

BELIEFS OF HELPING PROFESSIONALS WITHIN THE CONTEXT OF CHILD SEXUAL ABUSE ASSESSMENT

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Abstract:

Background: Child sexual abuse (CSA) is one of the most serious socio-pathological phenomena. However, its identification is challenging and linked to the risk of false positive and false negative conclusions, with far-reaching consequences for the lives of those affected. Incorrect assessments of suspected CSA cases can be made not only by lay people, but also by helping professionals who gather and evaluate information, consider further procedures and make decisions.

Aim: The aim of the presented review study is to summarize current scientific knowledge that answers two key questions. (1) what contributes to errors in the assessment of relevant cases; and (2) how these errors can be prevented.

Method: Previous research has shown that personal beliefs significantly influence the processes by which individuals search for, store, and interpret relevant information (Kahneman et al., 1982). For the purposes of this study, databases of scientific publications were primarily searched for research papers that mapped the beliefs of helping professionals in relation to CSA, as well as papers on strategies to reduce errors in the assessment processes of relevant cases.

Results: We identified three significant groups of beliefs that could lead to misjudgments of suspected CSA cases: (1) Misconceptions about CSA – especially about: (a) the prevalence and nature of CSA (including the assumption that CSA usually involves the use of physical force and sexual intercourse); (b) the CSA perpetrators (e.g., that they are mentally disturbed or sick; that CSA committed by a woman has a less harmful effect on victims than CSA with a male perpetrator; that the victim's peer cannot be the perpetrator); (c) the victims' responses to sexual abuse (including the dynamics of disclosure about CSA experiences; the dynamics of behavior in further contact with the perpetrator); (d) the memory performance of child victims during forensic interview (especially regarding the expected amount of details and consistency of testimony); (e) the way of conducting interrogations with suspected CSA victims (including the sensitivity of professionals to suggestive techniques); (f) the CSA diagnosis method (including the assumption that spontaneous game observation is a good method for assessing suspected CSA); (g) the frequency of false accusations.

(2) Beliefs related to the implications of the case assessment – especially: (a) excessive trust in the testimony of children versus skepticism (some professionals may tend to rule out false accusations and thus disregard the rights of the accused person, while others may approach suspected CSA cases with the a priori belief that a high percentage of CSA cases are untrue and therefore do not take great account of the rights and interests of the suspected victim); (b) beliefs about the functioning of the child welfare system (where distrust in this system may encourage professionals to fail to fulfill mandatory reporting regarding suspected CSA cases); (c) an emphasis on sensitivity versus specificity (i.e. either focusing on minimizing the occurrence of false negative conclusions to prevent the actual victim of the CSA from being identified and cared for, or concentrating on minimizing false positive conclusions to prevent the innocent person from being convicted); (d) beliefs regarding the removal of the child from the family.

(3) Beliefs about one's own objectivity and expertise – especially the frequent false beliefs of professionals that with the increasing length of practice and the amount of experience with CSA cases, the level of expertise

automatically increases. Experienced professionals can be simultaneously prejudiced and convinced of the correctness of their own erroneous beliefs. At the same time, more experienced professionals tend to have a more intuitive approach to assessing CSA cases. In this respect, various cognitive biases (especially patternicity, confirmatory bias, availability bias, anchoring, representativeness heuristic, bias blind spot and the Dunning-Kruger) effect play a negative role.

In the conclusion, the review study recommends several strategies in order to improve the practice and reduce errors in the assessment of the cases in question. It emphasizes the important role of the continuing education of relevant professionals in confronting participants with current scientific knowledge on CSA issues; encourages helping professionals to reflect on their own beliefs, which may influence the assessment of the cases in question, and recommends mastering the so-called Bayesian reasoning and effective methods to eliminate cognitive bias. At the same time, the study considers precise work with hypotheses, weighting evidence, supervision, the submission of expert opinions to independent review and slowing down of work strategies as an effective strategy of eliminating various prejudices. In addition, it proposes a multidisciplinary team approach to CSA case assessment – although the study does note that the impact of the group approach on the final outcomes of the case assessment process has not been sufficiently scientifically examined yet.

Conclusion and implications: The study emphasizes that the beliefs of helping professionals and decision-making skills play an important role in the CSA case assessment process, and that without the targeted application of effective strategies to eliminate cognitive biases and prejudices, the quality of case assessments is endangered. The members of various helping professions (especially educators, psychologists, psychiatrists, social workers, police officers, prosecutors and judges) who come into contact with suspected CSA cases may find the review study useful. Although the content of the study is based on the results of foreign research, it has application potential in Slovakia, especially in relation to the preparation of content in the continuous education of professionals, the focus of supervision in helping professions, or the designing of Slovak research projects focusing on these issues.

