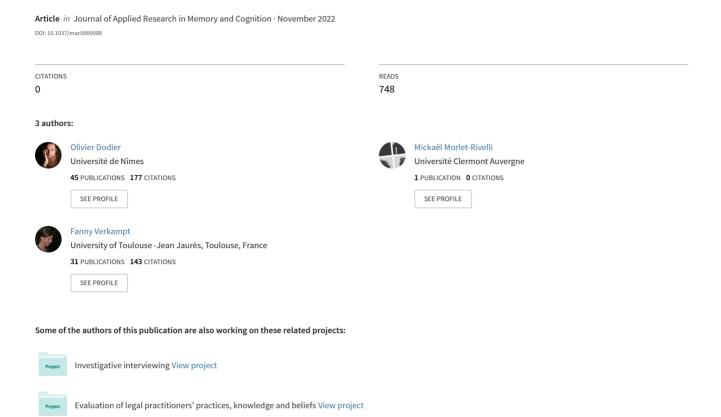
France lags behind in the application of memory science in the courtroom



France Lags Behind in the Application of Memory Science in the Courtroom

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Abstract

France has a strong psychoanalytical tradition in the application of psychology, and the legal field is no exception. In this article, we discuss the consequences of the limited use in court of knowledge about memory from cognitive sciences. As illustrations, we present published data showing the limited knowledge of French expert witnesses on memory, and a brief overview of two reports highlighting the failure of expert witnesses to mobilize reliable scientific knowledge in their reports and in the courtroom. Finally, we propose recommendations for improving practices.

Keywords: Memory science; expert witness; Justice system; Applied science; cognitive science

Discussing contributions of cognitive science to the practices of psychologists and psychiatrists in the French legal area is not easy. Traditionally, legal psychological or psychiatric reports are produced by clinical practitioners, whose theoretical orientation is mostly psychoanalytic. Guivarch et al. (2017) conducted a survey showing that 41% of psychiatry experts claimed a psychoanalytical background and about 18% a neuroscientific background, while no expert claimed a cognitive science background. Researchers have also stressed the dominance of psychoanalysis in the practices of French expert psychologists (Combalbert et al., 2014; Dodier, 2018), resulting in very little use of memory science in expert reports, either in the investigation stage or in trial. Indeed, psychoanalysis has been very popular in France since the 1970s and the great influence of Jacques Lacan in the fields of psychiatry and psychology. At the time, therapeutic tools based on scientific evidence were strongly associated with a North American culture and psychoanalysis was deemed a shield against approaches considered to control minds (Amouroux, 2017).

This popularity has never diminished in France, to the point where it is widely taught in the psychology department of French universities, and many master's degree programs in psychology are dedicated to it. Despite this popularity, the scientific community widely criticized the psychoanalytic conceptions of memory functioning (Crews, 1996; McNally, 2012; Otgaar et al., 2019; Otgaar et al., in press), such as traumatic repression (i.e., memories of traumatic events are pushed outside the boundaries of consciousness and are stored in an area inaccessible in their pristine form, for the purpose of protecting psychological well-being) or the functioning and role of false memories (i.e., false memories, according to Freud, would be oedipal fantasies; Freud, 1917/1962). Therefore, because psychoanalytic practice appears to be predominant in psychology education, it is not surprising that it is also prevalent in clinical psychology practice and expert reports. It is not surprising as well to observe, in expert reports, memory-related opinions that are not sufficiently grounded in updated science.

The aim of this article is to provide an overview of France's delay in the application of memory science in the legal field. For that, we will develop arguments showing both the delay in comparison with other countries and the lack of knowledge that French experts have on this issue. We will then present two expert reports on a complainant's and a suspect's memory. Finally, we will propose recommendations to improve the application of memory knowledge from cognitive sciences in the French legal field.

There Is No Official Role for Memory Experts in the French Legal System

To appear on the official lists of French judicial experts, psychologists and psychiatrists must apply to the Public Prosecutor at the High Court. In the application form, they must inform about their legitimacy (e.g., education, training, professional experience in the legal field) to provide expert reports. Peers and magistrates then assess the applications on the basis of specific criteria (e.g., professional skills, experience).

