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Published in: Children and Youth Services Review

DOI: 10.1016/j.childyouth.2019.104538

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Citation for published version (APA):
The content validity and usability of a child safety assessment instrument

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**ARTICLE INFO**

**Keywords:**
- Safety assessment
- Child welfare
- Content validity
- Child abuse
- Child maltreatment
- Instrument

**ABSTRACT**

Most child welfare professionals use safety assessment instruments to determine a child’s immediate safety. Surprisingly, the content validity of these instruments has hardly been examined, even though this provides valuable and essential information on their quality. Therefore, the aim of this manuscript was to examine the content validity and usability of a Dutch child safety assessment instrument by conducting two complementary qualitative studies. In Study 1, clinical professionals using the instrument (n = 15) were interviewed on what aspects of immediate child safety they considered essential to assess and on the usability of the instrument. In Study 2, other clinical and non-clinical experts on immediate child safety (n = 18) were interviewed on what aspects of immediate child safety they considered essential. All immediate child safety threats measured in the instrument were considered important, but the participants indicated that several additional threats should be measured for properly determining a child’s immediate safety. Examples of threats missed by the participants were whether or not a child is being emotionally abused, and whether harm is inflicted upon the child by anyone other than the primary caretakers. In general, the tool was considered useful for determining the immediate child safety, but participants provided recommendations for improvement for instance on the wording of items, the descriptions of items, and the (potential) outcomes of the instrument. The content validity of the child safety assessment instrument could be strengthened by adding several threats to the instrument. General implications of the results for the safety assessment instrument are discussed.

1. The content validity and usability of a child safety assessment instrument

Protecting children goes hand in hand with making very difficult decisions. One of the first decisions that are to be made by child welfare workers is about a child’s immediate safety. That is, clinical professionals must decide whether a child is in immediate danger and thus in need of immediate interventions to prevent serious harm to the child. Over time, a range of child safety assessment instruments have been developed to support child welfare workers in determining the immediate child safety. However, research on the psychometric properties of these safety assessment instruments, such as the validity, usability, and reliability, is still very limited (D’Andrade, Austin, & Benton, 2008; DePanfilis & Scannapieco, 1994; Pecora, Chahine, & Graham, 2013). Likewise, the psychometric properties of safety assessment instruments used in the Netherlands have been scarcely examined. Therefore, this study focused on the content validity and usability of a recently developed safety assessment instrument that is increasingly being used by child welfare services in the Netherlands and is referred to as the Actuarial Risk Assessment Instrument Youth Protection (ARIJ; Van der Put, Assink, & Stams, 2016).

Decision-making models in child welfare often distinguish between safety assessment and risk assessment (for example, National Council on Crime and Delinquency, 2017). Despite the widespread use of these models, there is considerable confusion about the meaning of safety and risk assessment, and about how these different assessment types relate to each other (Hughes & Rycus, 2006). However, distinguishing between safety and risk assessment is essential, since they serve quite different purposes. On the one hand, safety assessment instruments are designed to assess the child’s immediate safety, and are needed to answer questions such as whether a child was recently harmed, whether a child is being harmed right now, or whether it is likely that a child is harmed in the immediate future? (Hughes & Rycus, 2006; Knoke & Trocme, 2005). If immediate child safety threats are identified, immediate action is required to stop a child from being harmed, or to prevent serious harm to a child in the immediate future. On the other hand, risk assessment instruments assess the (non-immediate) future child safety (Hughes & Rycus, 2006; Knoke & Trocme, 2005). In these instruments, risk factors for (future) child maltreatment are assessed, so that at-risk children and families who need treatment can be identified. A range of child safety assessment instruments have been developed and implemented across the world (Bartelink, de Kwaadsteniet, Ingrid, &
Several other studies have focused on the criterion validity of safety assessment instruments. Specifically, two criterion validity types of safety assessment tools have been described in the literature: predictive and concurrent validity. The predictive validity (i.e. predictive value of child safety assessment outcomes for future child maltreatment) has, for instance, been described by Bartelink et al. (2017), Fuller and Wells (1998, 2003), Fuller, Wells, and Cotton (2001), and Wells and Correia (2012). However, these studies do not provide the information that is needed to draw conclusions on how well these instruments assess a child’s immediate safety. In fact, these studies compared safety assessment conclusions to measures of child maltreatment in the future, such as child maltreatment recurrence reports (within 60 days after the safety assessment), and re-entry into out-of-home care (sometimes more than a year after initial placement). However, safety assessment is about determining whether a child is currently being harmed, and whether a substantial threat to a child’s safety – that may induce harm in the immediate future - is currently present. This harm may or may not result in a maltreatment report (substantiated or otherwise). That is, a threat and/or abuse may be continually present but is not formally reported. To determine the predictive validity of a safety outcome, it is necessary to have a very short follow-up time, in all likelihood with measures that predict at a more granular level and that account for actions taken in response to the assessment. However, problems arise in such a study design due to ethical dilemmas. When a child is in immediate danger according to the outcome of a safety assessment, immediate measures must be taken to prevent harm to the child. If harm was indeed prevented by the measures that were taken, the child safety assessment’s accuracy cannot be determined unbiased. For obvious ethical reasons, it is undesirable to withhold these immediate safety measures, but that would in fact be necessary to accurately determine the validity of the safety assessment, that is, without the confounding effects of the safety measures that were taken to safeguard the child. The other form of criterion validity described in literature is concurrent validity, which needs to be established when the instrument outcome and criterion are determined simultaneously (Cronbach & Meehl, 1955). For this reason, concurrent validity is the most appropriate form of criterion validity when the aim is to make inferences on the quality of a safety assessment instrument. To the best of our knowledge, only two studies on the concurrent validity of safety assessment instruments have been conducted. Johnson (2004) compared safety assessment outcomes to outcomes of the Family Strengths and Needs Assessment instrument and the California Family Risk Assessment. Similarly, Baird (2004, cited in Baird & Rycus, 2004) compared safety assessment outcomes to results of risk assessment and response priority tools. Both studies demonstrated significant correlations between safety assessment outcomes and outcomes generated by these assessment tools. Although these correlations give some assurance that different types of assessment are in line with each other, they do not provide the information that is needed to determine how well these instruments assess the immediate child safety. To get this information, an outcome criterion on immediate child safety is needed. Such a criterion could be another safety assessment tool, however, there are no tools available that were found to be reliable and valid. Moreover, the best criterion would be an extensive investigation of immediate child safety conducted by a team of multiple experts, such as a pediatrician, a psychologist, a social worker, etc., using different sources of information on the child and its living environment. However, this a very expensive and time-consuming method because a comprehensive investigation is not only for children who are deemed to be in immediate danger but also for children who are not deemed to be in immediate danger. The concurrent validity of safety assessment instruments could also be studied with simpler methods that have a lower ecological validity, for example by using vignettes, filmed interviews, or a standardized actor.