Key words: Child sexual abuse (CSA). Personal beliefs. Bias. Heuristics. Decision making.

Introduction

Child sexual abuse (CSA) is one of the serious socio-pathological phenomena, with the potential of a whole spectrum of long-term negative consequences on the quality of life of its victims (Karkošková, 2014). According to one of the latest meta-analysis, the global incidence of CSA ranges from 8 to 31 % in women and from 3 to 17 % in men (Barth et al., 2013). The results of selected studies from 11 European countries show that 2.9 – 10.5 % of girls and 0.6 – 5.5 % of boys experienced penetrative forms of CSA; when using a broader definition of contact forms of CSA, their incidence ranged from 10 to 39.8 % for girls and from 6 to 16.2 % for boys (Lalor & McElvaney, 2011). According to a recent Slovak survey (Karkošková & Ropovik, 2019), by the age of 18, penetrative forms of CSA occurred in 5.6 % of girls and 1.3 % of boys; up to 30.2 % of girls and 11.6 % of boys experienced tactile forms of CSA and 40.6 % of girls and 17.7 % of boys reported experience with non-tactile forms of CSA. More than half of the CSA incidents occurred in the postpubescent period.

The identification of CSA cases is limited by several factors; including for instance whether the child has symptoms that would raise concerns about the child in the social environment and a consequent interest in finding out if something has happened to him or her; whether the child victim confides his or her experience; how the person trusted by the child reacts; whether the case comes to the attention of the competent authorities (child protective agencies and/or law enforcement authorities); how the case is being investigated; whether sufficient evidence can be gathered on the case; and whether the evidence gathered is properly assessed (Karkošková & Mikulášková, 2018).

At various stages of the potential identification of CSA cases, two types of errors may occur (Bridges et al., 2009; Pelisoli et al., 2015): (1) false negative conclusion: the conclusion that a child has not been sexually abused but in fact he/she is a victim of CSA; (2) false positive conclusion: the conclusion that the child has been sexually abused, when in fact this is not the

case. Any erroneous conclusion is highly undesirable – both in relation to victims and perpetrators (Bolen, 2001, p. 229; Staller & Vandervort, 2010). **False positive conclusions** about the CSA can lead to the prosecution of innocent people; to their social stigmatization (expressions of distrust and moral condemnation from the social environment); to disruption of family and other close relationships; to job loss; to financial losses; and/or to other negative consequences to the quality of life of the person concerned and his/her relatives. In addition to the negative consequences for alleged CSA perpetrators, false positive conclusions about CSA can also lead to disruption of the psychosocial development of the alleged victims and other negative consequences on the part of the institutions involved. On the other hand, **false negative conclusions** can disrupt or block victims' access to adequate care and protection; can expose the existing and potential victims of the perpetrator to further abuse in the future; can contribute to the development of the full range of long-term negative consequences to the lives of CSA victims (Ullman & Filipas, 2005) (including disruption of social relations and social stigmatization); can be a source of psychological suffering due to the unenforceability of the law.

An incorrect assessment of suspected CSA cases can be committed not only by lay people, but also by relevant helping professionals (especially educators, psychologists, psychiatrists, social workers, police officers, prosecutors and judges) who gather and evaluate information at various stages, consider further action and make decisions. In this context, the question of what contributes to errors in the assessment of relevant cases seems to be crucial, and consequently the question of how these errors can be prevented.

It is clear that decision-making processes are influenced by various factors, including: (1) factors related to the case under consideration, (2) organizational factors, (3) external influences, and (4) factors on the part of the evaluator (Baumann et al., 2011). As a detailed analysis of all of these factor groups is beyond the limits of this study, the focus is put only on the role of the evaluator's personal beliefs. Indeed, previous research has shown that personal beliefs significantly influence the processes by which individuals search for, store, and interpret relevant information (Kahneman et al., 1982).

1 False beliefs about child sexual abuse

In a study of a sample of Australian police officers who were presented with hypothetical CSA scenarios, Kite & Tyson (2004) found that the participants tended to treat CSA cases differently depending on whether the perpetrator was male or female. They were convinced that CSA committed by a woman had a less harmful effect on victims than CSA where the perpetrator was a man. Such a belief may reduce the recognition of women as CSA perpetrators and lead to an underestimation of the investigation of relevant CSA cases. The findings of Australian researchers confirmed the findings from older English research conducted by Hetherington and Beardsall (1998) on a sample of police officers and social workers in England.

Finnish research (Finnilä-Tuohimaa et al., 2005), involving social workers working with children, child psychiatrists and child psychologists, showed that these professionals are not very familiar with the scientific literature focused on investigating the issue. Although they are involved in the investigation of CSA cases, they show strong beliefs that are inconsistent with scientific knowledge. This may affect their judgment when assessing CSA cases and, ultimately, the overall outcome of the investigation.

