period since finishing high school, as many as 85% had successfully completed courses in social studies, 77% in science, and 67% in biological sciences. Although over half of the respondents (63%) had received training in using various types of scientific evidence in trials, 96% admitted that they had no knowledge of scientific methodology.

Meanwhile, the first *Daubert* criterion falsification is drawn directly from the Popperian understanding of science.

It is therefore not surprising that in spite of the fact that 88% of judges deemed this criterion to be useful when assessing the essence of scientific evidence (8% were of the opposite opinion), only 4% of respondents did really understand it.

The criterion of diagnostic value (error rate) was similar, despite the fact that the vast majority of judges; 364 (91%) regarded it as useful (54% even »very useful«), only 16 persons (4%) fully understood it.

It turned out that, among all of the *Daubert* criteria, only peer-reviewed publication and general acceptance did not, in principle, pose difficulties for judges as full understanding of these points was ascertained in 71% and 82% of those surveyed respectively. It would be worthwhile to observe that judges from »pro-*Daubert*« states did not turn out to be in the least bit more expert on *Daubert* standards than their colleagues from »pro-*Frye*« states.

Another survey was conducted among 380 judges in Florida presiding over criminal, civil, family and juvenile cases (Bull Kovera & McAuliff, 2000). 144 (38%) of the replies were received concerning a civil case on sexual harassment. It turned out that as many as 17% of respondents would admit worthless psychological evidence and the same number would admit valid evidence. It might be therefore inferred that (American?) judges would also accept poor evidence as valid in other fields of forensic science.

Dixon and Gill (2002), when studying federal civil cases, established that in the post-*Daubert* era judges tend to be more inclined to assess the reliability of evidence from an expert opinion, standards of admissibility of such evidence have been raised, and parties, when presenting or challenging given evidence, also consider changes in the standards of assessment of scientific evidence. However, in criminal cases, only criteria from the Federal Rules of Evidence correlated with evidence admissibility, and a more significant influence of *Daubert* criteria was observed in relation to the admissibility of scientific evidence (Groscup, Penrod, Studebaker, Huss, & O'Neil, 2002).

Benton, Ross, Bradshaw, Thomas, and Bradshaw (2006) compared the knowledge of jurors (N = 111), criminal and civil judges (N = 42) and policemen (N = 52), in comparison with that of 64 experts in the field of the psychology of eyewitness testimony. Responses of jurors matched those of experts only in 4 out of 30 statements (13%), the biggest difference (31% vs. 81%) occurred in relation to a statement on diagnostic value of a simultaneous lineup (participants appear together in a line at the same time) and a sequential lineup (the group of participants files past, but one by one): »Witnesses are more

likely to misidentify someone by making a relative judgment when presented with a simultaneous lineup (as opposed to a sequential lineup)». Nota bene judges had even worse results here, i.e., 29%, and policemen 37%. Consistency was observed between judges and experts in relation to 40% of statements, with the greatest disparity being noted in the case of a thesis/statement on hypnotic suggestibility, namely, 17% of judges vs. 91% of experts. Police officers' views were also consistent with those of experts in relation to 40% of statements.

Currently it is difficult to imagine a criminal trial without scientific evidence. Therefore a question whether judges are sufficiently prepared to evaluate evidence of this kind is quite reasonable, especially having in mind miscarriages of justice.

It seems that there are no delusions about the situation in the field. For example, Morgulis (2009: 277) writes: »There is reason to think that giving complex scientific questions to the judge may not yield better or less arbitrary results than letting the jury decide the issue.«

The authors of the noted American report on the status of forensic science define the forensic knowledge of judges in the following way: »Lawyers and judges often have insufficient training and background in scientific methodology, and they often fail to fully comprehend the approaches employed by different forensic science disciplines and the reliability of forensic science evidence that is offered in trial (...).« Judges »generally lack the scientific expertise necessary to comprehend and evaluate forensic evidence« (Strengthening forensic science in the United States, 2009: 27, 110). Thompson (2009) exaggerates, maintaining that the NRC report portrays judges as ignorant, co-dependent, and hidebound, nevertheless its conclusions and recommendations reflect the actual state of judges' knowledge and abilities, not only in the United States.