Since all above mentioned methods have important limitations, a good first step in evaluating at least one aspect of a safety assessment instrument’s quality is by examining its content validity. This approach would at least evaluate the degree to which all known aspects of immediate child safety are assessed. If one or more immediate child safety...
Since the quality of the ARIJ safety assessment instrument has not been examined yet, the main focus of this study was to examine its content validity and usability. In doing so, two studies were conducted. First, professionals using the ARIJ safety assessment in their daily practice were interviewed to find out how they judge the aspects measured in the ARIJ safety assessment instrument, and what aspects they consider are missing from the instrument. Additionally, they were asked about the usability of the instrument. Based on the results of this first study, we adjusted the original ARIJ safety assessment instrument and this adjusted version was used for the interviews in the second study. In the second study, experts on child safety (rather than professionals using the ARIJ) were interviewed about the content validity of the revised instrument. Specifically, the following research questions were examined:

1. How do professionals using the ARIJ safety assessment in their daily practice judge the content and usability of this instrument?
2. How do experts on immediate child safety judge the content validity of the ARIJ safety assessment?

2. User interviews (Study 1)

2.1. Method

2.1.1. Participants

Fifteen female (n = 14) and male (n = 1) professionals were interviewed: 8 child welfare workers, 5 (child) psychologists, 1 pediatrician, and 1 social worker. The participants used the ARIJ safety assessment instrument in their daily practice themselves, or they supervised a team of professionals using the instrument daily. At the start of this study, some participants had used the instrument only a few times, whereas others had (far) more experience with the instrument.

2.1.2. Procedure

We used a purposive sampling method, specifically expert sampling (Etikan, Musa, & Alkassim, 2016). Participants were recruited by approaching the seven Dutch child welfare organizations that had implemented the ARIJ safety assessment instrument at that time. If the threats are not included in an instrument, it can be assumed that child welfare workers will not be prompted to assess all relevant threats, potentially resulting in children being wrongfully assessed as being safe when they are not. To our best knowledge, the content validity of safety assessment instruments has not been specifically studied. Therefore, we aimed to study the content validity and usability of a Dutch child safety assessment instrument. In the Netherlands, the ARIJ (Van der Put et al., 2016) is being used by a growing number of child welfare organizations since its development in 2015. The ARIJ tools are an analogue to the SDM tools. The ARIJ is comprised of two separate instruments that were developed for supporting child welfare professionals in assessing immediate child safety on the one hand, and the risk for future child maltreatment on the other. Only the former tool, referred to here as the ARIJ safety assessment instrument, was examined in the present study.

In developing the ARIJ safety assessment instrument, eight items were formulated by child welfare professionals and scientific researchers (Van der Put et al., 2016). Examples of these items are: ‘The child is (in immediate danger of) being physically abused’ and ‘The child is (in immediate danger of) being sexually abused’ (For a list of all items, see Table 1). Each of the eight items can be responded to with one of three categories: ‘Yes’ (implying the threat described in the item is present), ‘No’ (implying the threat described in the item is not present), and ‘Unknown’ (implying there is insufficient information available at time of the assessment for a proper response). Each time a child welfare professional needs to assess a child’s immediate safety, the ARIJ can be administered, such as at first registration with the agency (for example, when a family is referred to child welfare by hotline services), or in monitoring a child’s safety during child welfare supervision. The ARIJ safety assessment instrument has not only been implemented by Dutch organizations offering (forensic) care to children and their families as imposed by a court, but also by organizations offering care on a voluntary basis. In case the ARIJ outcome states there is immediate danger, a child welfare worker develops a safety plan that describes the tasks and services that are to be provided to ensure child safety. Depending on the circumstances, a safety plan may include a recommendation for out-of-home placement or a temporary restraining order. If legal measures are not deemed necessary, in-home protective measures could be taken to ensure the child’s safety.

Table 1
The items and descriptions of the original ARIJ safety assessment instrument.

<table>
<thead>
<tr>
<th>Items</th>
<th>Item descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The child is (in immediate threat of) being physically abused</td>
<td>Consider (severe) forms of physical abuse causing physical or emotional harm to the child, such as bruises, fractures, burns, internal bleedings, hitting the child with a belt, tying up the child, and confinement of a child. Also consider the presence of Münchhausen by Proxy. Consider all forms of sexually inappropriate behavior in a verbal, non-verbal, or physical form, that is intentionally or unintentionally directed towards a child, without mutual consent and/or with force, who is much younger than - or dependent on - the abuser. Also consider child prostitution or a child witnessing prostitution. Consider severe neglect causing physical danger, such as malnutrition and homelessness.</td>
</tr>
<tr>
<td>2. The child is (in immediate danger of) being sexually abused by family members or others, either or not in the form of child prostitution</td>
<td>In case of abduction, the child is taken against its will or its caregivers. Honor-related violence comprises physical or emotional violence with the aim to restore family honor and might cause death. As for urgent and vital care, consider care that is immediately needed to prevent (further) physical or emotional harm, such as a blood transfusion or surgery. Severe self-harming behavior implies damaging the own body causing injuries, such as open wounds. A suicide threat is the suspicion that a child (or caregiver) is intending to commit suicide. When a child has an acute psychosis, it has lost contact with reality, causing danger to the child itself or individuals in its direct surrounding. A child has witnessed any form of verbal and/or physical violence between family members, and this child is younger than 4 years old or physically not able to safeguard itself, for instance because of a physical disability. Consider a caregiver who is emotionally or physically unavailable, implying that the child itself is put up with tasks that do not match with the age of the child. Examples are: a young child walking to school by itself, a child arranging its own meals, or a child raising its younger brothers and sisters. This also includes parentification.</td>
</tr>
<tr>
<td>3. The child is (in immediate danger of) being severely neglected causing immediate physical danger</td>
<td></td>
</tr>
<tr>
<td>4. The child is (in immediate danger of) being abducted or being a victim of honor-related violence</td>
<td></td>
</tr>
<tr>
<td>5. Urgent and vital medical or psychological care is refused</td>
<td></td>
</tr>
<tr>
<td>6. Severe self-harming behavior, the presence of a suicide threat and/or acute psychosis</td>
<td></td>
</tr>
<tr>
<td>7. Domestic violence in the presence of a child younger than four years old or a child who cannot safeguard itself</td>
<td></td>
</tr>
<tr>
<td>8. An insufficiently available caregiver</td>
<td></td>
</tr>
</tbody>
</table>

