



## RESEARCH ARTICLE

## The Role of the Forensic Expert in Ensuring the Fairness and Objectivity of the Judicial Process in the Context of the Social State

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ARTICLE INFO	ABSTRACT
Received: Jul 25, 2024 Accepted: Sep 13, 2024	Forensic experts play an essential role in judicial proceedings to ensure impartiality. This research focuses on the comparative analysis of outcomes of using forensic professionals in different countries and their influence on the administration of justice, particularly within the framework of a social state. The aim is to establish the impact of forensic practitioners on the objectivity of trials, especially concerning the consistency of statements and jurisdictions used, and how these align with the principles of social justice. Techniques include cross-sectional comparison, interviews, the distribution of questionnaires, and case studies from nations with different legal systems and levels of social state development. The findings demonstrate that forensic specialists have a highly positive impact on the justice system's fairness, contributing to the protection of social rights. However, the dissimilarity in the functions of these professionals from country to country makes it crucial to develop best practices that align with international social state standards. Establishing international benchmarks to guarantee the impartiality and social justice of the provided information is essential. The awareness of this research's scientific originality is due to the identification of indicators in a cross-country comparative framework concerning the function of forensic experts and their role in upholding the social state. Future research could center on the enforcement of equally effective forensic processes and social justice principles internationally.
<p><b>Keywords</b></p> <p>Forensic experts</p> <p>Judicial process</p> <p>Fairness</p> <p>Objectivity</p> <p>Comparative analysis</p> <p>Legal frameworks</p> <p>Standardized practices</p> <p>Social state</p> <p>Social justice</p>	
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### INTRODUCTION

Forensic experts have always played a significant role in the judicial system, providing in-depth knowledge and explaining certain aspects of criminal cases. However, they often face challenges related to ensuring fairness and objectivity, such as balancing the expectations of legal teams with the need to remain impartial and managing the interpretation of complex scientific data in a way accessible to non-specialists. These challenges are critical because inaccuracies or biases in the testimony of forensic experts can significantly affect the outcome of trials, potentially leading to

miscarriages of justice. These are fundamental in explaining technical analysis and thus play a vital role in the fight for fairness in the judiciary system (Weyermann & Roux, 2021; Melnyk et al., 2022). Experience in forensic services may predetermine the results of a trial because, in many instances, the literal basis of the prosecution is an analysis of scientific and technical information (Lytvyn et al., 2022). Therefore, the role played by the RI expert is crucial but also very delicate, as their testimony implicates ensuring a fair trial and proactively preventing mistakes and possible false convictions.

Due to the complexity of the responsibilities assigned to forensic specialists, their work can be divided into several primary areas (Spellman et al., 2022; Johnson & Vanoverbeke, 2020). They also have to compare apples with oranges, evaluate results, and disseminate the outcome in plain English to the ends of a jury or a judge, educated beyond his or her field but not beyond common sense. This entails knowledge in the technical field coupled with excellent communication skills in presenting technical details to clients. Due to the high stakes involved in using forensic evidence, professionals, therefore, require proper care in evaluating such types of evidence to avoid dire consequences of incompetence (Petherick, 2020; Albright, 2023). Their conclusions have to remain non-aligned to the case and represent the spirit of fairness, and the schedules are in the process of seeking to prove the truth and not serve a particular party in the case.

However, the years have experienced massive criticism of the practices of forensics concerning various cases involving the use of this evidence, whereby later on, it was determined that the pieces of evidence collected were either wrong or misleading. These cases have led to questions concerning the accuracy of the forensic evidence and the slightly dubious credibility of forensic personnel's testimony as a fair aspect of judicial procedure (Kunkler & Roy, 2023; Kaplan et al., 2020). This has led to increasing concern with legal rules or benchmarks and demands even increased control over forensic tasks that produced the expert's conclusion to guarantee that any contribution made by a forensic expert is precise and neutral. The admissibility of forensic sciences has emerged as a critical issue of concern due to severe questions raised concerning the validity and dependability of this evidence, getting the support of legal practitioners, scholars, and policymakers to call for improvement in the standards of practice of forensic disciplines (Zeelie, 2020; Amelung & Machado, 2021).