Australian researcher Shackel (2008) conducted a review study of existing research that looked at the beliefs of adults about children's responses to sexual victimization. Her study showed that many people in society, including some professionals, are falsely convinced that delayed

disclosure, recantation of the original testimony, and discrepancies in the testimony are unusual and suggest that CSA allegations are fabricated; that CSA victims are usually afraid of the perpetrators and do not express love for them; and that most victims show overt negative emotional and behavioral symptoms of CSA. In addition, many people also falsely believe that most cases of CSA involve the use of physical force and sexual intercourse, and that there are usually physical findings indicating CSA in CSA cases. Shackel (2008) stated that misconceptions about CSA are undoubtedly pervasive.

In particular, in a sample of child psychologists, CSA beliefs were examined by the Finnish team Finnilä-Tuohimaa et al. (2008). Many of the research participants had misconceptions about the proper way to conduct the interrogation and about the ability of professionals to diagnose CSA or detect lies. On average, the participants responded incorrectly to 20 % of 19 factual questions (these were presented in the form of statements whose accuracy or inaccuracy was unambiguous given the current level of scientific knowledge). Only 4.5 % of participants answered all factual questions correctly. A total of 2 % of participants provided incorrect answers to more than 50 % of factual questions. Researchers expressed concern that some misconceptions about CSA investigations are common among psychologists who potentially deal with suspected cases of CSA, and that there are psychologists who do have a large number of misconceptions. This can lead to serious errors in CSA investigations, both in relation to the investigative methods used and in relation to decision-making processes.

Another Finnish research study (Finnilä-Tuohimaa et al., 2009) focused on the level of expertise of three groups of professionals (social workers, child psychiatrists and non-private psychologists) involved in team CSA investigations in Finland. These professionals may participate in all parts of the investigation (including forensic interviewing of children) and contribute equally to the conclusions drawn from the investigation. In addition to questionnaires testing their beliefs about CSA, participants were provided with file materials (related to CSA cases), which to varying degrees included suggestive techniques used in forensic interviews of children, as well as files in which transcripts of forensic interviews were absent. As it turned out, research participants were sensitive to the presence of guiding questions but overlooked other suggestive techniques, while also overlooking the possibility of using suggestive techniques in cases where the transcript of the forensic interviews was absent from the file. According to the researchers, this is an alarming finding, because if professionals do not recognize the suggestive effects as harmful, they cannot take steps to avoid such effects in cases where they conduct forensic interviews of children. Equally dangerous can be the blind trust in other professionals, that they have interrogated the child in a non-suggestive manner although the transcript of the interrogation is not available.

Swedish researchers (Azad & Leander, 2012) conducted research on a sample of prosecutors, investigators (who investigate a case and usually conduct a child forensic interview) and lawyers assigned to victims of sexual offenses in the Swedish legal system and whose main role is to provide assistance to victims and support for their rights and interests in criminal proceedings. The researchers were interested in the beliefs and research knowledge these professionals had on the issue of children's testimonies. Participants were asked to comment on how detailed, consistent and spontaneous children are in CSA testimonies; how repeated abuse affects their testimony; and what the optimal number of children's interrogations is. All three groups of research participants mistakenly assumed that the older a child is, the more details he/she gives in his/her testimony. This assumption can be reflected in the evaluation of the credibility of older children's testimonies. However, empirical findings show that, regardless of age, children may have difficulty reporting CSA and their testimonies may be often fragmented and austere in terms of sexual abuse details (Bidrose & Goodman, 2000; Leander, 2010; Sjöberg & Lindblad, 2002). Research participants also tended to agree with the statement that sexually

abused children are consistent in their testimonies. However, their beliefs contradict scientific findings that consistency of the testimony is not an objective indicator of the veracity of the testimony (Granhag & Strömwall, 1999). Regarding beliefs about the appropriate number of interrogations with children, researchers noted a wide variation in responses both within the group of investigators and within the group of lawyers. Different beliefs between members of the same professional group may lead to the same child being treated differently depending on the beliefs of the professionals involved in the case.

Finnish researchers Korkman et al. (2014) conducted research on a sample of judges. The questionnaire consisted of questions focused on beliefs about the prevalence of CSA in different age groups of childhood, beliefs about perpetrators and victims, and beliefs about the investigation process. About a quarter of judges were mistakenly convinced that the child's biological parent was a typical CSA perpetrator. Three-quarters of the judges mistakenly believed that observing free-play was a good method to assess suspicions of the CSA. Many judges had misconceptions about suggestibility and suggestive techniques; e.g., more than 40 % of judges believed that the use of suggestive techniques in interrogation was useful when the purpose was to get a child to talk about CSA experiences. Half of the judges believed that no professionals use suggestive techniques when working with children. The researchers expressed concern about these results, as they may indicate that judges are unable to identify suggestive techniques potentially present in forensic interviews of children.