Note. Each of the eight items can be responded to with one of three categories: ‘Yes’ (implying the threat described in the item is present), ‘No’ (implying the threat described in the item is present), and ‘Unknown’ (implying there is insufficient information available at time of the assessment for a proper response).
organization was interested in participating, they recruited eligible participants within their own organizations and provided us with contact details of professionals who volunteered to participate. Next, we provided the professionals with detailed information on research participation, after which the professionals could consent to participate. The professionals who participated were employed at six out of the seven approached child welfare organizations. We aimed at including 20 participants. However, due to the busy schedules of professionals and the fixed number of organizations that implemented the ARIJ safety assessment, it was not possible to reach this number of participants.

Each participating professional was interviewed once by five bachelor’s degree students in alternating pairs. Prior to the interviews, the students were instructed on how to conduct the semi-structured interviews and, if necessary, received further instructions based on the analysis of the (recorded) first interviews they completed. All interviews lasted around one hour, except for one interview that lasted 90 min. All interviews were recorded with the participants’ informed consent. The participants received a voucher as compensation for their cooperation.

2.1.3. Instruments

2.1.3.1. The ARIJ safety assessment. The ARIJ safety assessment consists of 8 items assessing different immediate safety threats (see Table 1 for all items and their descriptions). Each item can be answered with ‘yes’, ‘no’, or ‘unknown’. When at least one of the assessed threats is judged to be present, meaning that at least one item is responded to with ‘yes’, the instrument concludes that a child should be safeguarded immediately. The response category ‘unknown’ refers to insufficient available information to assess an item, so if at least one of the items is answered with ‘unknown’, the instrument concludes that further information about the child’s safety needs to be obtained as soon as possible. When all items are answered with ‘no’, the instrument concludes that there are no known concerns about the child’s immediate safety. The items and their descriptions were formulated by practitioners of the Child Welfare Agency in Amsterdam, and scientific researchers (Van der Put et al., 2016) and mostly showed moderate or higher reliability (Vial, Assink, Stams, & Van der Put, 2019). Additionally, the reliability of the safety conclusion was moderate to substantial.

2.1.3.2. The interview. The semi-structured interview consisted of four central questions: (1) To what extent is the ARIJ safety assessment accurate and complete for assessing immediate child safety? (2) What aspects of child safety are missed? (3) Can the items be improved in terms of content, relevance, and clarity?; and (4) To what extent does the instrument support the assessment of the immediate child safety? The different characteristics of the instrument, such as the items, item descriptions, response categories, and the instrument outcomes, were discussed separately in the interview. The second question was aimed at stimulating the participants to think about (and describe) aspects of child safety that are essential to measure in an assessment of a child’s immediate safety, but were missing in the instrument. In addition, participants were asked if several specific immediate child safety aspects were missed and should be included in the instrument. These aspects were drawn from a screening of the literature about immediate child safety and safety assessment instruments. An example of a (potential) immediate safety aspect that was presented to the participants is: a child being fearful of his/her living circumstances. Based on the first two (practice) interviews, the questions were somewhat modified for clarification and for ensuring that the duration of the interview would be acceptable.

2.1.4. Data analyses

The audiotapes were transcribed, after which they were coded. The software program ATLAS.ti version 7 was used to code all interviews. Coding was done according to the method described by Boeije (2009) comprising the steps of open coding, axial coding, and selective coding. Of the first four interviews, each passage was studied after which it was labeled with a code (open coding). Next, all passages of each interview were compared to determine overlapping themes (axial coding). In general, these themes corresponded to the immediate child safety aspects that are measured in each item of the ARIJ safety assessment instrument. Finally, connections between codes within these themes were determined (selective coding), which was done by creating a network for each theme showing contradictions and resemblances between codes. All interviews were coded by two bachelor students and the first author of this study. First, the students’ codes were merged, and the students came to an agreement about their coding, after which the first author compared her coding to the students’ coding. The first author resolved any inconsistency in coding after which the final coding was reached.

2.2. Results

The themes generated in the data analysis refer to immediate child safety threats, which are conditions potentially causing harm to the child. The following immediate safety threats are described in this result section: physical violence, sexual abuse, neglect, child abduction and honor-related violence, psychiatric disorders, domestic violence, emotional abuse, immediate threats related to the child, and threats currently not assessed in the ARIJ mentioned by individual participants. We first describe the threats that were already assessed in the ARIJ and then describe threats that are not measured in the ARIJ. Child vulnerability is also reported on, but as a separate aspect of immediate child safety.

Participants mentioned taking child vulnerability into consideration when assessing a child’s immediate safety, but we regarded vulnerability as a contextual factor - not as a cause of harm to the child. Finally, results on the usability of the ARIJ safety assessment instrument are presented.

2.2.1. Safety threats assessed by the ARIJ

2.2.1.1. Physical violence (item 1). Physical violence was regarded as an important aspect in assessing the immediate child safety. However, opinions differed on the necessity to assess violence that does not (always) lead to physical injuries in children. Seven participants advocated including violence without injuries in the instrument because they considered the presence of any form of violence as severe, and therefore as an immediate threat to a child’s safety. Moreover, they stated that injuries are not always visible for professionals, implying that the immediate danger could be underestimated when only violence leading to visible injuries is assessed as an immediate safety threat. In contrast, five participants indicated that physical violence without injuries in children should not be part of the instrument because it can be too difficult to detect for professionals, or because it should be addressed in the next assessment stage. Further, participants indicated that the response categories ‘unknown’ or ‘yes’ would probably be chosen too often for less severe forms of violence on an instrument that is designed for determining immediate child safety. The participants agreed that a ‘corrective tap’ (i.e., mildly spanking a child) should not be considered an immediate safety threat.

