

# Optimizing child protection systems: A systematic review of the literature on risk assessment practices

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## ABSTRACT

Child maltreatment is a global phenomenon that has affected millions of children, with far-reaching consequences for their development. The assessment of risk has emerged as a fundamental and indispensable component within child protection services. Professionals should use safe and effective risk assessment practices, always prioritizing the best interests of the child. This systematic review aims to elucidate the prevailing risk assessment practices employed by professionals within the child protection systems. The systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Thirteen empirical studies were selected, featuring participants from diverse fields such as social services, health, psychology, and law enforcement. The professionals relied on a multifaceted approach, incorporating clinical judgment, professional expertise, actuarial risk assessment tools, individual interviews with children, adolescents, and family members, as well as the observation of familial dynamics. Moreover, intra- and interinstitutional collaboration played a pivotal role in the comprehensive evaluation of risk. Consequently, the discerned efficient practice appears to be a synergistic effort undertaken by a transdisciplinary team. This collaborative action encompasses the utilization of clinical judgment, augmented by the judicious administration of actuarial risk assessment instruments.

## 1. Introduction

Empirical evidence identifies maltreatment as a global phenomenon with high prevalence, affecting millions of children and young people (McCarthy et al., 2021; Vizard et al., 2022; World Health Organization, 2013). According to the WHO and International Society for Prevention of Child Abuse and Neglect (2006), child maltreatment is defined as “all forms of physical and emotional maltreatment, sexual abuse, deprivation and neglect, as well as their commercial or other exploitation, which result in harm to the child’s health, survival, development or dignity, in the context of a relationship of responsibility, trust or power” (p. 9). Although exposure to domestic violence was previously assessed in risk assessment tools, it was often classified as another form of abuse, such as emotional abuse. Recently, domestic violence has begun to be explicitly recognized as a distinct form of child maltreatment (Alaggia et al., 2013; Mehta et al., 2023; Vizard et al., 2022).

Furthermore, research into the prevalence of child maltreatment has shown the scale of this global issue. According to the Convention on the Rights of the Child (CRC, 1989), a child is defined as “every human

being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier” (p.4). In addition, according to the WHO (2020), one billion children worldwide, aged 2–17, have encountered some manifestation of violence.

Given the alarming prevalence of child maltreatment, it is crucial to implement robust child protection systems to safeguard children’s well-being. According to the United Nations Children’s Fund (UNICEF, 2021), child protection systems are defined as a set of laws, policies, regulations, resources, and services essential across various societal domains (social welfare, education, health, security, and justice) aimed at preventing and addressing instances of violence, abuse, and neglect. Risk assessment is an integral and fundamental component of child protection services. It consists of a systematic collection of information and assessment to identify the existence of risk, the likelihood of future occurrence and its severity (Calder & Archer, 2016; McCafferty & Taylor, 2020).

Most child protection systems rely on a singular standardized risk protocol to steer their decision-making processes. The risk assessment protocol facilitates the categorization of families based on their

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projected level of future risk, enabling the prioritization of cases and more efficient intervention strategies (Hughes & Rycusa, 2006). It is essential to bear in mind that the assessment must be centered on the child, with a focus on comprehending their needs and determining the most effective means of meeting them (United Kingdom Department of Health, 2001).

Risk assessment in the child protection system must therefore consider three areas: the developmental needs of the child, the capacities of the parents or caregivers to respond adequately to these needs and, finally, the impact of family and contextual factors in general (United Kingdom Department of Health, 2001). Therefore, risk assessments are implemented at the beginning of the child protection systems process and encompass multiple phases such as: (i) clarifying the referral source and its rationale for signaling maltreatment; (ii) gathering information about the risk situation; (iii) exploring the underlying problems, strengths and difficulties of the family; and, (iv) analyzing the needs of the child and parental capacity for addressing them (United Kingdom Department of Health, 2001).

### 1.1. Risk assessment approaches

In child protection services, the international debate that has been taking place is how to select the most appropriate risk assessment model and/or approach to assess risk in children (Hughes & Rycusa, 2006; Mendoza et al., 2016). Risk assessment models help professionals collect and organize information about families and guide the interpretation of this information (Hughes & Rycusa, 2006).

Globally, there are two main approaches used to assess the risk of children: clinical or consensual approaches and actuarial approaches. Both aim to predict the likelihood of maltreatment occurring or recurring, but they have specific features that distinguish them (Mickelson et al., 2017).

Clinical or consensual risk assessments are based on theories and the clinical judgment of professionals about risk, which leads professionals to use their practical knowledge, previous experience, or intuition, and to have greater flexibility when making decisions. This approach has shown limitations, mainly because professional experience changes according to the technician, so there are some discrepancies regarding decision-making, generating less consistency and validity between assessments (Mendoza et al., 2016; Mickelson et al., 2017). In addition, this approach shows inconsistency, using a set of similar variables to predict a variety of risk situations (Mendoza et al., 2016).

Actuarial risk assessment, on the other hand, uses statistical procedures to identify and evaluate family, contextual and social factors with a high probability of future maltreatment. Risk assessment tools have proven to be the primary model in child protection system practice in several countries, for example Australia, New Zealand, Canada, the United States of America (USA), and the United Kingdom (UK; Coohy et al., 2013; Mickelson et al., 2017). In this way, actuarial assessments enable professionals to conduct a more rigorous evaluation of families and prioritize their interventions for those exhibiting a heightened risk of maltreatment, as determined by a comprehensive set of risk factors (Coohy et al., 2013; Mickelson et al., 2017).

The meta-analysis by Van der Put et al. (2017) aimed to examine the predictive validity of risk assessment instruments. Through 30 studies, this research showed that actuarial approaches produce more accurate and reliable predictions compared to clinical or consensus approaches. However, Van der Put et al. (2017) concluded that the actuarial risk assessment tools used in the child protection system do not guide professionals in case management, and therefore these tools need to be further developed. Thus, risk assessment instruments that fit the actuarial risk assessment model should be understood as an aid to decision-making, with the aim of improving clinical judgment, rather than being understood as an adversarial approach to the consensus model (Mickelson et al., 2017; Van der Put et al., 2017).