3 Polish judges' opinions about the scientific evidence evaluation

Art. 7 of the Polish Code of Criminal Procedure [C.C.P.] (1997) and Art. 233 § 1 of the Code of Civil Procedure (1964) specify in the following way the judges' duties on the free appraisal of evidence: »The proceedings bodies shape their conviction on the basis of all evidence, evaluated freely according to the rules of proper reasoning and the indications of knowledge and life experience,« and »The court evaluates the reliability and strength of evidence according to its own conviction, on the basis of the comprehend evaluation of the evidence.«

Kwiatkowska-Wójcikiewicz and Wójcikiewicz (2009) surveyed 148 Polish judges presiding in criminal trials: 87 (59%)

from district courts, 57 (39%) from regional courts and 4 (2%) from appellate courts. Their average tenure was 10.2 years. When asked whether they were sufficiently prepared for the evaluation of scientific evidence, only 61 (41%) answered positively, 78 (53%) – negatively, and 9 persons (6%) did not give any answer. The answers to the question whether they had difficulties assessing expert witness opinions were as follows: very often – 0, often – 43 (29%), seldom – 103 (70%), never – 2 (1%). Paradoxically, 41 persons who maintained that they were not sufficiently prepared for evidence evaluation claimed they rarely had any difficulties in performing this task!

Very similar results were obtained by Hrehorowicz (2011) from having surveyed 37 judges presiding in economic criminal trials: 24 (65%) judges admitted that they were not sufficiently prepared for the evaluation of scientific evidence. Three (8%) respondents had very often difficulties in proceeding with this task, 12 (32%) – often, 21 (57%) – seldom, and 1 (3%) – never.

Kwiatkowska-Wójcikiewicz and Wójcikiewicz (2009) also inquired of the judges about the five most frequently ordered expert witness opinions in trials. Their ranking was as follows:

Psychiatric – 95% (140);
Road accident analysis – 88% (130);
Psychological – 76% (113);
Handwriting and questioned documents – 68% (100);
Forensic medicine – 66% (98);
Fingerprints – 53% (78);
Toxicological – 23% (34);
Tool marks – 21% (31);
Foot wear and tyre marks – 21% (31);
DNA – 16% (24);
Dog scent lineups – 11% (16);
Polygraph examination – 2% (3);
Other – 3% (5).

The respondents were also asked as to what kind of expert witness opinion used to be the most difficult to evaluate (range from 1 – very difficult to 13 – very easy). This time the order was (partially) reversed:

Polygraph examination – 4,87;
Dog scent lineups – 4,93;
DNA – 5,13;
Road accident analysis – 5,19;
Toxicological – 6,48;
Psychiatric – 6,58;
Psychological – 6,80;
Tool marks – 6,82;
Foot wear and tyre marks – 6,84;
Handwriting and questioned documents – 6,87;

Forensic medicine – 7,25;
Fingerprints – 7,68.

It seems that conclusive expert witness opinions are the easiest to evaluate, especially those referring to fingerprints, forensic medicine, and handwriting. As the most troublesome the respondents qualified vague, inconclusive or novel opinions such as the ones based on the polygraph examination, dog scent lineups or DNA examinations. The frequency of the opinions in trials and the judges' degree of familiarity with the issue also could have affected the answers.

The respondents, when asked about the reasons of the above-mentioned troubles and difficulties, indicated sophisticated methods and complicated technical language – 33% (49), ambiguity, unclear terminology of the opinions – 26% (38), and the lack of forensic knowledge – 26% (38).

De Keijser and Elffers (2012) examined the understanding of likelihood ratios by Dutch judges (N = 118), and defence counsels (N = 69) comparing to forensic science experts (N = 98). They came to the conclusion that proper understanding of likelihood ratios by jurists is quite poor, which is due mainly to the prosecutor's fallacy.