2.2.1.2. Sexual abuse (item 2). All participants indicated that (potential) victimization of sexual abuse is an important aspect of safety assessment. However, opinions differed about whether verbal sexual harassment should be assessed. Five participants were in favor of this, but six disagreed. Non-physical sexual abuse, such as making a child watch pornography or sexual acts, was mentioned as an aspect of immediate child safety that should be assessed.

2.2.1.3. Neglect (item 3, 5 and 8). Eight participants considered emotional neglect, besides physical neglect, as a threat to the immediate child safety, although they indicated that emotional neglect is difficult to determine. On the other hand, four participants did not consider emotional neglect as an aspect that needs to be assessed in a child safety assessment instrument. A physically dangerous child environment (for example, because drugs or weapons are present) was mentioned as an aspect of neglect that needs to be
assessed. Also, a caregiver who is physically and/or emotionally unavailable for a child as well as a caregiver who refuses to care for a child were viewed as important threats to a child's safety. Further, participants noted that the absence of parental care may be caused by deliberate refusal or by limited abilities of the caregiver (for example, because of intellectual disabilities or substance abuse). Some participants indicated that these causes should be included in the instrument.

2.2.1.4. Child abduction and honor-related violence (item 4). Participants indicated that child abduction is a rare problem, but that it nevertheless is an important aspect of immediate child safety, and should therefore be assessed in a safety assessment instrument. Further, the participants noted that both abduction and honor-related violence need to be assessed, and that differentiation between these safety threats is necessary, as they are not necessarily related to each other. Last, participants indicated that honor-related violence can be assessed by broadening the scope of the physical violence item, as it is physical in nature and perpetrated with a clear motive.

2.2.1.5. Psychiatric disorders (item 6). All participants viewed parental psychiatric disorders as an aspect of immediate child safety requiring assessment. For six participants, it was unclear to whom the item refers: to the caregiver, the child, or to the child and the caregiver. They indicated that psychiatric problems of caregivers as well as psychiatric problems of a child are important aspects of the immediate child safety and therefore should be assessed because both can impose a serious threat to a child’s immediate safety. Additionally, participants noted that parental substance abuse was lacking in the item or the item description as one of the disorders requiring assessment.

2.2.1.6. Domestic violence (item 7). The participants regarded domestic violence as an important safety threat requiring assessment. Nevertheless, the domestic violence item in its present form was judged to be formulated too broadly because all forms of verbal domestic violence are mentioned in the item description. Specifically, not all participants considered verbal violence as a severe form of violence posing a threat to a child’s immediate safety.

2.2.2. Other immediate child safety threats currently not assessed in the ARJ

2.2.2.1. Emotional abuse. Five participants mentioned that the instrument needs to be extended by including an item on emotional abuse of the child because this form of abuse can severely harm a child’s emotional well-being. However, two participants disagreed because they did not consider emotional abuse as a threat to a child’s safety that requires immediate action.

2.2.2.2. Safety threats related to the child. The participants were asked about the necessity of assessing child aspects in determining the immediate child safety, for instance, by measuring whether a child is afraid of (people in) his or her home-environment. This was not considered necessary by five participants because the cause of the child’s fear can be assessed in other items. However, one participant indicated that a fearful child can be a reason to immediately take measures, and that it therefore should be assessed as a separate aspect of the immediate child safety. Further, fourteen participants noted that a child's internalizing or externalizing behavioral problems, which may be a sign of child abuse but are not immediate safety threats themselves, should not be measured in a safety assessment. The participants reasoned that a child can be in immediate danger without showing any signs thereof.

2.2.2.3. Safety threats mentioned by individual participants. As for child safety aspects that are currently not measured in the ARJ safety assessment instrument, one participant indicated that safety threats coming from non-caregivers, such as uncles, acquaintances, or strangers with harmful intentions, need to be assessed. A different participant noted that running away from home can be indicative of child danger and must also be assessed. Some interviewees generally indicated that immediate child safety must be assessed in more depth, which may be achieved by providing a professional more guidance on how to collect and interpret information that is necessary for an adequate response to each item. Providing professionals with a list of signs that are important indicators of child danger or a list of written-out questions that professionals can use in their assessment, are examples of such guidance. Such guidance is considered particularly helpful in cases where safety problems have existed for quite a long time, and for which a professional needs to decide whether immediate action is necessary at this specific time.

2.2.3. Other aspects of immediate child safety

2.2.3.1. Child vulnerability. According to the participants, a child’s vulnerability should be considered in assessing immediate safety threats. For instance, lack of essential parental care is only an immediate threat if a child is unable to meet his/her own needs, according to the interviewees. Specifically, when a baby is not fed, his/her safety should be ensured immediately because a baby is fully dependent on a caregiver. However, if the assessment concerns a much older child (e.g., 16 years), immediate action is not necessary. Therefore, the age of a child plays an essential role in determining whether immediate action is required or not. Other important factors noted by the participants were a child’s skills and physical abilities, and the degree to which a child is dependent on care. If the 16-year-old adolescent in the example above has a severe physical impairment, immediate action might still be required. Two participants commended the domestic violence item, as it specifically refers to violence in the presence of children who are unable to protect themselves. On the contrary, two other participants mentioned that children do not tend to protect themselves, even when they are physically able to do so. Therefore, these participants noted that child vulnerability should not be assessed in a safety assessment. In the context of this, the domestic violence item prescribes that immediate action is unnecessary when a child is five years or older. The opinions about this age cut-off differed, as some participants considered that it was too low, whereas others considered it to be appropriate, as they noted that (very) young children are more vulnerable.