The French judicial system is inquisitorial. Therefore, the judges appoint experts to answer technical questions at the time of the investigation. This is different from the adversarial system where experts are generally appointed by the prosecution and defense parties to intervene at the time of trial. Standardized questions asked to French psychology and psychiatry experts cover a variety of topics, with a predominance of clinical and psychopathological issues¹.

Although the role of memory expert does not exist in France, forensic psychologists and psychiatrists often have to give their opinion on memory issues (Dodier, 2018). For example, the exploration of any factors that might influence complainant's testimony in sexual violence cases is almost systematically requested from the psychologists (or even psychiatrists, see Case 1). Similarly, in a high-profile case in France concerning the murder of a 5-year-old child whose body has never been found, psychologists and psychiatrists were sought as to why the two

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¹Standard questions are available here: https://doi.org/10.5281/zenodo.7303985

defendants (the mother and stepfather) stated that they could not remember where they had buried the young girl's body².

All questions relating to memory functioning are therefore asked to experts officially registered on lists of experts, who are mainly clinical practitioners (Dodier 2018) unlike other countries practices where the role of memory experts exists, and this, regardless of whether the legal system is inquisitorial or adversarial (e.g., Italy: Otgaar et al., in press; New Zealand: Zajac et al., 2013; UK: Conway, 2013; US: Brainerd, 2013; The Netherlands: Otgaar et al., 2017).

A notable difference between the practice of forensic psychological assessment and that of memory expertise is that the former refers to the work of a clinician, whereas the latter refers more to the work of a cognitive psychologist or, to some extent, a cognitive neuropsychologist. Therefore, providing an expert report on memory does not require meeting the complainant or the suspect, but rather exploring in depth the case file in order to highlight factors known to influence event-related memories. Memory experts are generally not asked to give an opinion on facts of the case, but instead to extract these factors from a case file—if present—, relate them to the scientific literature (e.g., Otgaar et al., 2017) and to educate judges and the court on this.

French Experts Know Too Little About Memory

In addition to the absence of the role of memory expert in France, it also appears that French experts have a low level of scientific knowledge about how memory works, as shown by Dodier and Payoux (2017). In their study, 120 French psychologist and psychiatrist experts completed a 14-item questionnaire on memory. Results showed that participants had a below-average score of correct answers (M = 6; SD = 0.18). For instance, about 30% of the experts were either uncertain or disagreed with the existence of the misinformation effect (see Loftus,

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²For more information on this case, see https://www.lefigaro.fr/actualite-france/2016/11/22/01016-20161122ARTFIG00380-affaire-fiona-la-face-cachee-de-cecile-bourgeon.php (in French)

2005). One in five experts agreed with the possibility to accurately remember events that occurred before the age of two (see Howe, 2019). A main result was that French expert psychologists and psychiatrists had significantly fewer correct answers on average than their non-expert colleagues (M = 6.64; SD = 0.20), but also than the general public (M = 7.06; SD = 0.10)—potential jurors.

In a following study, the knowledge on memory of French vs. Norwegian psychologist and psychiatrist experts were compared on a 12-item questionnaire (Dodier et al., 2019). On the whole questionnaire, the French sample had significantly less knowledge on average. Despite that the French sample was predominantly composed of clinical practitioners, they also performed less well on items related to clinical psychology (i.e., 7 out of 12 items).

All these results were discussed in the light of two arguments. Firstly, the strong influence of psychoanalysis in the education of French psychologists and psychiatrists may prevent them from having sound scientific knowledge. Secondly, the chances for French experts to be challenged during the investigation or trial is lower than experts in adversarial systems. In the latter systems, safeguards often ensure the scientific validity of arguments experts provided in their reports (e.g., in the U.S., the Daubert standards; see also Areh et al., 2021), which may result in the rejection of some reports. In France, such safeguards do not exist. Despite the importance left in the law to the adversarial process (e.g., Lawyers can request a counter-expertise at the time of the investigation), French judges and lawyers do not have the necessary training to assess the reliability of expert reports. In fine, it can reflect difficulties for cognitive science inputs on memory to be applied in the French legal field. In the next section, we illustrate this lack of knowledge by two cases in which French experts failed to rely on memory science.