4 Judges' knowledge on eyewitness testimony

Relatively many surveys deal with the problem of the respondents' knowledge on eyewitness testimony. Judges' knowledge should, however, be analysed in the context of psychologists' knowledge, at least Norwegian 857 licensed psychologists, who had completed courses in cognitive psychology and memory science surveyed by Magnussen and Melinder (2012: 58), »do not score higher than trial judges on memory issues specifically concerned with the reliability of eyewitness testimony, and they do not score higher than the average adult Norwegian citizen on more general issues of memory«.

The series of such surveys of judges' knowledge and beliefs was commenced by Wise and Safer (2004), who surveyed 142 state judges, 10 federal judges, 7 retired judges, and one Indian tribal judge. The judges appear to have limited understanding of eyewitness factors as they averaged only about 55% correct on the 14-item scale.

The nearly identical questionnaire was presented to 121 undergraduates and 57 second- and third-year law students. They answered correctly on 58% and 66% items, respectively. It turned out that U.S. judges were no more knowledgeable than undergraduates about factors affecting the accuracy of

eyewitness testimony, and that both groups were less knowledgeable than law students were!

The results of the American judges (55%) were also compared with the results of 157 Norwegian judges – 63% (Magnussen et al., 2008) and the results of 170 Chinese judges – 47% (Wise, Gong, Safer & Lee, 2010).

Magnussen, Melinder, Strindbeck, and Raja (2010) compared the results of Norwegian judges (63%) to the results of 168 Norwegian jurors (58%), and 1,000 Norwegian citizens (56%). However, the best respondents were American defence attorneys whose knowledge score was 78%, well above the scores of the judges (Wise, Pawlenko, Meyer & Safer, 2007)!

5 The remedies for optimising judges' assessment of scientific evidence

As experts in law, judges cannot also be efficient arbiters of all kinds of science or skill experts (Shaw, 2011). What remedies should be implemented then into the criminal justice system to achieve the main goal of criminal trials: to detect and adequately punish the perpetrator, and not to convict the innocent person? It seems that those remedies are as follows:

- Court-appointed experts,
- Metaopinions,
- Expert opinions on eyewitness identification,
- Education of judges on forensic sciences.

Court-appointed experts (c.f., Hillman, 2002) can and should provide help for the court not only in the common law system. The report Expert Evidence in Criminal Proceedings in England and Wales (2011), issued by the Law Commission, contains important recommendations in the field: »6.78. A judge should be provided with a statutory power to appoint an independent expert to assist him or her when determining whether a party's proffered expert opinion evidence is sufficiently reliable to be admitted [since] 8.8. Judges do not need to be trained to become scientists, they merely need to be trained to be critical consumers of the science that comes before them.« Paradoxically, the Bill of amendment of the Polish Code of Criminal Procedure (2013) strictly limits in Art. 167 § 1 the court's right to produce evidence including calling up expert witnesses (»only in exceptional, particularly reasonable cases«). On the other hand, private opinions presented in court by the accused would be admissible (Art. 393 § 3), which *nota bene* will pose another challenge for judges.

The Polish Supreme Court in the judgment of 8 February 2007, III K 277/06, LEX no. 257859, in the following way perceives the judges' duties concerning forensic expert witness

opinions: »The opinion of an expert is subject to free appraisal of evidence, just as any other piece of evidence, in accordance with requirements specified in Art. 7 of the C.C.P. This assessment can concern every aspect of the issued opinion, which means that it does not have to be limited exclusively to the analysis of logical correctness of experts' conclusions, but should also concern the scientific correctness of the statements applied.« No doubt judges can sometimes have problems with adequate assessment of some scientific evidence. It is difficult to demand of judges that they have up-to-date knowledge on research methodology and scientific achievements. Metaopinions, i.e. opinions about opinions, without any additional examinations, seem to be a good way to obtain more knowledge in the situation of a judge's deficit of information (Wójcikiewicz, 2009).