2.2.4. Usability of the ARJ

In general, the participants considered the ARJ safety assessment instrument as useful. The tool was experienced as a helpful checklist supporting professionals in structuring the available information. The outcome was considered to be confronting to the assessor, as it forces them to investigate further and to take action when needed. Two participants did not consider the instrument to be useful. One of them nuanced his statement by adding that the instrument might be useless if a child is covered in bruises, whereas it could be helpful when there are doubts about a child’s immediate safety. We noted that the outcome ‘Immediately safeguard the child’ was often interpreted as ‘place the child in out-of-home care’, but this is not in line with the purpose of the instrument, as a range of other measures can be taken to ensure a child’s safety. Also, it was unclear to the participants whether immediately should be interpreted as now or somewhat later in time (for instance, within 24 h after the assessment). The response scale comprising ‘yes’, ‘no’, and ‘unknown’, was considered suitable. However, one participant suggested that this scale should be extended with a response category in which a worker can indicate a (strong) suspicion about the presence of a threat. Additionally, one participant stated that the response ‘unknown’ should be replaced with ‘I am proceeding with further examination’. Two participants indicated the importance of explicitly writing down the evidence to substantiate each threat judged to be present by a professional, whereas a different participant indicated that this would take too much time. Lastly, not all items were considered to be clearly formulated. Specifically, the abundance of parentheses, the many ways in which sentences are structured, and the position of examples were
which they practiced by interviewing each other. Additionally, prior to interviews, the students were instructed on interviewing procedures after which they practiced by interviewing each other. Additionally, prior to the first author of this study conducted two interviews. Prior to assessment, they were only included if they had never used the ARIJ (the assessments could be part). If their work did involve performing safety assessments, they were included if child safety was an important aspect of their daily work, of which performing child safety assessments was part. If their work did involve performing safety assessments, they were only included if they had never used the ARIJ (the assessments could be part). If their work did involve performing safety assessments, they were only included if they had never used the ARIJ (the assessments could be part). If their work did involve performing safety assessments, they were only included if they had never used the ARIJ (the assessments could be part). If their work did involve performing safety assessments, they were only included if they had never used the ARIJ (the assessments could be part).

Eighteen experts on immediate child safety (13 women, 5 men) were interviewed and the participants had different backgrounds and expertise. There were 5 (child) psychologists/psychiatrists, 5 legal specialists, 3 social workers, 1 researcher, 1 policy officer, and 1 staff member of a non-profit organization aimed at reducing child abuse prevalences in society. Again, we used an expert sampling method. Participants were recruited by approaching Dutch organizations that specialize in (immediate) child safety. The organizations were emailed and, if necessary, approached by telephone. If an organization was interested in participating, our contact person recruited eligible participants within the organization and provides us with the contact details of the professionals who volunteered to participate, after which we provided the professionals with detailed information on research participation and obtained the professionals consent to participate. Additionally, experts on child safety who are well known in the Netherlands were approached by email and social media for research participation. None of the authors personally knew these experts. Experts could only participate if child safety was an important aspect of their daily work, of which performing child safety assessments could be part. If their work did involve performing safety assessments, they were only included if they had never used the ARIJ (the sampling frame for study 1). The professionals who participated were employed at 14 different organizations. At first, we aimed at including 20 participants. However, due to cancelations and busy schedules of professionals, it was not possible to reach this number of participants.

Two master degree students conducted 14 semi-structured interviews and the first author of this study conducted two interviews. Prior to the interviews, the students were instructed on interviewing procedures after which they practiced by interviewing each other. Additionally, prior to interviewing participants independently, the students attended a full interview that was performed by the first author. Prior to the interview, each participant received a digital copy of the ARIJ safety assessment instrument and a short manual, so they could familiarize themselves with the instrument. The interviews lasted about one hour. All interviews were recorded with the participants informed consent and the participants received a voucher as compensation for their time.

### 3.1.3. Instruments

#### 3.1.3.1. The ARIJ safety assessment

For this study, the original version of the ARIJ safety assessment instrument (see Table 1) was adjusted using findings from study 1. This adjusted version of the instrument was only used for the purposes of the present study (see Table 2 for all the items and their descriptions). This sampling and interviewing procedure was used to obtain expert opinion on the potentially improved instrument rather than on an instrument with known problems. The experts did not review the original version of the ARIJ, and their comments only reflect their opinions of the adjusted version. No comparisons between the two can be made.

#### 3.1.3.2. The interview

The semi-structured interview contained the following central questions: (1) To what extent is the safety assessment accurate and complete for assessing immediate child safety?; (2) Which aspects are missed?; and (3) Can the items be improved in terms of content, relevance, and clarity? Further, the interview also contained additional questions based on screening of scientific literature on safety and safety assessment instruments. In line with study 1, all characteristics of the instrument, such as the items, item descriptions, response categories, and the instrument outcomes, were discussed separately in the interview.

#### 3.1.4. Data analyses

The data analyses were conducted in the same manner as in study 1, with the exception that the transcripts were coded by two masters students who conducted the interviews. See the Data analyses section of study 1 (Section 2.1.4) for more information.

<table>
<thead>
<tr>
<th>Items</th>
<th>Item descriptions</th>
</tr>
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<tbody>
<tr>
<td>1. The child is (in immediate threat of) being physically abused</td>
<td>Physical violence of the child includes pulling a child’s hair, fiercely pinchling, hitting (either or not with an object), kicking, tying up, and confinement of a child. A form of physical violence may result in injuries such as bruises, fractures, burns, open wounds, and internal bleedings. Also consider the presence of honor-related violence and Münchhausen by Proxy. The ‘corrective tap’ should not be considered in this item.</td>
</tr>
<tr>
<td>2. The child is (in immediate danger of) being sexually abused</td>
<td>Consider sexually inappropriate behavior in which a child is the direct victim, but also consider non-physical sexual abuse, such as making a child watch sexual acts. Also consider forms of child exploitation, such as child prostitution or child pornography.</td>
</tr>
<tr>
<td>3. The child is (in immediate danger of) being severely neglected, either emotionally or physically</td>
<td>Consider forms of neglect such as malnutrition, homelessness, not providing urgent medical care, and a baby that is not properly taken care of. Also consider a child doing tasks that do not match with its age, such as, a young child arranging its own meals, or a child raising its brothers and sisters (i.e., parentification). A physically dangerous home-environment of a child, in which for instance drugs or weapons are present, may also be regarded in this item. Keep in mind that neglect may be caused intentionally, for example by rejecting care, or unintentionally due to (intellectual) disabilities or psychological problems, such as an addiction or a depression.</td>
</tr>
<tr>
<td>4. The child is (in immediate danger of) being abducted</td>
<td>As for abduction, consider a child who is unlawfully moved or taken away without the permission of the person(s) who has the legal custody of a child.</td>
</tr>
<tr>
<td>5. The child or caregiver has acute psychological problems</td>
<td>Examples of these problems are severe self-harming behavior, the presence of a suicide threat, or the presence of an acute psychosis. Also consider immediate psychological problems of caregivers causing a lack of parental supervision or posing a physical danger to the child.</td>
</tr>
<tr>
<td>6. The child is (in immediate danger of being) present during an episode of physical domestic violence</td>
<td>A child is present during an episode of any form of physical domestic violence.</td>
</tr>
<tr>
<td>7. The child is (in immediate threat of) being severely emotionally abused</td>
<td>Consider for instance humiliation (such as not changing a child’s soiled clothes) and belittling children for who they are.</td>
</tr>
</tbody>
</table>