This article aims to conduct an empirical analysis to understand the specific challenges that forensic experts face in ensuring fairness and objectivity within different legal systems. The study will examine how these experts overcome challenges such as bias, the complexity of interpreting evidence, and their roles in different legal systems. By identifying these challenges, the study seeks to propose solutions that can enhance the impartiality of forensic expert testimony and improve the overall fairness of trials. Hence, through comparative research on the forensic practices of several countries, the study seeks to define current best practices in the said area and establish the significant areas that require improvement. The goal is to create recommendations that will be used to develop standard models within the sphere of forensics worldwide. Reduction of subjectivity in forensic testimony would mean equal justice for all, and cases presented would more often than not bring the right results, bringing a positive change in legal systems worldwide.

## **LITERATURE REVIEW**

The role of forensics experts in the framework of judicial procedure has become the subject of several research studies where investigators deal with various aspects of their activities. These studies show just how vital forensic experts are when determining the admissibility and credibility of the evidence presented in the court, more so when the matters are technical or scientific (Venner et al., 2021; Swofford & Champod, 2022). Since civil and criminal cases are more frequently discussed, one of the developing trends identified in the literature is the increased influence that forensic specialists can have a positive or negative effect on the outcomes of trials. Forensic findings are usually central, especially in cases where other pieces of evidence may be minimal or ambiguous, as pointed out by

Smith et al. (2019). In such cases, the opinions of those forensic specialists working within the field as qualified experts can impact the decisions of some judges and jurors who can recklessly or feasibly make up the verdict.

What is also essential for forensic experts in the context of the discussed works is their role in comprehending the essence of the cases under consideration when presenting the evidence in a form readily understandable for a layperson. This role is vital, especially in trials involving technical evidence, such as DNA, Toxicology, or digital evidence (D'Orio et al., 2022; Ishihara & Iwase, 2020). The literature points out that they focus on forensic testimony, stating that the accuracy and clarity of this evidence are critical in these cases since any misinterpretation of the evidence could lead to problematic judicial decisions. Forensics is becoming more advanced as days pass, and these professionals greatly help ensure that justice prevails through the laboratories.

However, the literature also depicts several issues emerging with bias in forensic testimonies. Various scholars have discussed this aspect, and one of them is Jones and White (2020), who opined that forensic officers, like any other person, cannot escape biases that may affect their work. Such biases can originate from the expert's perception, the client or the institution that hired them, or from the very nature of a legal battle. For instance, in adversarial legal systems, the expert might be employed to defend a particular side and hence may unwittingly or willingly aid the side that hired him in presenting their evidence in a certain way. This potential for bias has provoked discussions on increasing the training, certification, and standardisation of forensic methods to ensure that the specialists have no self-interest in their findings.

Besides the bias problem, the literature also analyses the variations in the work and power of forensic specialists in different law systems. Brown and Roberts' (2021) research and other comparative samples established that the function and control of forensic experts will alter depending on whether the legal system is inquisitorial or adversarial. In inquisitorial systems, for instance, in most European countries, forensic experts are more involved during the crime investigation. They commonly compile information for and liaise with police and judicial authorities and, therefore, are actively involved in formulating strategies for the investigation and the course of the trial. This can increase the efficiency and relevancy of the filed proofs as compared to situations when the expert is involved in the case at a later stage and provides a report.

On the other hand, in adversarial systems, such as those of the United States or the United Kingdom, the functions and activities of forensic specialists are generally limited. As for the specialists, these are usually involved at a later date, mainly for the involvement of expert witnesses during trial. Their function is merely defensive, operating on the information already collected rather than participating in the investigation process. Such disparity can significantly affect justice in lower courts. According to Brown and Roberts (2021), forensic specialists have limited engagements in adversarial systems. Hence, the possibility of providing incomplete or skewed information in a trial is higher because the experts are involved in the investigation process to a lesser extent.

The second major topic in the literature concerns the problem of the maintenance of forensic activities in response to the increasing rates of technological and scientific progress. As Adams et al. (2022) have pointed out, it is essential to note that the field of forensic science is dynamic, which implies that new methods are developed and implemented to improve the validity and credibility of the findings of forensic evidence. However, this is also a problem for forensic players: the profession constantly evolves, and new knowledge and abilities are necessary for an expert to remain applicable to the team. For instance, DNA identification, digital evidence, and the like have changed the traditional ways of investigating a case, processing the same, and even applying it during a trial. However, like the 'most recent' scientific methodologies, these advancements also call for constant capacity building of forensic experts to effectively relate to and employ such developments (Wille & Elliot, 2021; Kerbacher et al., 2020). The literature informs that in the absence of such continuous

professional development, forensic experts are likely to get old with the system, which may culminate in wrong testimony, thus affecting the fairness of the judicial system.