Notwithstanding, due to the limitations of the two risk assessment

models identified above, a third generation of risk assessment was developed, called structured clinical judgment. Thus, the focus of risk assessment has shifted from just predicting risk to an assessment that also involves what interventions are needed to manage that risk. More specifically, these instruments comprise a series of evidence-based items, where other independent assessment methods must be considered, such as clinical judgment (De Bortoli et al., 2017).

The structured clinical judgment approach still has a few strengths and weaknesses. In terms of strengths, it proves to be a flexible approach, allowing professionals to consider specific and unique factors in each case, providing a holistic view of the child's situation. It also promotes the active engagement of professionals and the building of a relationship of trust with families (De Bortoli et al., 2017).

However, this approach has some limitations. The subjectivity inherent in clinical judgment can lead to variation between professionals. In addition, the need to document clinical reasoning in detail to ensure transparency can be detrimental in terms of time and resources. Compared to other approaches, the process can take longer and can increase the workload of professionals, which can be disadvantageous in situations that require quick decisions (De Bortoli et al., 2017). Although structured clinical judgment offers a valuable and flexible approach to risk assessment, it is essential to be aware of its limitations.

### 1.2. Current study

Risk assessment and the subsequent recommendation for intervention are crucial moments when dealing with children facing potential risks or dangers. These decisions significantly influence the lives of the individuals involved, including children and adults. According to Munro (2004), inaccurate risk assessments can lead to either false negatives or false positives. In other words, families wrongly categorized in terms of risk level may not receive the appropriate intervention for the situation, resulting in a negative impact on both the family and the child person's life. Therefore, professionals who respond to families or children must have extensive knowledge about risk assessment. Employing effective risk assessment practices is essential to accurately predict risk and ensure the best interests of the child (Søbjerg et al., 2020).

Davidson-Arad and Benbenishty's (2010) study of 236 workers in Israel's child protection system found that risk assessment proved to be the greatest difficulty for professionals, as they are confronted with various factors that lead to uncertainty when assessing the risk of each case. Nevertheless, the existence of various models for assessing risk in children has led to a discussion about which are the best models/approaches for assessing and predicting abuse and/or recidivism (De Bortoli et al., 2017; Hughes & Rycusa, 2006).

It is essential to expand research into the methods and practices used by professionals in assessing the risk of children and examining their effectiveness. Studies that only present professionals' decision-making about a child's level of risk are insufficient to understand to understand the systematic and rigorous process that risk assessment requires. Hence, the relevance of this systematic literature review lies in the necessity to organize and consolidate our understanding of the standards, procedures, and techniques utilized by child protection professionals in the assessment of risk. This study aims to identify the practices used by professionals in assessing children's risk, as well as the barriers and improvements they present, in order to optimize child protection systems.

## 2. Methods

### 2.1. Search strategy

The systematic literature review process was conducted in accordance with the guidelines proposed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2009). A literature search was conducted using the electronic databases PubMed,

EBSCO and Web of Science. The search followed the following search expression: (practice\* or strateg\* or approach\* or intervention\*) AND (professional\* OR practitioner\* OR psychologist\* OR counselor\* OR "social work\*" OR "case manage\*") AND (child\* welfare system OR child\* protection OR child\* services) AND ("risk assessment" OR "risk management" OR "risk analysis"). Additionally, an handsearch was carried out to identify more articles related to the study.

## 2.2. Eligibility criteria

The articles were selected according to the following inclusion criteria: (i) studies whose participants are professionals working in the field of child protection; (ii) a focus on the risk assessment practices used by professionals; (iii) empirical studies (quantitative and/or qualitative methodology); and (iv) studies written in English, Portuguese, and Spanish. The following exclusion criteria were also applied: i) studies with psychometric evaluations of a specific risk assessment instrument, because these studies focus exclusively on the technical aspects of the instruments and do not directly address how professionals apply these instruments in daily practice, nor do they explore the specific strategies and contexts in which risk assessments are carried out; and ii) gray literature, such as legislation, news, book chapters, unpublished studies, conference proceedings and literature reviews.

## 2.3. Study selection and data extraction

The studies were selected up to July 2024 in various databases. After the search, all the references were exported, organized, and managed in the Rayyan online software (Ouzzani et al., 2016).

Two researchers independently selected articles for inclusion in the review. They based their choices on the information found in the titles and abstracts, excluding studies that weren't relevant to the review. Discrepancies between the researchers were resolved through discussion and, finally, consensus and decisions on the eligibility of studies were overseen by a third researcher.

The initial search identified 6372 articles, of which 981 came from the EBSCO database, 4792 from PubMed and 599 from Web of Science.

Subsequently, an handsearch procedure was carried out, resulting in an article relevant to this study. After excluding 382 duplicates, 5588 studies were identified as potentially relevant to the review. A total of 5554 studies were excluded as they did not meet the mentioned inclusion criteria. Following this screening, 35 articles were considered for a thorough evaluation in full text. Out of these, 22 articles were subsequently excluded as, after reading them in full text, they did not meet the inclusion criteria, namely 19 articles did not focus on risk assessment practices and 3 articles were non-empirical studies. After this refined selection process, a final count of 13 articles was included in the systematic literature review. The study selection process is shown in Fig. 1. To analyze the results, the information considered relevant from the articles was extracted according to the following areas: i) references; ii) country where the study was carried out; (iii) objective of the study; (iv) characteristics of the sample (sample size, gender, age, years of professional experience); (v) methodological characteristics (design, instruments and data analysis; and, iv) main results (see Tables 2 and 3).

## 2.4. Quality assessment

To assess the quality of the studies included in the review, the Crowe Critical Appraisal Tool (CCAT; Crowe & Sheppard, 2011; Crowe et al., 2012) was used. The CCAT provides a reliable and consistent method for reducing bias in this review. The instrument consists of eight categories, divided into 22 items, assessing the following areas: 1) preliminaries; 2) introduction; 3) design; 4) sampling; 5) data collection; 6) ethical matters; 7) results and 8) discussion. Each category receives its own score on a six-point Likert scale, where zero corresponds to a low score and five corresponds to the highest score (Crowe et al., 2012). Overall, the studies did not score less than 30 points, which in turn showed that the articles included did not present a high risk of bias (see Table 1). Cohen's Kappa coefficient was used to assess agreement between researchers. The value of  $k = 0.84$  showed that there was a strong level of agreement when it came to assessing the quality of the articles.