Note. Each of the eight items can be responded to with one of three categories: ‘Yes’ (implying the threat described in the item is present), ‘No’ (implying the threat described in the item is present), and ‘Unknown’ (implying there is insufficient information available at time of the assessment for a proper response).
3.2. Results

Again, we first present results on the themes describing immediate child safety threats: physical violence, sexual abuse, neglect, child abduction, acute psychological problems, domestic violence, emotional abuse, safety threats related to the child, and safety threats mentioned by individual participants. These threats were paired with the items in the ARUJ safety assessment instrument. Again, we regarded child vulnerability as a separate aspect of immediate child safety.

3.2.1. Safety threats assessed by the ARUJ

3.2.1.1. Physical violence (item 1). In general, physical violence was considered an essential aspect of immediate child safety. However, some aspects were missed, such as female genital mutilation, shaking of babies, biting a child, fiercely pinching a child, and threatening a child. Two participants discussed that putting a child in a cold shower or repeatedly sending a child to the doctor may be relevant to assess. In addition, it was stated that child injuries may not be caused accidentally. There were different opinions about whether ‘corrective taps’ of caregivers should be assessed. On the one hand, the distinction between a ‘corrective tap’ and more severe physical violence was considered important by two participants but, on the other hand, it was acknowledged by six participants that the distinction between hitting and correctly tapping is unclear. Besides, describing in the instrument that a corrective tap is not an immediate safety threat, may give the wrong impression that it is an appropriate parenting behavior, whereas it is forbidden by law in the Netherlands. Opinions on including honor-related violence and Munchhausen by proxy (i.e., Factitious disorder imposed on another) in the instrument differed between experts. Two of them noted that both are explanations for harmful behavior, which they did not find important to assess. However, two other experts argued that these explanations should be taken into account in determining the immediate child safety. According to three experts, Munchhausen by proxy should not be measured because the syndrome has a very low prevalence and recognition of it is often merely based on suspicions. Finally, it was stated that the physical violence item includes various degrees of violence severity, as it can refer to both tying a child down and fiercely pinching a child.

3.2.1.2. Sexual abuse (item 2). Sexual violence was seen as an important reason to immediately safeguard a child. Four interviewees acknowledged that non-physical sexual abuse, such as making a child watch pornography, is an immediate safety threat. Two participants indicated that the sexual abuse item is too broadly defined, and they preferred including a range of different severities of sexual abuse. Others indicated that the item should focus on a child’s perception and should be based on what a child experiences as unacceptable. Furthermore, it was mentioned that sexual abuse is rarely substantiated because in most cases only signs of sexual abuse can be identified and often sufficient evidence to prove the abuse is lacking.

3.2.1.3. Neglect (item 3). Neglect was seen as an important part of immediate safety, even though some participants doubted whether neglect should be considered an immediate threat, since it was considered a structural, long-lasting problem. Often, a problem or a threat has been present for a longer time and can stay present for a couple more days without causing ‘extra’ harm. Two participants stated that only the most severe forms of neglect ask for immediate action, for example a baby suffering from malnutrition. Seven participants indicated that emotional neglect needs to be mentioned explicitly in the instrument because it can easily be overlooked. However, two participants did not consider emotional neglect as a reason for immediate action.

3.2.1.4. Child abduction (item 4). Abduction was considered an important immediate safety threat. However, six participants questioned the given definition and indicated that it can be defined more clearly. Whether or not the child abduction item should be answered with ‘yes’ was sometimes unclear for participants, for instance, in situations where a caregiver takes the child away from another caregiver in a (high conflict) divorce. Additionally, participants were unsure if the item should be answered with ‘yes’ if a parent does not adhere to (legal) parental access arrangements. Participants indicated that the item should perhaps focus more on where the caregiver (or abductor) takes the child to. Only if this location is dangerous for the child, it should be considered as an immediate safety threat. Finally, participants stated that an abduction threat is difficult to determine, and that abduction is a rare problem.

3.2.1.5. Acute psychological problems (item 5). An acute psychological disorder of a child or caregiver was seen as relevant for a child’s immediate safety. Additionally, it was stated that a caregiver’s psychiatric disorder needs to pose a danger for a child to warrant immediate action. As for a child’s psychiatric problems, it was mentioned that the caregiver’s behavior determines whether circumstances are immediately dangerous. If the caregiver takes appropriate measures, it may not be necessary to immediately safeguard a child.

3.2.1.6. Domestic violence (item 6). In general, domestic violence was considered an important aspect of immediate child safety. Nine participants did not only consider physical violence to be important, but also verbal abuse, threats of violence, and psychological abuse.

3.2.1.7. Emotional abuse (item 7). Five participants considered severe emotional abuse an immediate threat. However, it was argued that emotional abuse is a long-lasting problem, making it difficult to determine whether immediate action is necessary at a specific time. Additionally, three participants did not consider emotional abuse to be a reason to immediately safeguard a child.

3.2.2. Other immediate child safety threats currently not assessed in the ARUJ

3.2.2.1. Safety threats related to the child. Eight participants did not consider a child who is afraid of (people in) his or her home-environment as an immediate safety threat. Whether or not immediate action is required depends on the circumstances, and exactly what or whom the child fears. However, a child was considered an important information source. If possible, a child should always be consulted to determine severity of threats. In general, the participants indicated that more attention should be given to the child in assessing immediate child safety. Two participants indicated that there should be an extra item about whether the child discloses anything about any type of abuse that requires immediate action.