Pelisoli et al. (2015) conducted research on a sample of Brazilian and American professionals from the ranks of psychologists, social workers and doctors, as well as on a sample of non-professionals from the ranks of university students. One of the main objectives of the research was to determine the extent to which participants had knowledge of empirical facts that are important for the optimal forensic assessment of CSA cases and for drawing correct conclusions about the validity of CSA allegations. Participants were presented with an 18-item questionnaire, which included statements about the prevalence of CSA in boys and girls, the dynamics of victims' disclosure about their experience, the reliability of clinical judgment, the memory skills of professionals in relation to forensic interviewing they conducted, the impact of training on forensic interviewing conduct improvement, the impact of length of practice on the accuracy of clinical judgment, the ability of professionals to detect lies, and the issue of children's suggestibility. Professionals answered correctly 55 % of items on average. Only 10 % of professionals achieved 80 % or more of correct answers. The researchers found that many professionals are poorly informed about the scientific knowledge that is the key to the proper assessment of CSA cases.

The Spanish research team of Márquez-Flores et al. (2016) focused on examining the knowledge and beliefs about CSA on a sample of teachers working in preschools, primary and secondary schools, in both public and private sectors. The researchers identified various misconceptions among these educators; with a dominant representation of the beliefs concerning the pathological profile of the perpetrators (that they must be mentally disturbed or ill, or highly unstable individuals); beliefs that most CSA cases involve some form of violence; beliefs that the victim's peer cannot be the perpetrator; and that children often fabricate CSA. Researchers noted that such beliefs undermine the ability to identify cases of CSA and lead to secondary victimization, which exacerbates CSA latency.

U.S. researchers O'Donohue & Cirlugea (2016) point out that the method and outcome of investigating cases of suspected CSA may also be influenced by professionals' beliefs about the false accusations incidence. Based on the analysis of previous research related to the subject matter, they found that while some research on this issue was based on professional judgment (of respondents) without clarifying the criteria on the basis of which the judgment was formed, another part of the research used a variety of criteria, many of which were not empirically

confirmed as valid indicators of false allegations. Although there is no scientific evidence to suggest that false (malicious) allegations of CSA are a frequent phenomenon, that they constitute the majority or even a sizable minority of all reported cases (O'Donohue & Cirlugea, 2016), many professionals are convinced about the high incidence of this phenomenon and their ability to recognize it. In this context, several authors point out that false, intuition-based assumptions and beliefs about how a real victim should react to a CSA may lead to inadequate questioning of their credibility (Cossins, 2006; Fanflik, 2007; The Crown Prosecution Service, 2013; National Crime Victim Law Institute, 2014), and to conclusions that the cases are unfounded and/or that they are false allegations (Goodman-Delahunty et al., 2016).¹

2 Beliefs related to the implications of the case assessment

In the above-mentioned Finnish study, researchers Finnilä-Tuohimaa et al. (2009) also noted the relationship between the sensitivity of professionals (specifically social workers, child psychiatrists and psychologists) to suggestive elements in children's interrogations and their attitudes towards children and the criminal justice system. The Pro-Child Beliefs scale consisted of items such as "Children don't make up stories about CSA because they don't know anything about such things." Theoretically, achieving a high score on this scale may indicate a tendency to trust children unconditionally and rule out the possibility of false accusation, i.e., to ignore the rights of the accused person. The Anti-Criminal Justice System Scale included beliefs, such as punishments are not severe enough and perpetrators may be released as a result of dubious experts, lenient courts and sophisticated lawyers. The results of the research revealed that individuals who scored high on both scales when assessing suspected cases of CSA more likely assumed that CSA had occurred and believed that the suspect should be convicted in court. At the same time, their strong beliefs reduced their sensitivity to the presence of suggestive elements in children's interrogations. The beliefs and attitudes of professionals involved in clarifying suspected cases of CSA can influence how the evidence is perceived and what decisions are eventually reached.

Negative beliefs of professionals about the functionality of the system may also affect whether helping professionals who come into contact with suspected CSA victims will comply with the statutory reporting obligation at all. For instance, as shown by Swedish research (Talsma et al., 2015), doctors did not fulfill the reporting obligation because only 30 % of them believed that the child welfare office would investigate the case and act properly. Distrust in the child welfare system was also among the dominant causes of non-compliance with the reporting obligation in research carried out on a sample of American teachers. However, the main reason was the fear that they were wrong in their suspicion (Kenny, 2001); from which it can be concluded that they were more convinced of the importance of the presumption of innocence principle and the need to protect the reputation of the suspected perpetrator than of the need to protect the rights and interests of the suspected victim.