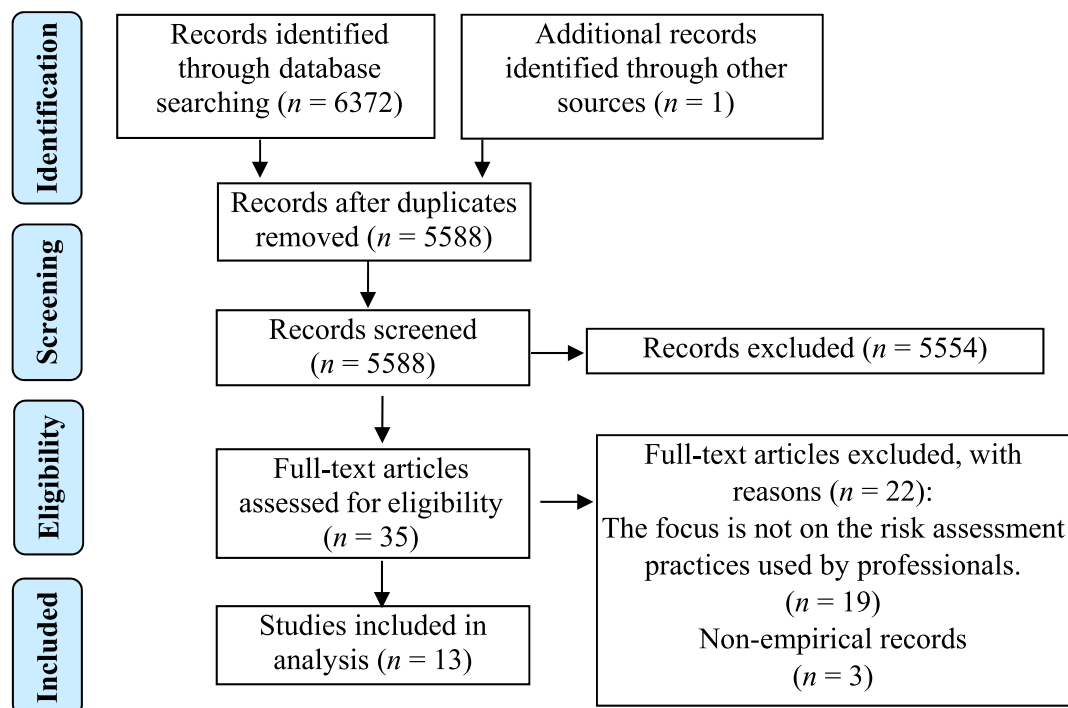


Fig. 1. PRISMA flow diagram.

**Table 1**  
Quality of studies assessed using the Crowe critical appraisal tool (CCAT).

Study	P	I	De	S	DC	EM	R	Di	T
Bourassa et al. (2008)	4/5	4/5	3/5	4/5	5/5	4/5	4/5	4/5	32/40; 80 %
Brunnberg and Pečnik (2006)	4/5	4/5	3/5	4/5	5/5	2/5	5/5	4/5	31/40; 78 %
Chateaufeuf et al. (2021)	5/5	4/5	4/5	4/5	5/5	4/5	5/5	5/5	36/40; 90 %
Darlington et al. (2010)	5/5	4/5	5/5	5/5	4/5	4/5	5/5	5/5	37/40; 93 %
Hayes and Spratt (2014)	5/5	4/5	5/5	4/5	5/5	4/5	5/5	5/5	37/40; 93 %
Hughes and Chau (2013)	5/5	5/5	4/5	3/5	4/5	4/5	5/5	4/5	34/40; 85 %
Lee et al. (2013)	5/5	5/5	4/5	4/5	4/5	4/5	5/5	5/5	36/40; 90 %
Olszowy et al. (2020a)	5/5	5/5	5/5	4/5	5/5	4/5	5/5	5/5	38/40; 95 %
Olszowy et al. (2020b)	4/5	4/5	4/5	4/5	3/5	3/5	4/5	4/5	30/40; 75 %
Skivenes and Stenberg (2013)	5/5	5/5	4/5	3/5	5/5	3/5	4/5	4/5	33/40; 83 %
Spies et al. (2015)	5/5	5/5	4/5	4/5	5/5	4/5	5/5	5/5	37/40; 93 %
Stanley (2013)	5/5	4/5	4/5	3/5	4/5	5/5	5/5	3/5	33/40; 83 %
Williams et al. (2019)	4/5	4/5	4/5	3/5	3/5	4/5	5/5	5/5	32/40; 80 %

Note. P=Preliminaries; I=Introduction; De = Design; S=Sampling; DC=Data Collection; EM=Ethical Matters; R=Results; Di = Discussion; T=Total.

### 3. Results

#### 3.1. Description of studies

Thirteen empirical studies published between 2007 and 2022 were found. Most of the studies took place in Canada ( $n = 5$ ) and the USA ( $n = 2$ ). The rest originated in Australia ( $n = 1$ ), Northern Ireland ( $n = 1$ ), Norway ( $n = 1$ ), South Africa ( $n = 1$ ), New Zealand ( $n = 1$ ) and Sweden ( $n = 1$ ).

The number of participants ranged from 21 to 1405, comprising a total of 2398 participants. All the studies included both male and female participants. The included studies evaluated risk assessment practices using social workers ( $n = 8$ ), psychologists ( $n = 2$ ), health professionals ( $n = 2$ ) and law enforcement officers ( $n = 2$ ) as samples. However, five of the studies did not specify the professional field of the participants, who were characterized as child protection professionals. These included samples in which the participants' professional experience ranged from 4 to 20 years. However, seven of the included studies did not provide information on the number of years of the participants' professional experience.

The methods used to collect the data were semi-structured interviews ( $n = 11$ ), case vignettes ( $n = 4$ ) and questionnaires ( $n = 4$ ). Most of the studies were qualitative ( $n = 7$ ), followed by mixed ( $n = 4$ ) and ethnographic ( $n = 2$ ).