3.2.2.2. Safety threats mentioned by individual participants. The experts identified as missing the following safety aspects in the instrument: immediate danger caused by criminal behavior or activities of others, a child being negatively influenced (or manipulated by) someone/people with extreme views, and human trafficking. Finally, one expert wondered whether children’s own behavior, such as putting sexually explicit photos of themselves online, should be regarded as an immediate safety threat.

3.2.3. Other aspects of immediate child safety

3.2.3.1. Child vulnerability. The opinions differed on the relevance of judging a child’s vulnerability in determining immediate child safety. Three participants indicated that all children are vulnerable and dependent, at least to some degree, and the explanation about vulnerability should therefore be omitted. However, this was not a common opinion – 13 participants indicated that child vulnerability should be taken into account in determining immediate child safety. The experts identified that the following vulnerability aspects were missing on the revised instrument: a child’s mental health concern (for
example, ADHD and autism), whether a child is involved with non-
caregivers or agencies that may mitigate safety concerns (for example, 
care child, foster care, or a social support network), whether a child has 
been abused before which may have caused the child to have a low self-
esteeem and to be unaware of personal boundaries, and characteristics of 
the neighborhood in which a child is growing up. It was considered 
positive that no specific age cut-off is mentioned in the instrument, but 
age was deemed to be important in determining a child’s vulnerability, 
and thus, a child’s immediate safety. It was suggested that more gui-
dance should be provided on how a child’s vulnerability should be 
weighed. By example, the experts mentioned that it could be explicitly 
described that babies and toddlers are more vulnerable than older 
children and adolescents. In addition, professionals should also assess 
the immediate safety of unborn children and could be made aware of 
this by explicitly mentioning them in the instrument. Finally, experts 
proposed formulating the vulnerability aspects as strengths or child 
capacities.

4. Discussion

The aim of this study was to examine the content validity and us-
ability of a Dutch child safety assessment instrument (the ARJ) by 
conducting two complementary qualitative studies in which users of the 
ARJ and experts on child safety were interviewed. Most immediate 
safety aspects measured in the ARJ safety assessment instrument were 
considered to be important in determining the immediate child safety. 
However, some additional immediate safety aspects that were lacking in 
the instrument were identified. The first study found that, according 
to users of the ARJ safety assessment instrument, the following im-
mediate safety threats have high content validity and should be 
included in the instrument (i.e., they are important to assess when per-
forming a safety assessment): (1) physical violence (including violence 
not causing visible injuries), (2) sexual abuse (including non-physical 
sexual abuse), (3) severe neglect (both physical and emotional), (4) 
child abduction, (5) whether a child and/or caregiver has a psychiatric 
disorder, (6) (mainly physical) domestic violence, and (7) severe 
emotional abuse. The threat that was most prominently missing in the 
ARJ was lesser forms of emotional abuse, though it was unclear whe-
ther such forms of emotional abuse would qualify as threats of im-
mediate harm. The users of the ARJ also mentioned that a child’s 
vulnerability must be taken into account in determining a child’s im-
mediate safety, but this aspect is currently not mentioned in the ARJ. 
In general, the safety assessment tool was considered useful, but the 
content was considered insufficient for conducting a good assessment.

In the second study, the experts on immediate child safety confirmed 
the importance of most of the items and also made some suggestions for 
Improvement. They suggested the following immediate safety threats that 
should be assessed in the ARJ safety assessment instrument: (1) physical 
violence (including violence not causing visible injuries), (2) sexual abuse 
(including non-physical sexual abuse), (3) severe neglect (both physical 
and emotional), (4) child abduction, (5) whether a child and/or caregiver has a psychiatric 
disorder, (6) domestic violence (including verbal abuse), (7) severe emotional 
abuse, and (8) whether the child can be or has been harmed by others (for 
instance, because of criminal activities). Some of the experts also indi-
cated that emotional abuse and harm to the child caused by non-care-
givers should be included in the ARJ safety assessment. The experts also 
considered child vulnerability to be important to assess in the ARJ.

In comparing the results of the current study to the results of 
Scannapieco and DePanfilis and Scannapieco (1994), one prominent 
difference stands out - The threats identified by Scannapieco and De-
panfilis mainly focus on threats caused by a child’s parents, whereas the current 
Study also identified threats caused by others (such as threats 
causd by the criminal activities of others). In all likelihood, safety as-
essment instruments do not generally include non-parental or non-
caregiver threats because they were built for use in existing child

protection systems that focus on preventing and responding to child 
maltreatment. In most countries, child maltreatment consists of harm 
inflicted on a child in the context of a relationship of responsibility, trust, 
or power (see, for instance, the definition of the World Health 
Organization, 2017). In many situations, child unsafety concerns are, 
indeed, related to a caregiver inflicting harm on a child. However, as this 
Study underlines, immediately safeguarding a child may be required due 
to external threats (e.g., honor-related violence or criminal activities).

Several specific study results need to be discussed. First, it was 
striking that the ARJ safety assessment users focused more on threats 
of physical harm (Study 1), whereas the experts had a broader focus, 
which also included the danger of emotional harm (Study 2). Using 
domestic violence as example, the professionals in study 1 mainly fo-
cused on physical domestic violence, whereas the experts also focused 
on verbal domestic violence. In daily practice, threats of physical harm 
are more frequently a reason to immediately safeguard a child than 
threats of emotional harm. This may be due to the limited time and 
resources in which these decisions about child safety usually need to be 
made. As a result, a child’s safety is not always secured in cases where 
safeguarding is required. Moreover, injuries are easier to detect and 
substantiated than emotional harm. It seems feasible that the reasoning 
of experts was based more on ideal circumstances rather than circum-
stances that are representative for the reality of daily practice. The 
professionals were being more practical, they do what needs to be 
immediately done, and the experts were being more philosophical, they 
thought more about what should be done in general.

Second, some participants had remarkably different opinions on 
aspects of immediate child safety. This may be caused by the fact that 
many different experts were included in the second study. One of the 
participant groups comprised three adults with a child abuse history 
(exerts by experience). In general, they focused on child experiences as 
the threshold for immediate danger, meaning that a child’s experience 
should be leading in decisions on child safety. For example, in de-
termining if sexual misconduct by a caregiver reaches the severity 
threshold so that immediate action is required, a professional should 
always talk to a child to find out how he/she experiences the perpe-
trator’s behavior and to find out what specific behavior is experienced 
as sexual and unwanted. One of the experts by experience mentioned 
that she should have been safeguarded as a child when her father 
touched her in a way that is generally accepted as appropriate. She 
explained that she knew the sexual connotation of her father’s touching 
due to inappropriate sexual behavior of her father in the past.