Two Cases³ of Failure to Use Memory Science by French Experts

Case 1

In 2016, a psychiatrist provided an expert report concerning a 16-year-old girl, accusing her grandfather's brother of sexual abuse when she was 8 years old. This appeared to be a case of recovered memory: the complainant suddenly and spontaneously remembered the event when she heard the suspect's name, with the feeling that she had never been aware that any abuse had occurred until she remembered. The defense counsel commissioned the first author of this article (OD) to examine and provide, if relevant, a critical examination on the psychiatrist's report about possible memory-related issues that the expert would not have explored.

Firstly, focused on complainant's credibility, the expert did not comment on possible factors influencing her testimony and its credibility. While the scientific community has tested tools to assess the credibility of testimonies (e.g., *CBCA*, Steller & Köhnken, 1989; the *reality monitoring* approach, Johnson & Raye, 1981); the expert based his conclusions regarding the complainant on his personal judgement, stating that she was "sincere", ignoring any evidence-based tools to establish credibility.

Secondly, regarding the recovered memories of sexual abuse suffered by the complainant, the expert referred to "a more or less conscious and active self-protective mechanism of memory repression, which lasted for about years, before completely breaking down in autumn 2015." First, the notion of repressed memory is widely debated within—and criticized by—memory researchers (Mangiulli et al., 2022a; Otgaar et al., 2019). Then, at no point did the expert refer to the road accident the complainant had between the target event and the memory recovery, even though this accident caused her a head injury and a coma putting her life in

³ The first case report is based on the expert report made by the first author of the article (OD). The second case report was provided by an expert in psychology who knew the purpose of our article and gave their consent to do a critical analysis of it anonymously.

danger. Therefore, potential links between head injury and autobiographical memory loss (e.g., Levine et al., 1998; Roberts et al., 2019), and between head injury and memory accuracy (e.g., Ries & Marks, 2006), have not been explored in this case.

To summarize, this expert (i) did not explore the issue of memory reliability when it was relevant, (ii) did not use any assessment tool, (iii) raised a controversial hypothesis (i.e., repressed memory), and (iv) did not explore a major factor of memory impairment (i.e., brain injury).

Case 2

In 2015, a psychologist provided an expert report concerning a man born in 1970, who was suspected of having killed with a rifle his wife from whom he was separated. Her written evaluation explicitly mentions that the suspect reported amnesia of the crime for which he was accused: "She was angry because she had seen him hanging around the house: 'She thought I was watching her, I left the room angry and went back in, she had a rifle in her hands, so I took one too', the rest is impossible for him to recall, claiming amnesia."

Surprisingly, despite the substantial literature on amnesia reported by suspects (e.g., dissociative amnesia, e.g., Porter et al., 2001; Taylor & Kopelman, 1984; malingering amnesia, e.g., Christianson & Merckelbach, 2004; Mangiulli et al., 2022b), the psychologist did not explore this issue. Nor did she address the issue of a probable deficit in encoding abilities, while she mentioned difficulties with short-term memory functions (i.e., "His long-term memory works, but short-term memory is weak"; note that there is no indication in the report that short-term memory and long-term memory were formally tested). Conversely, although the suspect denied the charges, she seemed to be convinced of his guilt: "The question of [the suspect's] rehabilitation: it can be done provided that he accepts to do psychotherapy on his behavior, and on his responsibility for his wife's death." Finally, results obtained through the Rorschach test led the psychologist to suggest that the suspect is "in denial of his involvement in this tragedy",

due to a "risk of collapse of the Ego" (for a criticism of the Rorschach in judicial contexts, see Areh et al., 2021)

In short, the expert psychologist (i) seemed to find the suspect's denials not credible, and this in the absence of data gathered through evidence-based practice. By contrast, while he claimed amnesia, (ii) she used the Rorschach test—a highly controversial tool—which allowed her to conclude that the suspect was in a "narcissistic" denial of the crime he was accused of. At no point (iii) did she explore a potential encoding failure or amnesia, for which approaches are currently developed to better discriminate between a feigned amnesia and genuine one (Zago et al., 2019).