#### 3.2. Risk assessment methods in the child protection systems

##### 3.2.1. Actuarial risk assessment tools

In four distinct studies (Chateaufeuf et al., 2021; Hayes and Spratt, 2014; Spies et al., 2015; Williams et al., 2019), it has been demonstrated that child protection professionals in Canada, the USA, Northern Ireland, and South Africa follow a specific and systematic protocol throughout the risk assessment procedure. This protocol is grounded in the standards and legislation of the respective child protection services in their countries of operation. Nevertheless, Williams et al. (2019) discovered that health professionals in the United States have access to a specific form from their organizations to aid in their risk assessment practices. Six studies (Bourassa et al., 2008; Chateaufeuf et al., 2021; Lee et al. (2013); Olszowy et al., 2020a; 2020b; Skivenes and Stenberg, 2013) reported that child protection professionals in Canada and the USA had standardized risk assessment tools provided by their organizations and country of origin. These tools prioritize services for the cases posing the highest risk and provide decision-making guidelines for professionals, namely: "Structured Decision Making" (SMD); "Family risk assessment"; and "Family risk reassessment". Nevertheless, findings from two studies (Chateaufeuf et al., 2021; Lee et al. (2013)) uncovered that most child protection professionals in the USA and Canada do not regularly incorporate risk assessment tools into their ongoing practices.

Regarding intervention with DV cases, Olszowy et al. (2020a) found that Canadian child protection professionals exhibit inconsistency in the utilization of risk assessment tools. This inconsistency arises from the fact that child protection systems typically employ a standardized risk assessment tool that does not specifically address the risk of DV. Furthermore, the assessment usually encompasses various factors, with exposure to interparental violence being just one element in the evaluation process. Olszowy et al. (2020b) demonstrated that Canadian child protection professionals complemented their risk assessment by administering specific risk assessment tools to assess the risk of DV during interviews with the perpetrator and victims, such as: "The Brief Spousal Assault Form for the Evaluation of Risk" (B-SAFER) and "The danger assessment tool" (DA).

##### 3.2.2. Intra- and inter-institutional collaboration

Six studies (Bourassa et al., 2008; Hayes and Spratt, 2014; Hughes & Chau, 2013; Olszowy et al., 2020a; Stanley, 2013; Williams et al. (2019)) showed that child protection professionals in Canada, New Zealand, Northern Ireland and the USA engaged in institutional collaboration. They employed different sources of information for risk assessment, including the analysis and consultation of family files related to criminal practices or previous involvement with child protection services. Nevertheless, Williams et al. (2019) found that US health professionals examined families' previous medical reports to gather information about medical history (e.g., adherence to medical appointments, home maintenance, substance abuse history, mental health conditions and/or child development). Meanwhile, Stanley (2013) showed that New Zealand social workers sought to collaborate with psychologists and psychiatrists, requesting reports written by them, to ascertain behaviors and the existence of diagnoses in the parents, thereby supporting the overall risk assessment process.

Furthermore, two studies (Chateaufeuf et al., 2021; Stanley, 2013) found that social workers from Canada and New Zealand collaborated with professionals from their own team to provide support and validation when deciding on the level of risk, benefiting from diverse perspectives on the given situation. However, Stanley (2013) showed that some New Zealand social workers expressed a need for supervision from their superiors, particularly in the context of the risk assessment process.

##### 3.2.3. Clinical judgment and professional experience

Five studies (Bourassa et al., 2008; Chateaufeuf et al., 2021; Olszowy et al., 2020a, 2020b; Stanley, 2013; Williams et al., 2019) have shown that child protection professionals and health professionals from



**Table 2**  
Studies' characteristics.

References	Sample country	Aims	Sample	Study design: instruments/materials and data analyses
<a href="#">Bourassa et al. (2008)</a>	Canada	Evidence of social workers' interventions with families suffering from domestic violence (DV), the factors that influence social workers' decisions and the factors that facilitate and create obstacles to intervention.	25 social workers (8 men and 17 women) <i>M</i> age = 34.6 <i>M</i> years of professional experience = 13.4	Qualitative design: Semi-structured interviews; Thematic analysis
<a href="#">Brunnberg and Pečnik (2006)</a>	Sweden	Comparing the risk assessments of Swedish and Croatian social workers in a case of a four-year-old child exposed to risk in his family.	159 participants in total: – 87 Croatian social workers (93 % women and 7 % men) <i>M</i> age = 41.8 <i>M</i> years of professional experience = 16 – 72 Swedish social workers (87 % women and 13 % men) <i>M</i> age = 42 <i>M</i> years of professional experience = 11.1	Mixed design: Self-report questionnaire; Case vignette; Descriptive analysis; Content analysis
<a href="#">Chateaufort et al. (2021)</a>	Canada	Evidence of how social workers arrive at the decision to remove a child from parental care and how they choose a foster family.	39 social workers (37 women and 2 men)	Qualitative design: Semi-structured interviews; Thematic analysis.
<a href="#">Darlingto et al. (2010)</a>	Australia	To examine professionals' perceptions of risk factors and responses to intervention in a specific case.	21 child protection workers <i>M</i> years of professional experience = 8.7	Qualitative design: Semi-structured interviews; Case vignette; Content analysis
<a href="#">Hayes and Spratt (2014)</a>	Northern Ireland	To examine the daily practices of social workers who work with children and families.	55 social workers (52 women and 3 men) <i>M</i> age = 35.25 <i>M</i> years of professional experience = 4.3	Mixed design: Questionnaire; Case vignette (semi-structured interview); Content Analysis; ANOVA
<a href="#">Hughes and Chau (2013)</a>	Canada	To explore how child protection workers understand and recognize DV and what their role, practices and interventions are.	24 child protection workers <i>M</i> years of professional experience = 11	Institutional ethnographic design: Semi-structured interviews; Content analysis
<a href="#">Lee et al. (2013)</a>	USA	To examine the variability in practices around child protection services in relation to allegations of child maltreatment.	39 child protection workers	Qualitative design: Focus groups; Semi-structured interviews; Thematic analysis
<a href="#">Olszowy et al. (2020a)</a>	Canada	To explore how professionals in child protection systems assess risk, as well as the barriers they face in effectively assessing risk in cases where DV is identified.	29 child protection workers	Qualitative design: Semi-structured interviews; Thematic Analysis
<a href="#">Olszowy et al. (2020b)</a>	Canada	Understand the nature of DV risk assessment and risk management within the child protection sector by examining: (a) the frequency with which workers engage in risk assessment practices; (b) types of risk assessment tools used; and (c) workers' experiences with risk assessment in the context of DV.	1405 child protection workers	Mixed design: Questionnaire; Semi-structured interviews; Descriptive analysis; Thematic analysis
<a href="#">Skivenes and Stenberg (2013)</a>	Norway	Examine how workers operating in different child welfare systems use different risk assessment tools/approaches by evaluating a DV case vignette.	301 child protection workers (102 from Norway, 100 from England and 99 from the USA)	Mixed design: Qualitative interviews; Questionnaire with case vignette; Descriptive analysis; Content analysis
<a href="#">Spies et al. (2015)</a>	South Africa	Report on the results of the dialog between professionals and researchers that resulted in the development and implementation of the new security and risk assessment tools for South Africa.	1st phase: – 81 participants from South Africa (55 social workers, 3 psychologists, 19 legal professionals, 2 law enforcement officers and 2 health professionals). 2nd phase: – 13 social workers	Qualitative design: Semi-structured interviews; Focus groups; Content analysis
<a href="#">Stanley (2013)</a>	New Zealand	To examine how social workers assess risk in their daily practice and what they record about children being at risk.	70 social workers (53 women and 17 men)	Ethnographic design: Semi-structured interviews; Grounded analysis
<a href="#">Williams et al. (2019)</a>	USA	To characterize similarities and differences in risk assessment practices between nurses and social workers.	112 participants in total: 50 nurses and 62 social workers	Qualitative design: Semi-structured interviews; Focus groups; Content analysis