Metaopinions are admissible in Polish judicial proceedings. For example, the Supreme Court in its judgment of 28 July 2005, V KK 18/05 (unpublished) stated that: »The court should consider the need to prepare a metaopinion (as evidence) by an appropriate institute, with the aim of assessing the correctness of the expert analysis performed in the case. Admittedly, an expert in the field of osmology should in principle be appointed to carry out an appropriate expert analysis of scent traces with the help of specialists. Nevertheless in a situation, where an osmological opinion constitutes the only incriminating evidence and doubts exist as to the methodological correctness of conducting the osmological expert analysis (this dynamically developing field of knowledge still does not guarantee explicit diagnostic results), it is possible to admit evidence from a metaopinion to assess the correctness of the expert opinion already provided in the case.« However, metaopinions ought to be treated as exceptional, and should not be regarded as a remedy for judges' ignorance.

The admissibility of a court expert evaluating the diagnostic value of the eyewitness identification evidence is still questionable, at least in common law countries (cf. Elliott, 1993; Fradella, 2006). However, this expert can support the court with a plethora of information unattainable from other sources. The illusion of the judges or the jury members being competent enough to assess the probative value of eyewitness testimony has led many innocent persons even to death row. Calling up an expert witness to evaluate an eyewitness identification testimony (the identification parade) by using the mock witness paradigm, undoubtedly could prevent many miscarriages of justice: out of the first 250 ex-prisoners exonerated owing to the Innocence Project, as many as 190 (76%) were misidentified by the witnesses (Garrett, 2011). Wise, Dauphinais, and Safer (2007) treat expert witness opinions in such cases as protective mechanisms against witness misidentification, next to strict compliance with the most recent and improved identification procedures and educating law-

yers and police officers. In some Polish cases such an expert witness opinion led even to the acquittal (Wójcikiewicz & Kwiatkowska-Wójcikiewicz, 2011).

It is a truism that forensic science education and training of prospective and current judges as well as prosecutors, defence counsel, and police officers is vital for the healthy criminal justice system. Especially judges are situated in a rather embarrassing position being obliged to evaluate scientific evidence (expert witness opinions) not having enough knowledge to carry out their duties. Therefore all forms of forensic science education and training of lawyers and prospective lawyers (students and apprentices) should be highly appreciated. For instance, the Department of Criminalistics and Public Security of the Jagiellonian University has been organising since 2007, the one-year postgraduate studies on evidence law and forensic sciences. Out of 532 students at least as many as 218 public prosecutors, 143 judges and 18 police officers graduated by 2013.

6 Conclusions

No doubt the proper evaluation of evidence is the best protection against the miscarriages of justice. It seems that the problem of the competencies of judges concerning scientific evidence evaluation will become more prominent when taking into consideration the changing paradigm of forensic science. Although the judges obviously prefer the conclusive expert witness opinions, they probably will have to be accustomed, and not only in forensic genetics, to the inconclusive opinions, mostly interpreted in line with the Bayes theorem (Konieczny, 2012; Saks & Koehler, 2005, 2008). From this perspective even more important become all training and education programmes targeted at the scientific evidence evaluators.

References

1. Benton, T. R., Ross, D. F., Bradshaw, E., Thomas, W. N., & Bradshaw, G. S. (2006). Eyewitness memory is still not common sense: Comparing jurors, judges and law enforcement to eyewitness experts. *Applied Cognitive Psychology*, 20(1), 115–129.
2. Bill of amendment of the Code of Criminal Procedure [Ustawa o zmianie ustawy-Kodeks postępowania karnego oraz niektórych innych ustaw]. (2013). *Parliament's document*, (1586).
3. Breyer, S. (1998). The interdependence of science and law. *Science*, 280(5363), 537–538.
4. Bull Kovera, M., & McAuliff, B. D. (2000). The effects of peer review and evidence quality on judge evaluations of psychological science: Are judges effective gatekeepers? *Journal of Applied Psychology*, 85(4), 574–586.
5. Code of Civil Procedure [Kodeks postępowania cywilnego]. (1964). *Dziennik Ustaw*, (43, sec. 296, with amendments).