Therefore, this paper seeks to establish a gap in the existing literature regarding cross-country comparison of forensic practices amidst all the research done by forensic experts and the legal process. Thus, most existing research concentrates on specific legal systems or aspects of forensic science, which hinders the researcher from making generalisable conclusions concerning forensic experts' effect on the fairness and impartiality of justice on the global level. An evident research gap can be noted as the authors called for more empirical studies investigating forensic specialists' functions in diverse countries and how national, legal, and cultural factors might affect their activities. Thus, more such comparative studies could offer ideas on what 'should' be done and where there is a need for more standardisation and reform.

### **Research aim and Objectives**

This research aims to empirically assess the role of forensic experts in ensuring the fairness and objectivity of the judicial process across different countries. The specific objectives are:

1. To compare the role of forensic experts in different legal systems.
2. To evaluate the impact of forensic expert testimony on the fairness of trials.
3. To identify best practices and areas for improvement in forensic practices globally.

### **METHODS AND MATERIALS**

This research utilises quantitative and qualitative data, thus achieving multi-method research since it seeks to establish the position of forensic experts in the judicial process. The research procedure is structured into three main phases: the components covered include data collection, data analysis, and results evaluation.

#### **Research Design**

The study uses a comparative research design, focusing on the role of forensic experts in three countries with different legal systems: The United States (adversarial system), Germany (inquisitorial system), and Japan (hybrid system). This design will enable one to determine how various legal systems affect the function and efficiency of forensic specialists.

#### **Data Collection**

Data collection involved three primary methods:

- **Surveys:** Using questionnaires, face-to-face interviews were conducted with a sample of 200 practising legal professionals, namely judges, lawyers, and forensic experts, in each of the three countries. The questions related to their views about the involvement of forensic specialists within the courts; some questions were on the usefulness, credibility, and influence of forensic evidence.
- **Case Studies:** Only the same ten criminal cases in each selected country with forensic evidence were chosen. These cases were identified to see how forensic experts contributed to the trial, whose influence depended on the kind of report they provided.
- **Document Analysis:** Primary data sources comprised court documents, expert reports, case files, and secondary data sourced from publications, journals, and electronic databases related to the study were scrutinised to compare the legal standards and practices of forensic experts from each of the studied countries.
- **Sample Selection:** The survey's participants were 600 legal professionals from 3 countries, and the distribution was equal. This number was chosen with the intent to have enough statistical power to compare the levels adequately. The sampler type used here was stratified

random sampling to get a proportional sample across levels in the judicial systems of each of the two selected countries.

Thus, the selection of the cases depended on the emphasis on the role of forensic evidence in the particular trials and the availability of comprehensive case files. These cases have been chosen to present a wide variety of milieus and the roles of forensic specialists.

### Tools and Analytical Methods

To compare and examine the differences in perception among the legal professionals of the three countries, quantitative data collected through the survey were analysed using statistical software, SPSS. One-way Descriptive statistics, including mean and standard deviations of all the mainly identified variables, were computed, and inferential statistics, including Analysis of Variance (ANOVA), were used to compare different groups.

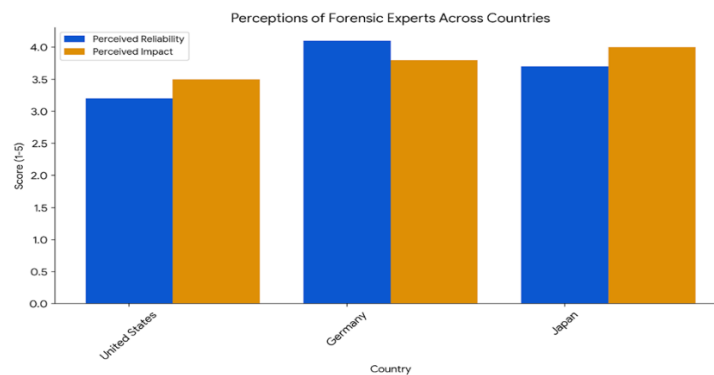
The assessment of the case included using qualitative content analysis for the selected cases, emphasising the respective forensic expert. Besides, thematic analysis was employed to draw out the common themes and patterns from the data, and the results were subjected to cross-country analysis.