**Note.** USA: United States of America; DV: Domestic Violence.

Canada, New Zealand and the USA used their experience and professional training to assess risk. Participants preferred their clinical judgment as an alternative to using risk assessment tools. About intervention in cases of DV, two studies ([Bourassa et al., 2008](#); [Skivenes and Stenberg, 2013](#)) showed that social workers in Canada and Norway considered their in-depth knowledge of the problem of DV and the consequences that exposure to it causes in children to be essential for effectively assessing risk in cases of DV.

### 3.2.4. Individual interviews

Three studies ([Bourassa et al., 2008](#); [Hughes & Chau, 2013](#); [Olszowy et al., 2010b](#)) found that child protection professionals in Canada conducted one-on-one interviews with both parents and children, allowing them to express freely about their experiences of violence. [Lee](#)

[et al. \(2013\)](#) showed that child protection professionals in the USA developed their own set of questions to assess risk during interviews. Additionally, two studies ([Bourassa et al., 2008](#); [Williams et al., 2019](#)) highlighted that social workers in Canada and the USA found it relevant to gather comprehensive information by conducting interviews with extended family members.

### 3.2.5. Observation of family dynamics

[Bourassa et al. \(2008\)](#) found that Canadian social workers considered the observation of family dynamics to be an important stage in the risk assessment process. A study revealed that social workers and health professionals in the USA utilized their observational skills when conducting interviews and home visits with children ([Williams et al., 2019](#)).

**Table 3**  
Main Results.

References	Main Results
Bourassa et al. (2008)	When assessing risk, professionals used different practices: <ul style="list-style-type: none"> <li>– Interviews with parents and children, individually;</li> <li>– Observation of family dynamics;</li> <li>– The assessment tool used in New Brunswick and the use of the Protocol for abused children;</li> <li>– Different sources of information (child protection agencies);</li> <li>– Essential professional experience and knowledge of domestic violence issues.</li> </ul>
Brunnberg and Pečnik (2006)	<ul style="list-style-type: none"> <li>– In the first phase, 75 % of the participants from each country responded that the reliability of the information reported in the signs should be verified.</li> <li>– In the second phase, many participants felt that the child should be protected. Swedish professionals felt that parents should receive parental support.</li> <li>– In the third phase, there was no difference between countries, with the majority choosing the need to protect the child. More Swedish than Croatian professionals chose to support parents to take better care of their child as a response to this situation.</li> </ul>
Chateaufneuf et al. (2021)	<ul style="list-style-type: none"> <li>– Social workers reported collaborating with other child protection professionals to support and validate their decisions on the level of risk.</li> <li>– Participants mentioned using their professional experience and clinical judgment in risk assessment.</li> <li>– They mentioned having assessment tools but considered their clinical judgment to be fundamental.</li> </ul>
Darlington et al., 2010	<ul style="list-style-type: none"> <li>– Participants assessed risk from an ecological perspective, namely: environmental factors (inadequate housing, financial difficulties, social isolation and ethnicity); factors related to parents (substance abuse, domestic violence, young parents, lack of parenting skills, etc.); and factors related to the child, such as physical issues (unmet basic needs such as food and hygiene, physical safety, lack of supervision, health problems) and emotional issues (verbal and emotional abuse, lack of attachment, inappropriate parental behavior, risk of delay in the child's normative development).</li> </ul>
Hayes and Spratt (2014)	<ul style="list-style-type: none"> <li>– Firstly, most professionals selected “investigate/resolve concerns with parents” in the questionnaire before assessing the risk.</li> <li>– Professionals follow a legal and political procedure to investigate the risk situation.</li> <li>– Secondly, professionals selected “multidisciplinary contacts” in the questionnaire.</li> <li>– Finally, they selected “assessment” in the questionnaire, where they considered it necessary to assess the risk, the parenting skills and the child's needs.</li> </ul>
Hughes and Chau (2013)	<ul style="list-style-type: none"> <li>– Professionals assessed risk through a complex set of risk factors.</li> <li>– The professionals assessed: (i) the source of the signaling; (ii) the frequency and severity of the violence; (iii) the impact of the various risk factors on the child; (iv) the parents' ability to take responsibility for exposing the child to violence and their willingness to make changes to reduce the risks.</li> <li>– The professionals consulted previous family files (criminal violence cases or previous involvement with child protection services).</li> <li>– They conducted interviews with both parents and children to assess risk.</li> </ul>
Lee et al. (2013)	<p>The participants pointed out some barriers to risk assessment practices:</p> <ul style="list-style-type: none"> <li>– Receiving inaccurate and insufficient information from other entities regarding the child's risk situation;</li> <li>– Limited time and resources;</li> <li>– Not being informed in a timely and consistent manner about changes in the child protection system's policies and laws;</li> <li>– Use of a standardized risk assessment tool, however they had a negative perception of the tool (e.g., “confusing”, “biased”) and often did not use it;</li> </ul>