6. Code of Criminal Procedure [Kodeks postępowania karnego]. (1997). *Dziennik Ustaw*, (89, sec. 555, with amendments).
7. De Keijser, J., & Elffers, H. (2012). Understanding of forensic expert reports by judges, defense lawyers and forensic professionals. *Psychology, Crime & Law*, 18(1-2), 191-207.
8. Dixon, L., & Gill, B. (2002). Changes in the standards for admitting expert evidence in federal civil cases since the Daubert decision. *Psychology, Public Policy, and Law*, 8(3), 251-308.
9. Elliott, R. (1993). Expert testimony about eyewitness identification: A critique. *Law and Human Behavior*, 17(4), 423-437.
10. Expert Evidence in Criminal Proceedings in England and Wales. (2011). *Law Commission*, (325).
11. Fradella, H. F. (2006). Why judges should admit expert testimony on the unreliability of eyewitness testimony. *Federal Courts Law Review*, (June), 3-29.
12. Garrett, B. L. (2011). *Convicting the innocent: Where criminal prosecutions go wrong*. Cambridge: Harvard University Press.
13. Gatowski, S. I., Dobbin, S. A., Richardson, J. T., Ginsburg, G. P., Merlino, M. L., & Dahir, V. (2001). Asking the gatekeepers: A national survey of judges on judging expert evidence in a post-Daubert world. *Law and Human Behavior*, 25(5), 433-458.
14. Groscup J. L., Penrod S. D., Studebaker C. A., Huss M. T., & O'Neil K. M. (2002). The effects on the admissibility of expert testimony in state and federal criminal cases. *Psychology, Public Policy, and Law*, 8(4), 339-372.
15. Hillman, T. (2002). Using court-appointed experts. *New England Law Review*, 36(3), 587-591.
16. Hrehorowicz, M. (2011). *Opinia biegłego w sprawach karnych gospodarczych i jej ocena sądowa* (Doctoral dissertation). Poznań: Uniwersytet im. Adama Mickiewicza.
17. Keierleber, J. A., & Bohan, T. L. (2005). Ten years after Daubert: The status of the states. *Journal of Forensic Sciences*, 50(5), 1154-1163.
18. Konieczny, J. (2012). Kryzys czy zmiana paradygmatu kryminalistyki? *Państwo i Prawo*, 1, 3-16.
19. Kwiatkowska-Wójcikiewicz, V. & Wójcikiewicz, J. (2009). Sędziowie wobec dowodu naukowego. In J. Kasprzak, & B. Młodziejowski (Eds.), *Kryminalistyka i inne nauki pomocowe w postępowaniu karnym* (pp. 43-57). Olsztyn: Print Group.
20. Magnussen, S., & Melinder, A. (2012). What psychologists know and believe about memory: A survey of practitioners. *Applied Cognitive Psychology*, 26(1), 54-60.
21. Magnussen, S., Melinder, A., Stridbeck, U., & Raja, A. Q. (2010). Beliefs about factors affecting the reliability of eyewitness testimony: A comparison of judges, jurors and the general public. *Applied Cognitive Psychology*, 24(1), 122-133.
22. Magnussen, S., Wise, R. A., Raja, A. Q., Safer, M. A., Pawlenko, N., & Stridbeck, U. (2008). What judges know about eyewitness testimony: A comparison of Norwegian and US judges. *Psychology, Crime & Law*, 14(3), 177-188.
23. Morgulis, E. (2009). Juror reactions to scientific testimony: Unique challenges in complex mass torts. *Boston University Journal of Science and Technology Law*, 15(2), 252-277.
24. Peterson, J. L., Hickman, M. J., Strom, K. J., & Johnson, D. J. (2013). Effect of forensic evidence on criminal justice case processing. *Journal of Forensic Sciences*, 58(S1), S78-S90.
25. Saks, M. J., & Koehler, J. J. (2005). The coming paradigm shift in forensic identification science. *Science*, 309(5736), 892-895.
26. Saks, M. J., & Koehler, J. J. (2008). The individualization fallacy in forensic science evidence. *Vanderbilt Law Review*, 61(1), 199-219.
27. Shaw, K. (2011). Expert evidence reliability: Time to grasp the nettle. *The Journal of Criminal Law*, 75(5), 368-379.
28. *Strengthening forensic science in the United States: A path forward*. (2009). Washington: The National Academies Press.
29. Thompson, W. C. (2009). The National Research Council's plan to strengthen forensic science: Does the path forward run through the courts? *Jurimetrics Journal*, 50(1), 35-51.
30. Wecht, C. H. (2005). Review: Effective expert witnessing, Fourth Edition: Practices for the 21st century, Jack V. Matson, Suha F. Daou, & Jeffrey G. Soper (CRC Press, New York 2004). *Journal of Legal Medicine*, 26(4), 529-534.
31. Wise, R. A., & Safer, M. A. (2004). What US judges know and believe about eyewitness testimony. *Applied Cognitive Psychology*, 18(4), 427-443.
32. Wise, R. A., Dauphinais, K. A., & Safer, M. A. (2007). A tripartite solution to eyewitness error. *Journal of Criminal Law & Criminology*, 97(3), 807-871.
33. Wise, R. A., Gong, X., Safer, M. A., & Lee, Y-T. (2010). A comparison of Chinese judges' and US judges' knowledge and beliefs about eyewitness testimony. *Psychology, Crime & Law*, 16(8), 695-713.
34. Wise, R. A., Pawlenko, N. B., Meyer, D., & Safer, M. A. (2007). A survey of defence attorneys' knowledge and beliefs about eyewitness testimony. *The Champion*, 33, 18-27.
35. Wójcikiewicz, J. (2009). *Forensics and justice: Judicature on scientific evidence 1993-2008*. Toruń: Dom Organizatora.
36. Wójcikiewicz, J., & Kwiatkowska-Wójcikiewicz, V. (2011). Rol sądowego eksperta w ocenie rezultatów opoznania, prowadzającego oczewidcem proisshestwija, *Ekspert-kriminalist, Fiedieralnyj nauczno-praktichieskij żurnal*, 3, 37-38.