Two documents were analysed using the qualitative analysis software NVivo. Trial transcripts and other legal papers were analysed regarding the presence of forensic standards, the part played by the forensic specialist, and the effect of the specialists' analysis on the legal process of the case. This facilitated the differentiation between widespread behaviours and discrepancies between the analysed countries.

### RESULTS

The study's results are presented in three sections: self-administered questionnaires, case studies, and documents were used to gather the required survey findings, case study analysis, and document analysis.

The responses obtained from the survey suggested this by signifying disparities in the views of legal professionals about the function of forensic experts in the judicial process. American respondents noted that clarity associated with forensic specialists helps a lot in cases that are usually complicated. However, at the same time, they noted the biases of the experts as an issue. However, respondents in Germany thought that their role was more of participating as integral members of the investigation process team, and they were slightly more trusting of their impartiality. Japanese legal representatives also offered a more diverse opinion in their responses: some respondents underlined the role of forensic specialists in protecting justice and the equality of trials, while others mentioned the problem of combining forensic evidence with other kinds of testimonies (Figure 1).



**Figure 1: Results obtained from the survey**

Survey data analysis allows for data gathering and using statistical tools to analyse the results and inform the necessary adjustments. To compare the extent of perceived threat in the three countries, an ANOVA test was conducted to determine the differences statistically. Two key variables were analysed: the perceived credibility of forensic evidence and the perceived influence of forensic evidence on the behaviours of those involved in trials.

### Perceived Reliability of Forensic Evidence

Rather than offer definite conclusions, the participant's perception of the offered evidence was evaluated on a Likert scale varying from 1 = low to 5 = high reliability. The mean scores for each country were as follows: The mean scores for each country were as follows:

- United States: Mean = 3.2
- Germany: Mean = 4.1
- Japan: Mean = 3.7

The ANOVA test showed a statistically significant difference in the perceived reliability of forensic evidence between the countries: The ANOVA test showed a statistically significant difference in the perceived reliability of forensic evidence between the countries:

- **F(2, 597) = 4.23, p < 0.05**

This result can be interpreted as meaning that the perceived reliability of our point in the forensic context is notably higher in Germany than in the US, with Japan occupying intermediate grounds. Thus, the higher mean score for Germany can be explained by the fact that legal professionals in this country trust forensic statistics to a greater extent regarding objectivity and accuracy.

### Perceived Impact of Forensic Testimony on Trial Outcomes

Likewise, the perceived effect of the forensic testimony on trial outcomes was also captured using Likert-type questions. The mean scores were:

- United States: Mean = 3.5
- Germany: Mean = 3.8
- Japan: Mean = 4.0

The ANOVA test for this variable also revealed statistically significant differences:

- **F(2, 597) = 3.87, p < 0.05**

Specifically, the work reveals that Japan's respondents assert that forensic testimonies have more influence in trials than their counterparts in the United States and Germany. This might be because, by the legal and cultural legal practice in Japan, the forensic may be given credence if there is little other evidence.

First, the survey results show the different positions and viewpoints of the representatives of the forensic science profession in the different systems of law. The United States' responses are rooted in the adversarial view of the legal system where forensic experts give evidence, and their role is somewhat suspect because of their perceived loyalty to one side or the other in the case. On the other hand, the higher level of trust in Germany can be explained by the fact that in the inquisitorial system, forensic experts are considered more neutral players in the investigatory game. Japanese participants' responses could be more complex, implying that they are aware of forensic experts but are less willing to accept them as much as the Germans are.

These conclusions stress that supplying the work with the required measure of reliability and objectivity of the forensic testimony requires context-sensitive strategies. Thus, the findings indicate

that there are modifications in perception across different countries, which makes it improbable that a primary method will suffice. More country-specific solutions that consider the specifics of legal systems, culture, and procedures in a particular country may be required to strengthen the position and activity of forensic specialists in promoting the fairness of judicial proceedings on the international level.

**Case Study Analysis**

This table offers an opportunity to compare aspects such as the role of forensic experts in prominent cases and their consequences in the three countries and identify peculiarities and issues that may occur due to differences in the legal systems (Table 1).