U.S. researchers Everson and Sandoval (2011) addressed the oft-observed phenomenon that evaluators examining the same evidence often come to significantly different conclusions in forensic assessment of suspected CSA cases. The aim of their research was to try to identify and quantify the subjective factors that contribute to such discrepancies. The research sample consisted of 1,106 professionals working in various positions, in which they participated in the forensic assessment of suspected cases of CSA (they were experts in the field of child welfare,

¹ Explanation of the so-called counterintuitive reactions of CSA victims is available in Slovak in the study of Karkošková (2015).

mental health experts, police investigators and prosecutors). The researchers found that the evaluators' discrepancies about suspected CSA could be partly explained by individual differences in score levels on scales measuring three attitudes related to forensic decision-making:

1. emphasis on **sensitivity** – i.e., focusing on minimizing the occurrence of false negative errors to prevent the actual victim of CSA from not being identified and cared for;
2. emphasis on **specificity** – focusing on minimizing false positive errors so that an innocent person is not convicted;
3. **skepticism** about children's testimony – individuals with a high degree of skepticism, approach suspected cases of CSA with the a priori belief that a high percentage of CSA cases are false.

Researchers note that skepticism and the emphasis on specificity are interrelated but are not synonymous. Individuals who score high on the scale of skepticism are more likely to emphasize specificity when making decisions. However, the opposite is not always true. One can place considerable emphasis on specificity without being prejudiced against children's testimonies about CSA. Similarly, emphasizing sensitivity over specificity does not require the belief that all (or most) cases of CSA are true (Everson & Sandoval, 2011). In any case, the three attitudes mentioned above act as prejudices or predispositions to perceive suspected cases of CSA as rather true or rather false (Everson & Sandoval, 2011).

When comparing different professions, the researchers found that workers from child protection services achieved significantly higher scores on the scale of specificity and skepticism than other professions, but they scored well below the average on the scale of sensitivity. Based on such results, they can be more likely expected to *not* believe in CSA suspicions. The attitude profile of workers from child protection services does not correspond with traditional views on their role. Suspected cases of CSA, which often enter the system through the child protection service, should be sensitively captured. A more in-depth investigation into whether the suspicions are substantiated should ideally be carried out in cooperation with other players in the system (including the police, the prosecutor's office, the courts, forensic experts). However, in most cases this will not happen. Thus, if child protection service workers set standards for substantiating allegations that are too high, there is a risk of many true cases of CSA being assessed as unsubstantiated, and victims will not receive assistance (Everson & Sandoval, 2011).

Dutch researchers Bartelink et al. (2018) carried out research on a sample of social workers from child protection services. The participants in the research were presented with a hypothetical case in which a primary school teacher filed an incentive with the child protection service to investigate a suspicion that a child was being abused at home. Participants were to determine if they considered the suspicion to be well-founded, to assess the risk to the child and to recommend interventions, including answering the question of whether the child should be removed from the family. It turned out that the decisive influence on their assessment was not the case characteristics or expectations regarding possible interventions (advantages and limitations of different interventions), but above all, subjective beliefs in relation to the removal of the child from the family in general. Professionals who inclined towards the removal of a child from the family, assessed the risk for the child as increased and were more prone to place the child in foster care. Professionals who decided that the child should stay at home emphasized the importance of the biological family. Similarly, earlier Irish research (Spratt et

al., 2015) revealed that professionals tend to subordinate their child welfare decisions to the values they prefer: either child protection or family preservation.

3 Beliefs about one's own objectivity and expertise

Probably the most sophisticated theory of human reasoning, known as dual process theory (Kahneman, 2012), points out that two different systems play a role in our decision-making processes. In the first system, the way of decision-making and finding solutions is based on intuition and association and is therefore very adaptable and fast, because it requires less involvement of cognitive functions. The second system, on the other hand, is more analytical, relies on facts and normative rules, and therefore requires more cognitive resources, which may not be available (Kahneman, 2012). System 1 acts unconsciously in decision-making and automatically processes and interprets the information obtained; it is therefore referred to as an intuitive model. System 2, on the other hand, works with abstract concepts and hypotheses, and its involvement requires concentration, time, and energy; it is often referred to as an analytical model.