**Table 3 (continued)**

References	Main Results
	<ul style="list-style-type: none"> <li>– Creating their own list of questions to be used during individual interviews.</li> </ul> <p>Regarding improvements in risk assessment practices, professionals reported that:</p> <ul style="list-style-type: none"> <li>– Ongoing support and professional development for professionals to consistently implement risk assessment procedures;</li> <li>– Continuous supervision and information on policy changes in the child protection system;</li> <li>– Implementation of an evidence-based risk assessment tool that has been shown to be effective in other states (e.g., “Structured Decision Making” (SDM)).</li> </ul>
Olszowy et al. (2020a)	<p>Participants mentioned different barriers to the practice of risk assessment: challenges in the relationship between client and professional; lack of trust and knowledge of the professional; high workload and lack of training; lack of internal policies/protocols; lack of resources; challenges in collaboration between agencies; and, lack of specific risk assessment tools for DV.</p> <p>Risk assessment practices used by professionals: interviews with the victim, perpetrator and child, individually; professional experience and training, they do not use risk tools consistently; and, they resort to analyzing previous family and child/youth cases.</p> <p>Promising practices: intersectoral collaboration; building relationships of trust; the existence of protocols; training and education for professionals in the field of DV; and competent clinical supervision.</p>
Olszowy et al. (2020b)	<ul style="list-style-type: none"> <li>– Most participants (69 %) used risk assessment tools provided by the governing ministry: Safety Assessment Tool, Family Risk Assessment Tool and Family Risk Reassessment.</li> <li>– Some professionals (13.4 %) reported using complementary tools specific to DV risk: the B-SAFER Tool, the Danger Assessment Tool and the Power and Control Wheel.</li> <li>– A small number of participants (<math>n = 20</math>) reflected on some existing barriers in their work in the child protection system, such as: high volume of cases involving exposure to DV; need for more specific risk assessment tools for child protection work; and lack of collaboration in creating safety plans with the family and other entities.</li> </ul>
Skivenes and Stenberg (2013)	<p>The international differences in risk assessment are not significant:</p> <ul style="list-style-type: none"> <li>– They based their assessments on a set of risk factors (e.g., family factors, context, parenting skills)</li> <li>– All professionals explained their risk assessments through research-based knowledge about the negative consequences of DV for children. Norwegian professionals demonstrated that they mostly use their clinical judgment when assessing risk.</li> <li>– American workers use the “SDM” risk tool in their risk assessments and English professionals use a triangulation assessment.</li> </ul>
Spies et al. (2015)	<ul style="list-style-type: none"> <li>– Participants were not familiar with concepts related to risk assessment, but referred to it as “essential and crucial”;</li> <li>– Participants demonstrated a lack of awareness of the role of a theoretical framework underlying assessment practices;</li> <li>– Most participants expressed a strong need for risk assessment tools and procedures;</li> <li>– Some participants mentioned that they follow a specific procedure during the risk assessment process, based on the standards and laws of child protection services.</li> <li>– Participants perceived that actuarial assessment tools help prioritize cases in which children were considered to be most at risk;</li> <li>– Consensus-based risk assessment tools help professionals explore the full context of the family.</li> </ul>
Stanley (2013)	<p>The participants used different strategies to assess a child's risk:</p>

(continued on next page)

Table 3 (continued)

References	Main Results
	<ul style="list-style-type: none"><li>– They started the risk assessment process as soon as they received a referral;</li><li>– They consulted and analyzed their family’s previous records;</li><li>– Making probability judgments about the level of risk;</li><li>– Case supervision;</li><li>– Favored reports written by other professionals (psychologists and psychiatrists) involved with the family.</li></ul>
Williams et al. (2019)	<ul style="list-style-type: none"><li>– Both nurses and social workers used the following practices when assessing risk: identifying risk factors and building a relationship of trust with the family.</li><li>– Nurses used practices other than social workers: (i) observation and clinical judgment; (ii) risk assessment forms provided by the entity; (iii) consultation of internal medical records; (iii) assessment of protective factors; (iv) continuous holistic assessments.</li><li>– The social workers used the following practices: (i) a systematic risk assessment process based on the laws and regulations of the country where they work; (ii) behavioral observation, both in interviews and home visits; (iii) gathering information on family risk factors, protective factors, and resources, through interviews with the complainant, victim, aggressor, and other relevant family members; (v) consulting previous family files.</li></ul>

3.3. Factors assessed in child protection systems

3.3.1. Assessment of risk and protective factors

Three studies (Brunnberg and Pečnik, 2006; Hayes and Spratt, 2014; Stanley, 2013) indicate that Swedish, Canadian and New Zealand social workers start the risk assessment process upon receipt of a report. They check the reliability of the information provided, especially when dealing with anonymous reports. Additionally, Stanley (2013) discovered that New Zealand social workers also seek to assess potential risk indicators through referrals. Therefore, four studies (Darlingto et al., 2010; Hughes & Chau, 2013; Skivenes and Stenberg, 2013; Williams et al., 2019) showed that the majority of child protection professionals, including social workers and health professionals, from Australia, Canada, the USA, Norway and the UK, based their assessments on a complex set of risk factors, namely: individual factors (e.g. learning deficits, special needs, age, etc.), contextual and environmental factors (e.g. financial difficulties, social isolation, inadequate housing, support network, etc.), and parenting skills (e.g. substance abuse, domestic violence, poor parenting skills, young parents, etc.).

Apart from identifying risk factors, Williams et al. (2019) showed that social workers and health professionals in the USA sought to assess protective factors as well as family resources. Conversely, Hughes and Chau (2013) showed that Canadian child protection professionals, through a systematic and rigorous risk assessment approach, evaluated the origin of indicators, the frequency and severity of the violence, the influence of the various risk factors on the child, and subsequently, the parents’ ability to take responsibility for exposing the child to such risks, as well as their willingness to change to eliminate these risks.