Odnos sodnikov do znanstvenih dokazov

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Članek obravnava stanje znanja sodnikov o forenzični znanosti in njihovo sposobnost za ocenjevanje znanstvenih dokazov. Predstavljeni so rezultati raziskav, izvedenih v različnih državah, ki so primerjali znanje o forenziki med sodniki, zagovorniki, porotniki, študenti in občani. Študija se osredotoča na raziskavo o poljskih sodnikih, ki je potekala leta 2009. Ugotovitve so pesimistične; veliko sodnikov nima ustreznega in zadostnega znanja za ocenjevanje znanstvenih dokazov. Enake so ugotovitve glede njihovega znanja o pričanju očitca. V različnih državah bi bilo treba izvesti nadaljnje raziskave na drugih populacijah sodnikov. Študija predstavlja izčrpno primerjavo rezultatov raziskave pri vprašanih, ki se nanašajo na sodnike, zaradi česar bi le-ti morali prepoznati potrebo po povečanju njihovega znanja o forenziki. Nadzorniki kazenskega pravosodja bi morali ustvariti ustrezne programe izobraževanja in usposabljanja, namenjene izključno sodnikom. Avtorji predlagajo določena pravna sredstva za izboljšanje odgovornosti sodnikov: od sodišča imenovani strokovnjaki, meta-mnenja, strokovnjaki za identifikacijo očitca kot tudi izobraževanje in usposabljanje sodnikov na področju forenzike.

Ključne besede: ocena znanstvenih dokazov, znanje sodnikov, očitci, pričanje

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