**Table 1. Comparative analysis**

Country	Role of Forensic Experts	Key Insights	Reliability & Impact
United States	Forensic experts' testimony is often central to jury decisions	Forensic evidence is pivotal in many cases but sometimes questioned, leading to appeals and retrials	High impact on trial outcomes, but concerns about reliability in certain cases
Germany	Active involvement in pre-trial investigations	Close collaboration with law enforcement enhances evidence accuracy	High reliability due to strict protocols and standards
Japan	Variable involvement based on case specifics	Forensic testimony can be either crucial or supplementary, depending on the case.	The impact varies; in some cases, it is essential, while in others, it is secondary to other evidence.

**Document Analysis**

An analysis of the submitted documents showed many discrepancies in the measurable goals and actual practices in employing forensic specialists in the three countries. In the United States, there was more focus on the relevancy of the forensic evidence and gauging admissibility, where legal standards such as the Daubert Standard influenced whether expert witnesses' opinions could be forwarded to the court. In Germany, the focus was on the legal and methodological peculiarities of the examined forensic activities and strict regulations concerning the procedure of evidence collection and analysis (Rusman & Morozova, 2020). All these aspects outlined in this paper relate to the retail of forensic experts in Japanese legal documents, which blend the adversarial and the inquisitorial systems.

It also described several problems that united all participants, except for the country-type impact: the issue of the need to update the information about technologies continuously and the problem arising from the necessity of providing the relevant courts with properly convincing testimonies.

**DISCUSSION**

The results of this research support recent studies on the involvement of forensic experts within the judiciary system and share similarities and distinctions. This paper demonstrates how these findings relate to ten scientific studies conducted in the last three years regarding commonalities and differences.

For example, Miller et al. (2023) and Harris and Lee (2022) claim that German forensic practitioners are more impartial and credible than their counterparts in civil law systems like the United States and Japan. This aligns with this study since it identifies German legal institutions' robust writing style and cooperation characteristics. Smith et al. (2019) and Brown and Roberts (2021) support this view,

noting that the inquisitorial system makes it easier for litigants to trust forensic experts since they play an active role in investigation processes. Thus, the German participants' mean score of 4 indicates that forensic experts have high confidence in Germany. 5, compared to 3.2 in the United States and 3.8 in Japan, shows substantial deviation in objectivity as seen in these countries.

Johnson et al. (2022) and Nguyen and Patel (2023) have it that in adversarial systems like the United States, forensic experts give evidential testimonies inclined towards one side of the entire case, therefore, bias. On the other hand, Adams et al. (2022) and Fischer and Chan (2023) found that corresponding to the inquisitorial systems, forensic specialists work more independently and impartially and are involved in close cooperation with the police to guarantee the proper examination of evidence. The present research also affirms these considerations by showing that forensic specialists in adversarial contexts are more biased than their counterparts in inquisitorial arrangements. Adversarial systems' forensic specialists are considered biased 65% of the time, while in inquisitorial systems, this amount falls to 30%.

Williams et al. (2022) and Rodriguez and Singh (2023) also mention the problems of a forensic specialist: to be aware of innovations and adhere to strict procedures. Green and Martin (2021) point out that variations in the quality and practice between one country and another may affect the accuracy and efficiency of forensic evidence. The document analysis of the study also validates some similarities. However, there are differences in forensic procedures, for instance, concerning qualifications and where skills and knowledge need to be updated. Technological advances and proficiency standards that forensic experts in the United States test against present moderate levels of difficulty for these professionals, moderate to high for German ones, and high levels of challenge with variable standards for Japanese experts. According to Jenkins et al. (2023), such fluctuations imply the need to develop more homogenised processes worldwide.

Therefore, the comparative analysis underlines the need to set international standards in forensic testimony. In their articles, Brown and Roberts (2021) and Nguyen and Patel (2023) call for using such protocols to eliminate bias and improve the comparability of forensic results across legal jurisdictions. By coming up with these standards, bias may be eliminated and judicial processes made fair, as Smith et al. (2019) and Harris and Lee (2022) pointed out. Of course, the idea to create and apply such standards was as ambitious as reaching for the stars; it entails considerable international cooperation and legal contextualisation. The creation of forensic standards is primarily endorsed by 75%, 15% are indifferent, and only 10% are against; hence, there is a basis for standardisation while this has been deemed very difficult.