Professionals dealing with difficult cases need to extract from the large amount of information those pieces that are needed for the case, having only limited time and cognitive capacity at their disposal. Therefore, many decisions are made through some kind of mental abbreviations (heuristics), leading to the achievement of answers that are fast, but may not always be correct (Martino Baráková, 2020). It is clear that cognitive bias is often behind professionals' decisions (Finnilä-Tuohimaa et al., 2005, 2009; Gambrell, 2008; MacLean et al., 2019; Petherick, 2020), with the following being particularly relevant in the context of CSA suspicions:

- **Patternicity (apophenia)** – the tendency to perceive patterns in the data even when there is no pattern in them (Petherick, 2020); originally defined as the tendency to find meaningful patterns in meaningless noise (Shermer, 2008). It may be the result of an adaptive tendency to reduce complex patterns of information to simplified forms or explanations (Petherick, 2020). This cognitive error becomes particularly problematic when the discovery of a non-existent semantic pattern is combined with confirmatory bias (Petherick, 2020).
- **Confirmatory bias** – the tendency to seek, interpret, prioritize, and recall information in a way that confirms our existing beliefs or hypotheses, with disproportionately less attention being paid to alternatives (Nickerson, 1998).
- **Availability bias** – the occurrence of a certain phenomenon is assessed on the basis of how easily the examples of the given phenomenon come to mind and not on the basis of how frequent the given phenomenon actually is. If some phenomena are often mentioned in private, in the workplace or in the media, they appear to be more widespread than they really are (Tversky & Kahneman, 1973). Professionals may exaggerate the likelihood of certain phenomena, e.g. those they often encounter. This means that those who come across many cases of suspected CSA in their work may tend to overestimate the likelihood of CSA (Finnilä-Tuohimaa et al., 2005).
- **Anchoring** – the tendency to give more weight to the information we encountered initially than to the subsequent information (Kahneman et al., 1982). However, the initial information may not be relevant, complete or true at all and may adversely affect judgment. Professionals are often exposed to conflicting information and may have difficulty reformulating the original hypothesis in the light of information subsequently obtained.
- **Representativeness heuristic (representative thinking)** (Tversky & Kahneman, 1974) – this means that professionals with clinical practice combine a certain problem with a certain characteristic, forgetting that it is possible to have this characteristic without the problem.

Because clinicians may be in a constant contact with people who have a given problem and have a given characteristic, they conclude that each new client with both criteria provides feedback confirming that people with the problem also have that characteristic. For instance, sexualized behavior in children is often considered the evidence of CSA, although according to research, no specific behavioral symptom can be considered definitive evidence of CSA (Friedrich, 1995). This error can only be corrected by clinical practice based on research findings, not on impressions (Finnilä-Tuohimaa et al., 2005).

- **Bias blind spot** – is a cognitive bias in which a person can recognize the effect of cognitive bias in other people, but not in himself/herself. As a result of this bias, the person is subconsciously convinced that his/her views are correct and objective compared to the views of others (Pronin et al., 2002).
- **Dunning-Kruger effect** (Kruger & Dunning, 1999; Krueger & Mueller, 2002) – it states that the relationship between competence and self-confidence may not be directly proportional. When knowledge is low, self-confidence tends to be high because the individual lacks an understanding of exactly how much he/she does not know. With increasing knowledge, self-confidence tends to decrease as the individual begins to comprehend the scope of the problem and admits how little he/she knows about the domain of inquiry. As the level of knowledge increases even more, self-confidence also increases slightly, as the person begins to develop a sense of mastery. Ideally, self-confidence should never exceed knowledge (Petherick, 2020).

Cognitive bias may come from three different categories of sources: (1) a specific case – something about that case causes bias in how the data is perceived, analyzed and interpreted; (2) a specific evaluator – something about a specific person assessing a case (e.g. experience, personality, motivation, personal ideology and beliefs, coping with stress and fatigue, the need to close a case) can cause bias; (3) the natural cognitive architecture of the human brain which we all share regardless of the specific case or the specific person of the evaluator (Dror, 2020).

Uncertainty is an essential element in the investigation of CSA cases. Research on judgment and decision making identified several problems of human judgment in situations of uncertainty, including a wide range of cognitive biases (Finnilä-Tuohimaa et al., 2005, 2009), which can lead to selective information handling, lack of critical thinking, and failure to consider alternative hypotheses, which can reduce the quality of decisions (Gambrill, 2008; Munro, 1999; Saltiel, 2015). When evaluating complex and uncertain information (evidence), professionals should properly start with a judgment based on the base-rate probabilities of a given event or phenomenon and then adjust these probabilities based on new information (the so-called Bayesian approach).² However, this is often not the case (Finnilä-Tuohimaa et al., 2005, 2009). One of the reasons is that professionals do not know the relevant research data on the incidence of certain phenomena, e.g. relevant data on the prevalence of CSA or on the prevalence of false accusations of CSA.