3.4. Barriers and needs in risk assessment practices

3.4.1. Challenges and barriers in risk assessment

Regarding the barriers identified by professionals, one study showed that participants received inaccurate and insufficient information from other entities about the child’s risk situation, which consequently hindered the pace of the investigation and its efficiency (Lee et al., 2013). Olszowy et al. (2020a) observed a lack of protocol development between agencies, resulting in a constraint on the exchange of information among entities.

Moreover, findings from three studies (Lee et al., 2013; Olszowy et al., 2020a; 2020b) revealed that professionals within child protection

systems experienced a substantial workload due to the overwhelming number of referred cases, coupled with constraints on their time and resources. Olszowy et al. (2020a) showed that challenges in establishing positive relationships with family members, children, particularly their resistance to participating in the assessment and their lack of trust in professionals, pose challenges to the effectiveness of risk assessment.

Simultaneously, two studies (Olszowy et al., 2020a; Spies et al., 2015) highlighted that a lack of training and professional development regarding risk assessment and the intricacies of DV poses challenges to the effectiveness of the risk assessment process. Two studies (Olszowy et al., 2020a; 2020b) presented a limitation in terms of the risk assessment tools/procedures used, specifically when intervening in cases of DV, since these tools assess risk in children in general, and therefore do not focus on the specific risk of exposure to interparental violence. Finally, the operational framework of child protection system is dictated by the laws and policies of the respective countries. Lee et al. (2013) verified that some professionals in the USA mentioned a lack of timely and consistent information regarding changes to these laws, impacting their practice.

3.4.2. Risk assessment improvements and needs

About needs in risk assessment practices, Lee et al. (2013) found that participants considered ongoing professional training and education to be important to consistently implement these procedures. In addition, Olszowy et al. (2020a) found that some Canadian child protection professionals emphasized the need for training on DV issues. Nevertheless, two studies (Lee et al., 2013; Olszowy et al., 2020a) found that participants expressed the importance of competent ongoing supervision in risk assessment processes. They also emphasized the importance of providing consistent information about changing policies and laws within the child protection system, to enhance professionals’ skills and confidence in their roles.

In a study by Olszowy et al. (2020a), Canadian professionals highlighted the significance of intersectoral collaboration in ensuring the sharing of comprehensive and detailed information about the risk situation of children. In this way, one improvement pointed to be the development of interagency protocols that will result in promising practice in the child protection system. Two studies (Lee et al., 2013; Spies et al., 2015) showed that professionals considered it crucial to implement evidence-based risk assessment protocols and tools that have proven to be effective in assessing risk in other countries. Finally, findings from two other studies (Darlingto et al., 2010; Williams et al., 2019) showed the importance of establishing a trust-based relationship among professionals, families, and children. This relational foundation is deemed fundamental in the context of risk assessment, facilitating professionals in gaining a better understanding of the needs and wishes of those involved.

4. Discussion

The results of this systematic literature review reveal various practices used by professionals in the risk assessment process, including actuarial instruments, clinical judgment, individual interviews with relevant participants, and observation of family dynamics. Additionally, the assessment of risk and protective factors has been shown to be crucial and should be evaluated from an ecological perspective, considering the child’s needs, parenting skills, and social and environmental factors. Collaborative work, both intra- and inter-institutional, was also identified as essential. However, professionals highlighted several barriers and needs that affect daily risk assessment practices, impacting the effectiveness of these assessments. Thus, existing literature suggests that risk assessment for child victims of any type of abuse requires a multi-method, multi-informant, and multidisciplinary approach (Zumbach et al., 2022). To ensure the credibility and rigor of the assessment process, professionals must triangulate information (Mendoza et al., 2016).

One of the main findings of this review is the recurrent use of actuarial risk assessment tools by professionals, a fact well established in the literature (Berrick et al., 2017; Skivenes & Skramstad, 2015). Most child protection services, such as those in the US and Canada, rely heavily on these instruments for risk assessment, as they allow professionals to classify the level of risk and prioritize cases (Mickelson et al., 2017; Skivenes & Skramstad, 2015). However, the literature has shown that actuarial risk assessment instruments have limitations in their effectiveness, as they are prone to errors in both application and interpretation. In addition, these instruments have static risk factors and fail to capture changes in family dynamics and assess various domains of a child's life (Cuccaro-Alamin et al., 2017). This review highlights these limitations and suggests that although actuarial instruments provide a standardized approach, they may not fully address the particularities of each case. There is therefore a need to continually improve risk assessment tools to ensure they are more adaptable and comprehensive.

Beyond the limitations of actuarial instruments, the results also show that professionals are concerned about their effectiveness in cases involving children exposed to domestic violence. In response to this gap, the literature indicates that professionals advocate for the inclusion of factors associated with the risk of recidivism and the application of instruments to parents to assess the risk of DV (Jenney et al., 2014). This underscores the ongoing challenge of refining risk assessment tools to better handle the complexities of domestic violence situations.

This review highlights the need for coordination and collaboration among organizations in risk assessment, as emphasized across multiple studies. Proper risk assessment practice involves gathering information and exploring facts through collaborative efforts with entities dealing with families and children at risk, including specialized family support services, law enforcement, legal services, health, and education (De Bortoli et al., 2017; Zumbach et al., 2022). This collaborative approach not only enhances risk assessment but also improves risk management and protection. Transdisciplinary collaboration facilitates the exchange of information, knowledge, and skills among professionals, making it possible to address the social, educational, psychological, and physical needs of abused children (Land et al., 2018; Zumbach et al., 2022). Child maltreatment is a complex phenomenon that affects various aspects of a child's life, necessitating a biopsychosocial perspective and transdisciplinary work throughout the child protection process (Watters & Martin, 2021). This review underscores that a lack of collaboration can compromise the safety of children and suggests implementing strategies to improve communication and cooperation between the institutions involved.

In this ensuing analysis, one particular finding demands special consideration. A diverse array of professionals showed a preference for relying on their clinical judgment in the context of risk assessment. This preference demonstrates, once again, that most professionals consider that there is a limitation to the effectiveness of actuarial risk assessment instruments. Professionals express greater confidence when integrating their extensive experience within the child protection system, particularly notable in the UK and Norway, where clinical judgment is evidenced (Gilbert et al., 2011). There are also some professionals from Canada who, alongside employing actuarial risk assessment tools, as previously mentioned, also use their clinical judgment (Gilbert et al., 2011).