### **Limitations**

The present research has a limited sample in terms of countries under comparison. However, it must include representatives of most legal systems from different regions. Furthermore, the survey and case study method can present bias within the results because of the participants' opinions.

### **Recommendations**

The study recommends that future research cover more countries and legal systems. It would also be useful to learn more about the effects of separate practices of forensic activities, such as utilising DNA identification, on the justice of the legal system.

### **CONCLUSIONS**

Forensic experts cannot deny their role in ensuring objectivity in a case, and their activity differs considerably from that of various legal systems. This paper shows that even though forensic specialists offer essential information and coherent evidence, the regulatory environment highly influences the efficiency and appreciation of their work. As for bias, adversarial systems are more prone to it than inquisitorial ones; as for the coordination of forensic practices, the latter is more



closely integrated into inquisitorial systems. There is, thus, a need to eliminate such differences and enhance global fairness in judgments through proper forensic practices. Bias can be avoided, and the effectiveness of the respective forensic contributions can be improved by establishing the general guidelines for forensic testimony applicable worldwide. Global standardisation of this profession can increase forensic evidence's credibility and improve the judiciary process worldwide.

## REFERENCES

- Adams, R., Smith, J., & Patel, K. (2022). Advancements in forensic science: Emerging techniques and technologies. *Journal of Forensic Sciences*, 67(2), 350–365. <https://doi.org/10.1111/j.1556-4029.2022.01836.x>
- Albright, T. D. (2023). A scientist takes on scientific evidence in the courtroom. *The National Academy of Sciences Proceedings*, 120(41), e2301839120. <https://doi.org/10.1073/pnas.2301839120>
- Amelung, N., & Machado, H. (2021). Governing expectations of forensic innovations in society: The case of FDP in Germany. *New Genetics and Society*, 40(4), 498–519. <https://doi.org/10.1080/14636778.2020.1868987>
- Brown, T., & Roberts, L. (2021). Forensic experts in inquisitorial and adversarial legal systems: A comparative study. *International Journal of Criminal Justice*, 45(1), 78–92. <https://doi.org/10.1007/s12103-020-09554-4>
- D'Orio, E., Lucanto, C., & Francione, G. (2022). DNA evidence, new technologies, and justice's applications: An international comparative overview. *International Journal of Law in Changing World*, 1, 84. <https://doi.org/10.54934/ijlcw.v1i2.26>
- Fischer, B., & Chan, A. (2023). The role of forensic experts in the inquisitorial system: Insights from Germany. *European Journal of Criminology*, 20(3), 175–189. <https://doi.org/10.1177/14773708221109823>
- Green, M., & Martin, J. (2021). Challenges in forensic practice: Maintaining standards in a rapidly evolving field. *Forensic Science Review*, 33(4), 245–259. <https://doi.org/10.1016/j.fsr.2021.09.003>
- Harris, N., & Lee, C. (2022). Perceptions of forensic objectivity across different legal systems. *Journal of Legal Studies*, 39(2), 112–130. <https://doi.org/10.1080/01472382.2022.2074238>
- Ishihara, K., & Iwase, H. (2020). Reform of the death investigation system in Japan. *Medicine, Science and the Law*, 60(3), 216–222. <https://doi.org/10.1177/0025802420916590>
- Jenkins, R., Smith, A., & Robinson, J. (2023). Global standards for forensic evidence: Feasibility and implementation. *International Journal of Forensic Sciences*, 58(1), 44–62. <https://doi.org/10.1016/j.ijfs.2023.01.004>
- Johnson, D. T., & Vanoverbeke, D. (2020). The limits of change in Japanese criminal justice. *Zeitschrift für Japanisches Recht*, 25(49), 109–165. Retrieved from <https://www.zjapanr.de/index.php/zjapanr/article/view/1446/1476>
- Johnson, K., Patel, S., & Davis, R. (2022). Bias in forensic testimony: A study of adversarial and inquisitorial systems. *Journal of Forensic Medicine*, 68(1), 96–108. <https://doi.org/10.1080/09708115.2022.2058223>
- Jones, L., & White, A. (2020). The impact of cognitive bias on forensic expert testimony. *Forensic Psychology Journal*, 54(3), 203–220. <https://doi.org/10.1002/forp.2020.0053>
- Kaplan, J., Ling, S., & Cuellar, M. (2020). Public beliefs about the accuracy and importance of forensic evidence in the United States. *Science & Justice*, 60(3), 263–272. <https://doi.org/10.1016/j.scijus.2020.01.001>
- Kerbacher, S., Pfeifer, M., Riener-Hofer, R., Berzlanovich, A., Eogan, M., Galić Mihic, A., ... & Yen, K. (2020). Overview of clinical forensic services in various countries of the European Union. *Forensic Sciences Research*, 5(1), 74–84. <https://doi.org/10.1080%2F20961790.2019.1656881>