Research studies that also analyzed the relationship between the length of practice, beliefs, scientific knowledge and assessment of one's own expertise on a sample of professionals involved in investigating CSA cases (Finnilä-Tuohimaa et al., 2005) and judicial decisions in relation to CSA cases (Korkman et al., 2014) showed that professionals relied more on their professional experience than on scientific knowledge to assess the level of their own expertise in relation to the assessment of CSA cases. However, relying on professional experience is highly risky. Meta-analyses of studies examining the relationship between experience and the

² For more information on the importance of Bayesian reasoning in the forensic sciences, see e.g. Vrtiška, (2018).

accuracy of clinical judgment concluded that experience alone has a negligible impact on judgment accuracy (Spengler et al., 2009; Faust & Faust, 2012). At the same time, researchers noticed one unfortunate consequence of extensive practice (experience) - namely, that over time, experienced professionals gain an increasing sense of certainty about the correctness of their judgments - and this is happening without a real improvement in judgment (Faust & Faust, 2012; Korkman et al., 2014; Pelisoli et al., 2015).

The length of practice and the associated professional experience with CSA cases is not a guarantee of expertise, as professionals may be prejudicial and may lack objective feedback (Dawes et al., 1989; Garb, 2005; Finnilä-Tuohimaa et al., 2008, 2009; Spengler et al., 2009; Bridges et al., 2009; Korkman et al., 2014; Pelisoli et al., 2015). The individual can only learn from experience correctly if he/she receives unbiased and accurate feedback on the conclusions he/she has reached (Dawes et al., 1989). In this regard, Bridges et al. (2009) note that whenever experts make a mistake in assessing suspected CSA cases, they are unlikely to be aware of it; and without clear feedback on the correctness of their conclusions, how can they use their experience to improve their decisions and methods? An expert who claims that via practical experience, he/she can distinguish between sexually abused and non-abused children, almost certainly bases his/her claim on evidence with serious deficiencies and may suffer from false self-confidence (Bridges et al., 2009). Research shows that professional experience alone does not correct misconceptions and does not increase expertise in relation to CSA issues (Finnilä-Tuohimaa et al., 2008, 2009; Korkman et al. 2014). On the contrary, with the length of professional practice, persuasion in bias can also increase (or in the correctness of one's own misconception) (Pelisoli et al., 2015). More experienced professionals tend to have a more intuitive approach to assessing CSA cases (Finnilä-Tuohimaa et al., 2008). Many professionals may not be aware of the problems associated with learning from experience, as they have been socialised in their profession to believe that their practice is objective, and that prejudice rather concerns others (Finnilä-Tuohimaa et al. 2005; Neal & Brodsky 2014).

Although, in general, professionals by virtue of their profession are not automatically immune to the various cognitive biases in the assessment of the cases they deal with, particular concerns about their objectivity arise in situations where they assess the case on the basis of private requests from those affected. Research looking at the ability of experts to maintain objectivity and accuracy when hired to carry out a private expert opinion has reached alarming conclusions. In such situations, experts tend to "abandon objectivity" and become "advocates" for the party that hired them. Research has shown that different experts can reach conflicting conclusions in relation to the same person under investigation, even if they use procedures designed to increase objectivity and reliability. Although the subject examined achieved the same score in the same test, the results were interpreted differently by different experts (Murrie et al. 2013; Murrie & Boccaccini 2015; Guarnera et al. 2017). This phenomenon also applies to the interpretation of scores in tests designed to assess the risk of sex offenders (Chevalier et al. 2015). The mechanism behind this phenomenon is probably similar to subconscious heuristics and cognitive biases, which disrupt judgment in many other situations as well.

4 How can the assessment of child sexual abuse cases be improved?

In order to improve practice and reduce errors in the assessment of the cases in question, several strategies need to be applied. The starting strategy should be the continuous training of relevant professionals. In order to eliminate widespread misconceptions about CSA, participants should be confronted with current scientific knowledge on CSA issues, encouraged to reflect on their own beliefs that may influence the assessment of cases, get acquainted with the difficulties of human judgment in situations of uncertainty, and be led to the acquisition of the so-called

Bayesian reasoning and effective methods to eliminate cognitive bias (Bartelink et al., 2018; Finnilä-Tuohimaa et al., 2005, 2008, 2009; Korkman et al., 2014; Pelisoli et al., 2015; Petherick, 2020).

The first step in dealing with cognitive biases is to recognize their existence and the impact they can have on hard-working, determined and skilled professionals. In this context, Dror (2020) speaks of the need to get rid of the six misconceptions about cognitive biases that professionals often have: (1) that it is only a matter of personality, integrity and morality (i.e., that bias applies only to corrupt and ruthless individuals); (2) that it is a question of competence; i.e., it only happens to professionals who do not know how to do their job properly; (3) that experts are impartial and immune to cognitive bias; (4) that the use of modern technology or artificial intelligence guarantees protection against human prejudice; (5) that other experts, but not me, are affected by the bias; (6) that if I realize that biases can affect me³, I can control them by force of will.