Differences between participants’ opinions may also be caused by 
the fact that they were affiliated with different organizations that all 
provide different types of care for children and their families in need of 
care. Some of these organizations are confronted with the task to make 
decisions about how to act in newly presented cases within only a few 
hours (e.g., hotline services), whereas other organizations continuously 
monitor immediate child safety in a treatment program of considerable 
duration. In the latter, more time, resources, and possibilities are 
available to assess emotional aspects of child safety than in the former. 
As a result, immediate child safety and immediate action do not ne-
cessarily have the same meaning for all child welfare organizations, and 
it is therefore difficult to develop a single instrument that is consistent 
with the vision and work processes of all these organizations. However, 
we believe that the threats identified in this study should always be 
assessed in a child safety assessment. If these threats are assessed in a 
different context, the professional using this instrument needs to judge 
for each safety threat, whether the threshold for severity is reached and 
thus requires immediate action. For example, the threshold for severity 
is higher at hotline services, than at child protection services. The re-
liability of these threats should be assessed for each context in which 
these threats are assessed. Depending on the context these treats can be 
used as a screener, after which a full assessment of each threat by a 
trained professional is necessary. The results of a full safety assessment 
should always be discussed with a (multidisciplinary) team or
supervisor to prevent false negatives and false positives, as both could have traumatic consequences for families and children. Even for true positives it is important that a team or one or more supervisors are always consulted, as selecting the most suitable intervention is quite complicated. Moreover, the preferred intervention is not always available and interventions for child maltreatment are generally not as effective as desirable (Euser, Alink, Stoltenborgh, Bakermans-Kranenburg, & van IJzendoorn, 2015; Gubbels, van der Put, & Assink, 2019).

4.1. Clinical implications

Since the ARIJ safety assessment instrument does not assess all the aspects designated as important by the interviewed professionals, a revision of the instrument seems necessary. Specifically, the following four immediate safety threats should be (more) explicitly assessed: emotional abuse, (the threat of) harm inflicted by others for which caregivers are unable or unwilling to protect the child, (symptoms of) a caregiver’s psychiatric disorder that imposes an immediate threat to the child, and a child’s psychiatric problems that impose an immediate threat to him/herself. Further, the relevance of taking child vulnerability aspects into account when assessing safety should be stressed in the instrument. These adjustments to the instrument should be validated in future research. Additionally, several adjustments to the ARIJ safety assessment instrument should be made to improve its usability. First, the outcome of the instrument stating that a child should be safeguarded immediately caused confusion, as it was often misinterpreted as ‘the child must directly be placed in out-of-home care’. This outcome should be adapted to an outcome that focusses on setting up a child safety plan. Second, a definition of immediate child safety should be added to the instrument so that users better understand what exactly is assessed with the instrument. This may also increase the reliability of the instrument, and thus facilitate more consistent safety assessments by different child welfare workers. Last, several formatting and wording changes should be made to items and their descriptions to enhance readability, clarity, and overall usability. Whether the adaptations to the instrument as outlined above truly improve the usability of the ARIJ should be examined in future research. One way to compare performances of both instruments would be to randomly assign either the old or new version of the instrument to a professional, possibly letting them use the instrument to assess vignettes or real cases, and then compare results of the instruments. As more organizations have implemented or are implementing the ARIJ, the need for further research on the ARIJ becomes imperative.

4.2. Limitations

Some research limitations need to be mentioned. First, both studies produced results that were sometimes contradictory. For instance, some interviewees mentioned the relevance of assessing verbal sexual harassment in child safety assessment instruments, whereas others mentioned the irrelevance of measuring verbal sexual harassment in safety assessments. Further, it was notable that participants were not always certain about their opinion, and they sometimes contradicted themselves. However, an important advantage of qualitative research is that the results can reveal important insights that could not be obtained with quantitative research. Very insightful results may be brought up by a few or only one participant. Therefore, it is important to take notice of the information from individual participants instead of only drawing attention to what the majority reports. Second, the samples might not be representative for all child welfare workers and child safety experts in the Netherlands. We searched for various participants working at different child welfare organizations. However, due to the exhaustive nature of qualitative research, it was not feasible to include more participants. Despite these limitations, this study provides insight into the content validity of the ARIJ safety assessment instrument by interviewing both instrument users and experts on their opinions of the tool and what is needed to assess immediate child safety. Perhaps even more important, this study was, to our knowledge, the first to examine the content validity of a child safety assessment instrument.

4.3. Conclusion

The content and usability of a child safety assessment instrument widely used in the Netherlands was examined. Our findings suggest that there is room for improvement on both the content and usability of the ARIJ safety assessment instrument. According to clinical professionals and child maltreatment experts, emotional abuse, harm caused to the child by non-caregivers (for instance, because of criminal activities), and a child’s vulnerability should be assessed as part of a child safety assessment instrument. Failure to include all aspects of immediate child safety in an assessment instrument may result in poor decisions that can result in harm to children. On the other hand, overinclusion of items, misspecification, and poor or inadequate responses can have unintended consequences. Wrong decisions on the presence of immediate safety concerns could traumatize children and their families. The aspects measured in safety assessment instruments need to be assessed carefully. Overinclusion and underinclusion of immediate safety threats needs to be avoided, therefore future research should assess whether the threats that are to be assessed are formulated properly, and whether their content needs to be adjusted. The content validity of these type of instruments should continually be evaluated, as new threats might come up, for example due to changes in policy and society. Finally, the development of a safety plan is the most important consequence of a safety assessment. It needs to be studied how the use of an instrument influences the development of such a safety plan. Does the safety plan mitigate the identified safety threats, and is a safety plan based on the result of a safety assessment instrument more effective in mitigating the identified safety threats? These are questions that should be examined and ideally in an experimental design. A large body of work on safety assessment instruments still lies ahead.

Funding

This work was supported by the Dutch organization for Health research and Development (ZonMW), grant number: 729300108.

Declaration of Competing Interest

Annemiek Vial declares that she has no conflict of interest. Mark Assink, Geert Jan Stams and Claudia van der Put were involved in the development of the ARIJ.

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