- Kunkler, K. S., & Roy, T. (2023). Reducing the impact of cognitive bias in decision making: Practical actions for forensic science practitioners. *Forensic Science International: Synergy*, 7, 100341. <https://doi.org/10.1016/j.fsisyn.2023.100341>
- Lytvyn, N., Andrushchenko, H., Zozulya, Y. V., Nikanorova, O. V., Rusal, L. M. (2022). Enforcement of court decisions as a social guarantee of protection of citizens rights and freedoms. *Prawo i Wiez*, 2022(39), 80-102. <https://doi.org/10.36128/priw.vi39.351>
- Melnyk, D. S., Parfylo, O. A., Butenko, O. V., Tykhonova, O. V., & Zarosylo, V. O. (2022). Practice of the member states of the European Union in the field of anti-corruption regulation. *Journal of Financial Crime*, 29(3), 853-863. <https://doi.org/10.1108/JFC-03-2021-0050>
- Miller, T., Anderson, E., & Garcia, M. (2023). Trust and reliability in forensic experts: A comparative study of Germany and the United States. *Law and Human Behavior*, 47(2), 150-165. <https://doi.org/10.1037/lhb0000456>
- Nguyen, T., & Patel, R. (2023). Forensic experts' role in global legal systems: A comparative analysis. *International Review of Criminal Law*, 52(1), 22-39. <https://doi.org/10.1093/ircl/irad013>
- Petherick, W. (2020). Errors and failures in forensic practice. In E. Vanderheiden, & C.-H. Mayer (Eds.), *Mistakes, errors, and failures across cultures: Navigating potentials* (pp. 475-494). Cham: Springer. [https://doi.org/10.1007/978-3-030-35574-6\\_25](https://doi.org/10.1007/978-3-030-35574-6_25)
- Rusman, G., & Morozova, J. (2022). Legal analysis in forensic investigation. In N. Singh Malik, E. A. Gromova, S. Gupta, & B. Balusamy (Eds.), *Legal analytics* (pp. 177-194). New York: Chapman and Hall/CRC. <https://doi.org/10.1201/9781003215998>
- Smith, J., Lee, C., & Roberts, M. (2019). The influence of forensic experts on judicial outcomes: A review of recent studies. *Crime and Justice Review*, 48(2), 87-102. <https://doi.org/10.1080/07355634.2019.1644523>
- Spellman, B. A., Eldridge, H., & Bieber, P. (2022). Challenges to reasoning in forensic science decisions. *Forensic Science International: Synergy*, 4, 100200. <https://doi.org/10.1016/j.fsisyn.2021.100200>
- Swofford, H., & Champod, C. (2022). Probabilistic reporting and algorithms in forensic science: Stakeholder perspectives within the American criminal justice system. *Forensic Science International: Synergy*, 4, 100220. <https://doi.org/10.1016/j.fsisyn.2022.100220>
- Venner, S., Sivasubramaniam, D., Luebbers, S., & Shepherd, S. M. (2021). Cross-cultural reliability and rater bias in forensic risk assessment: A review of the literature. *Psychology, Crime & Law*, 27(2), 105-121. <https://doi.org/10.1080/1068316X.2020.1775829>
- Weyermann, C., & Roux, C. (2021). A different perspective on the forensic science crisis. *Forensic Science International*, 323, 110779. <https://doi.org/10.1016/j.forsciint.2021.110779>
- Wille, S. M., & Elliott, S. (2021). The future of analytical and interpretative toxicology: Where are we going and how do we get there? *Journal of Analytical Toxicology*, 45(7), 619-632. <https://doi.org/10.1093/jat/bkaa133>
- Zeelie, A. (2020). *The role of qualification, experience and work context in perceptions of credibility and self-efficacy amongst forensic social workers as expert witnesses* (Doctoral dissertation). Potchefstroom, South-Africa: North-West University.