The application of clinical judgment helps to identify factors that the assessment instruments are unable to detect, thus helping to interpret them (De Bortoli et al., 2017). Nevertheless, clinical judgment has some limitations, notably the variability in decision-making stemming from each professional's unique experience, potentially leading to divergent risk assessments. To address this challenge, the literature advocates for the application of a "structured clinical judgment" approach. This approach integrates the scientific evidence embedded in actuarial instruments for evidence-based risk assessment, aligning clinical judgment with robust guidance and support derived not only from theory and research but also from practical experience and professional expertise

(De Bortoli et al., 2017). The review suggests that a combined "structured clinical judgment" approach can balance the precision of actuarial tools with the flexibility of clinical judgment. According to Shlonsky and Wagner (2005), integrating actuarial instruments with clinical judgment significantly enhances the accuracy of case management decisions within child protection systems.

Interviews with children and family members were highlighted by some professionals as an efficient risk assessment practice for gathering information. Research findings show that achieving accuracy and consistency in determining the level of risk necessitates conducting interviews with both the child and their parents. This enables the collection and exploration of information regarding the risk situation, as well as a comprehensive understanding of the needs of the child (Mickelson et al., 2017). Additionally, enriching the risk assessment process can be achieved by interviewing other sources of information, such as extended family members. This not only enhances the overall assessment but also establishes a parallel with the information provided by the parents.

While only a small number of professionals have mentioned the observation technique as a method for risk assessment, the literature indicates that direct observations of parent-child interactions can offer valuable insights into family dynamics. This approach is particularly beneficial for identifying potential indicators of abuse or neglect and assessing constructs like parental competence and attachment problems (Zumbach et al., 2022). This is especially true in the case of younger children who have limited language skills, so interviews with these children may not be sufficiently informative (Zumbach et al., 2022). Integrating the observation technique with other risk assessment practices can be an efficient strategy for assessing the risk of child maltreatment.

In this way, this systematic review demonstrates that combining different methods is fundamental for a comprehensive analysis. Interviews with parents and children often provide subjective information that is complemented by direct observations of family dynamics. In addition, risk assessment tools provide a standardized basis, while information from external sources, together with clinical judgment, enriches and deepens the understanding of the risk situation. This combination of methods allows for a more robust and accurate assessment, considering multiple dimensions of risk.

Regarding the factors assessed by professionals, assessing risk from an ecological perspective appears to be one of the appropriate practices adopted by some of the professionals presented here. Contextual assessment of both the child's and the family's functioning should be transversal to all professionals in this field (Calder & Archer, 2016). By assessing risk and protective factors, as well as the resources available in the family, professionals can better respond to the child's developmental needs (Mickelson et al., 2017; UK Department of Health, 2001). Consequently, an ecological assessment of all the systems associated with the child becomes essential for an effective risk assessment, given the influence that the family context, the environment and society have on the child's development. Thus, the assessment of risk factors and protective factors becomes fundamental to identify the most appropriate and effective interventions to mitigate the risk situation.

Finally, the need for adequate training for all professionals who play a key role in assessing children's risk has been highlighted. The expressed need for a broad spectrum of training is evident among professionals, particularly in honing their professional skills, gaining specific knowledge about DV, and acquiring theoretical knowledge into risk assessment. It is crucial that these individuals are well qualified and trained in the specific field, as adequate training can improve the quality of practice (Shlonsky & Stern, 2007; Søjberg et al., 2020). Still, as documented in the results, professionals have limited time and resources, making it difficult to get started with training. In addition, due to lack of time, risk assessment tools are not applied and, consequently, professionals assess risk quickly and superficially (Cuccaro-Alamin et al., 2017; Hughes & Rycusa, 2006). Professionals without training,



preparation and supervision may produce assessments with inaccurate conclusions and children may not receive the necessary preventive services and become victims of abuse again.

#### 4.1. Limitations of the review

This systematic review has some limitations that should be considered. It is not possible to generalize the results as the studies predominantly include social work professionals, thereby presenting insufficient data regarding the perspectives of other professionals. Furthermore, due to the specific nature of the topic, there are few published studies addressing the risk assessment practices used by professionals. Most of the studies mentioned the use of risk assessment instruments in their assessment process, however, it was not specified which instruments were used, making it impossible to determine whether these professionals administer standardized risk assessment instruments and what their strengths and weaknesses are.

Additionally, methodological heterogeneity is considered a limitation of the systematic review itself. The studies included in this review predominantly employed similar methodologies and research techniques, such as the case vignette technique and questionnaires. This is a limitation because many professionals only mentioned their decision-making regarding the level of risk without specifying the practices or methods used to assess the risk of a particular child.

#### 5. Conclusion

This systematic review of the literature has shown that the risk assessment process requires a multi-method approach to be effective and subsequently provide an appropriate intervention for each child and family. At the same time, clinical judgment has proven to be a privileged practice in child protection systems, complemented using risk assessment tools to make the final decision on the level of risk.

This systematic review presents implications for policy and practice in child protection systems. To optimize child protection systems, continuous and adequate training of professionals is necessary, regardless of their role, to safeguard the best interests of the child. Furthermore, the work carried out with these children must be based on the existence of a transdisciplinary network and cooperation between professionals, given the specific nature of the problem and the fact that several areas of the child's life are affected. In this way, policies must promote communication and coordination between the different sectors, to guarantee rapid and effective responses.

This review therefore points to the importance of conducting future studies. The results highlight the need to carry out research using different research techniques (e.g., qualitative observation and semi-structured interviews) to gain a more detailed understanding of the professional's reasoning process prior to deciding on the level of risk, as well as the techniques used. Certain studies overlooked professionals at the forefront, like health professionals or security force professionals. So, future studies could focus exclusively on these professionals. Furthermore, it would be relevant to develop specific risk assessment tools for children exposure to interparental violence, given the scarcity and need for these in child protection systems.

#### Author's Note

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#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence

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#### Data availability

No data was used for the research described in the article.

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