Precise work with hypotheses is considered to be an effective strategy for eliminating various biases. After a thorough collection and acquaintance with the information on the case, it is necessary to develop a range of alternative hypotheses that take into account each possibility or probability. Subsequently, each hypothesis should be tested on the basis of the available facts, and efforts should be made to refute it rather than confirm it. If, however, there are still several hypotheses that cannot be definitively ruled out, it is necessary to proceed with an exploration of competing hypotheses, in which a summary of the evidence supporting (+) or refuting (-) each hypothesis is made and the hypothesis with the highest support (the most +) is finally used as a working hypothesis for a given case (Petherick, 2020; Berman & Killeen, 2019).

Furthermore, it is necessary to build a culture of evidence, not belief (Petherick, 2020). An effective way of protection against errors and failures is to follow the evidence - to take into account the data available and the data that are missing and to reflect how it limits our analysis and what follows from this in relation to the conclusions drawn in a particular case (Petherick, 2020). Ideally, the evaluator (e.g. the forensic expert) will have information that is highly valid, highly reliable and sufficient. The further the situation moves from the ideal, the more room there is for speculation. In any case, the weight of evidence should be clearly communicated and the evaluator's conclusions should be formulated in probability categories (Petherick, 2020). Undoubtedly, the subject of the supervision of suspected CSA cases should also be the examination of the potential presence and impact of personal beliefs of helping professionals in decision-making processes.

In the case of expert opinions, in order to increase their objectivity, it is recommended to submit a draft to an independent review (Otgaar et al., 2017; Petherick, 2020). The reviewer should not know whose work he/she is evaluating and at the same time the evaluated person should not know who the reviewer is. The reviewer's role is to examine the draft, to determine whether the expert has carefully used the scientific literature and information in the file to support his/her hypotheses and conclusions, and to make critical comments if necessary.⁴

Everson and Sandoval (2011) state that a multidisciplinary approach to case assessment may be particularly useful in order to provide alternative perspectives and reduce individual

³Many professionals mistakenly believe that **introspection** is the most useful strategy to prevent cognitive bias and prejudice. In fact, this strategy is ineffective and may even exacerbate prejudice; when looking inward, the professional does not notice any bias and succumbs to a false sense of reassurance (Neal & Brodsky 2016; MacLean et al. 2019).

⁴ Such an approach (independent review of the draft) is a common practice among Dutch forensic psychologists (Otgaar et al., 2017).

prejudices. However, the impact of such a group approach on the final outcomes of the case assessment process has not yet been sufficiently scientifically examined (Capacity Building Center for States, 2017). In this context, it should be noted that the bias does not affect only the individual in isolation or only one aspect of the work; often the bias cascades from one person to another, from one aspect of work to another and affects various elements of the investigation and assessment of a case (Dror, 2020).

In addition to the above-mentioned strategies, one should bear in mind that activating the analytical model of reasoning (as opposed to intuitive) requires not only an awareness of the risks of various biases, but also sufficient time and energy. In order for evaluators to focus fully on the specific task, “slowing down” workplace strategies are recommended (Neal & Brodsky, 2016, p. 60). An excessive number of assigned cases and time pressure push the evaluator's thinking more into the sphere of intuition and cognitive abbreviations, which can negatively affect the quality of decisions (Martino Baráková, 2020).

Conclusion

CSA cases are often a confusing mosaic of complex data. The present study has shown that the ability to identify, integrate and draw reasonably correct conclusions from multidimensional and complex data without being influenced by cognitive biases and prejudices requires not only expertise but also good decision-making skills reflecting the difficulties of human judgment in situations of uncertainty. Affiliation to a certain helping profession and the length of practice do not in themselves guarantee that the helping professional has knowledge that is in line with the current state of scientific knowledge in relation to CSA. Previous research has shown that members of various helping professions have many misconceptions that can lead to errors in identifying, investigating and assessing suspected CSA cases. If for instance judges are carriers of prejudices or if they do not notice the bias of other professionals who are involved in clarifying CSA cases, judgments may be prone to error (Korkman et al., 2014). Errors in assessing CSA cases cannot be completely eliminated, but to understand how they arise and what far-reaching consequences for the lives of the persons concerned they may have can motivate the introduction of measures to achieve improvements in the processes of assessing these difficult cases. This represents a special challenge for the Slovak context, in which the issue in question has not yet been properly reflected either in application practice or in professional and scientific publications. We consider the main benefit of this study to be the filling of the mentioned gap in the literature.

Given that no research has yet been carried out in Slovakia to map the nature and occurrence of various beliefs of professionals coming into contact with CSA cases, along with the impact on decision-making processes, the present study may be an inspiration for preparing research projects with this focus.

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