Recommendations

Research outcomes and specific cases presented in this article suggest that, when addressing litigants' memory issues, French psychologists and psychiatrists probably rely little on evidence from cognitive sciences. It is thus unlikely that current experts would be able to identify critical factors that might influence accuracy and specificity of testimonies (e.g., misleading questions, event's repetition, stress), or even features of ordinary memory functioning that might be perceived as indicators of non-credibility (e.g., forgetting, inconsistency between accounts; Voogt et al., 2017). The risk of miscarriages of justice may therefore increase in two directions: conviction of innocent people, or discharge of guilty people. While further work is needed to further clarify how French experts deal with memory issues (e.g., quantitative analyses of a large and representative sample of expertise reports), current evidence shows that memory knowledge are not properly applied in the French justice system. To overcome these difficulties, it is necessary to provide recommendations for experts and legal professionals.

In France, the practice of psychological or psychiatric expertise is not controlled by a framework external to the magistrate-expert dyad. This raises questions because the magistrates

use the experts' skills to counterbalance their lack of knowledge on psychological and/or psychiatrics aspects of a case and, at the same time, are not qualified to assess the expert's skills or the scientific validity of their report. They therefore have no choice but to place blind trust in the experts' conclusions.

Regarding the questions posed to expert, we identified three limitations. Firstly, they are standardized and do not invite the magistrate to adapt them to the nature of the case (for example, sexual violence vs. murder). Secondly, they are too vague and allow experts to use a wide variety of clinical and criminological assessment methods, including non-scientifically validated approaches (e.g., psychoanalysis). Thirdly, they do not require experts to explain and justify their method.

Two options could be recommended. The first one would deal with the rewording of the questions to lead the expert to specifically question memory issues, when the witness testimonies are crucial (e.g., sexual abuse cases where physical evidence may be lacking; suspects claiming amnesia). The experts could then combine their knowledge and clinical experience with validated tools, with the obligation to explain the assessment methods and theoretical background used. The second option would be to initiate work on the admissibility of the methods and tools used by French expert psychologists and psychiatrists to move towards practices that have a sound theoretical basis and that have been the subject of peer-reviewed publications, that are valid, reliable, based on accessible data and results, and that meet ethical standards (see Areh et al. 2021). This might for example result in the development of a tool based on the same model as actuarial scales (e.g., recidivism likelihood assessment) which, based on a list of validated criteria (e.g., use of a validated method/approach, mentions of peer-reviewed references), would enable the magistrate to assess the validity of the report concerning the experts' analyses of the functioning of memory and the reliability of testimonies. The use

of such a tool should first be tested in laboratory settings and field studies, and then could be integrated into the training of magistrates.

Among information available on the expert lists, it would be important for French experts to clearly indicate their areas of expertise so that magistrates can choose the expert best able to respond reliably to memory-related issues. Given the limited knowledge of psychologists and psychiatrists in the field of memory, the implementation of such a recommendation should highlight the lack of memory experts. Therefore, we also recommend appointing teams of experts including a legal psychologist (performing the clinical and criminological part) and a memory-expert when the case requires it. Furthermore, as the work of memory experts is based on the case file, it would also make it possible for the magistrates to ask questions on memory phenomena experienced by other actors in criminal cases (e.g., non-victim eyewitnesses), which is currently non-existent in French legal proceedings. This recommendation is at the heart of the work of the Memory and Law Network, created in 2022 by the Memory Research Group of the French National Centre for Scientific Research. This multidisciplinary network, made up of academics specialized in memory science, aims to promote the application of cognitive sciences of memory in the different stages of investigation process, from the first interviews of witnesses, victims, and suspects to the testimony of expert psychologists and psychiatrists in court.

Implementing such recommendations is challenging as it suggests profound changes in proceedings and practices. In addition to the institutional issues they raise, the proposed changes could face resistance from various stakeholders. To overcome this difficulty, we might consider (1) building a working group, composed of memory researchers and professionals (e.g., magistrates, experts; see Pezdek & Reisberg, 2022, for the importance for researchers to collaborate with stakeholders in the field to make them adhere to evidence-based recommendations) of the need to improve practices, to develop a framework that responds to

the difficulties observed in the field; and (2) undertaking in-depth education and popularization of the cognitive sciences of memory to maximize their acceptance.

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