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Safety and risk assessment in child welfare

Moving forward

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CHAPTER 1

General Introduction

1.1 ASSESSMENT IN CHILD WELFARE

Child maltreatment is an enormous problem that affects many children around the world. Each year, three to four children per 1,000 children are physically, sexually, or emotionally abused (Stoltenborgh, Bakermans-Kranenburg, Alink, & Van Ijzendoorn, 2015). However, this figure depends strongly on the type of abuse that is measured and measurement methods that are used in child maltreatment prevalence studies (Euser et al., 2013; Stoltenborgh, Bakermans-Kranenburg, Alink, & Van IJzendoorn, 2015). Self-report studies on the prevalence of child maltreatment even report rates up to 138 per 1,000 children (Finkelhor, Ormrod, Turner, & Hamby, 2005). On top of that, a child that already has been abused has an even greater chance to be revictimized. For example, research has shown that 50 to 60 percent of the children that have been sexually abused report sexual revictimization (Classen, Palesh, & Aggarwal, 2005; Walker, Freud, Ellis, Fraine, & Wilson, 2017).

To stop children from being (re)victimized, many different intervention programs have been developed (e.g., parenting or home visiting programs). However, multiple meta-analytic reviews have shown only small overall effects of these programs on child maltreatment (Casillas, Fauchier, Derkash, & Garrido, 2016; Chen, & Chan, 2016; Geeraert, Van den Noortgate, Grietens, & Onghena, 2004; Gubbels, van der Put, & Assink, 2019; MacLeod, & Nelson, 2000). A possible explanation for the lack of effectiveness of these programs may be found in how programs for children and their families are selected in clinical practice. If the program selected by clinical practitioners does not optimally fit the outcomes of a properly conducted risk and needs assessment, then studies examining the effectiveness of such programs may underestimate the true program effectiveness.

For effective prevention of crime, the risk-needs-responsivity model (RNR-model; Andrews, & Bonta, 2010; Andrews, Bonta, & Wormith, 2011; Bonta, & Andrews, 2016) describes three core principles. The risk principle describes that the program intensity should be matched with the risk level for a new offense. Programs must be more intensive when offered to a high-risk offender and less intensive (or no program at all) when offered to a low-risk offender. The need principle describes that a program should target the criminogenic needs (i.e., dynamic/changeable risk factors) of an offender. The responsivity principle describes that the program should match an offender's characteristics, learning style, and abilities. The application of these principles has shown to improve the effectiveness of interventions aimed at the prevention of criminal behavior (Bonta, & Andrews, 2016). These principles can only be applied correctly if offenders are accurately assessed using structured and validated instruments (Andrews, Bonta, & Wormith, 2011).

The (theories on the) etiology of child maltreatment and criminal behavior show great similarities, as both are based on an accumulation of risk factors related to the immediate or broader context of the perpetrator (Belsky 1993; Loeber, 1990). Moreover, the risk factors themselves are also quite similar. For example, substance abuse

problems, mental health problems, and poverty are all risk factors for both juvenile criminal behavior and child maltreatment (Cottle, Lee, & Heilbrun, 2001; Stith et al., 2009). It is therefore likely that the RNR principles are also applicable (with some adjustments) to programs developed to prevent child maltreatment (Van der Put, Assink, Gubbels, & Boekhout van Solinge, 2018).

The application of the RNR-model in child protection is slightly different. Figure 1.1 visualizes the different stages of assessment and care to prevent child maltreatment (this Figure is based on the model described by Van der Put, Assink, Gubbels, Van Lent, & Stams, 2018). First, the child's immediate safety should be determined by means of a so-called safety assessment. In this type of assessment, a professional assesses whether the child is being harmed, was harmed very recently, or is likely to be harmed in the immediate future (Hughes & Rycus, 2006; Knoke, & Trocmé, 2005). If a child is in immediate danger, safety measures need to be taken to prevent the child from being harmed (further). Examples of safety measures are in-home safety interventions, out-of-home safety interventions, or placement in protective custody.

Figure 1.1 The different stages of assessment and care to prevent child maltreatment
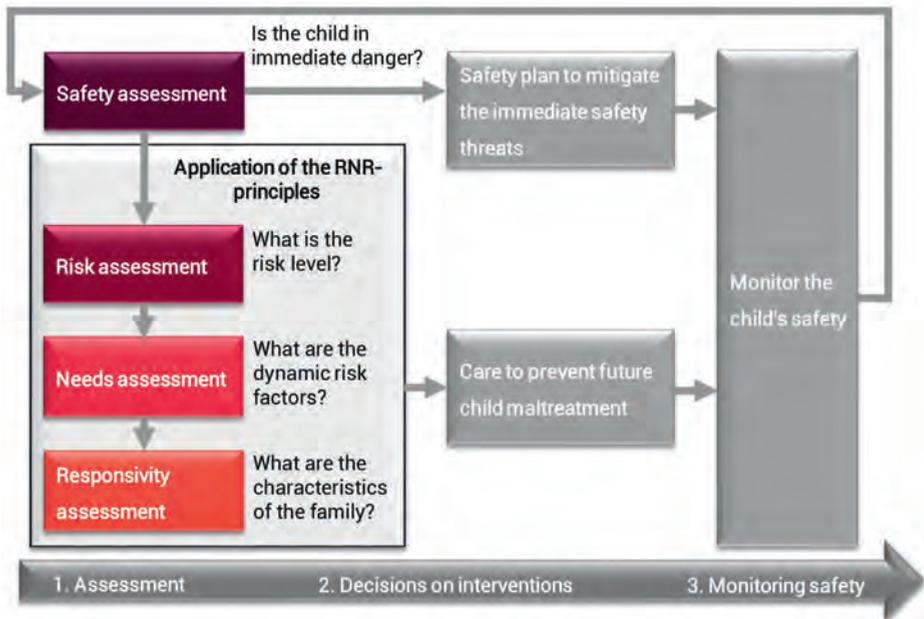
Note. RNR = Risk-Need-Responsivity. This model is based on the model described by Van der Put, Assink, Gubbels, Van Lent, and Stams (2018).

Second, the risk for future child maltreatment should be determined in a risk assessment in which a professional determines the level of risk based on the risk factors that are present in a child's family. Higher risks ask for more intensive interventions. Third, the dynamic risk factors (i.e., needs) should be assessed in a needs assessment. The intervention strategy that is chosen should address these dynamic risk factors so that the risk of child maltreatment is reduced as much as possible. Fourth, the chosen strategy must be in line with the responsivity of the child and its family, implying that it is aligned with, for instance, the learning abilities of the family members and their motivation levels. Throughout the assessment and intervention procedures, a child's safety should be monitored at all times along with any changes in risk or needs of the family. This dissertation is focused on safety and risk assessment in the child welfare context.

The distinction between safety and risk assessment is important, as the goals are different. Although the factors assessed in these assessment types often describe similar problematic behavior of caregivers, they require a different assessment approach. In a risk assessment, it is determined whether or not a risk factor for child maltreatment is present, but it is not relevant how this factor affects the child at the time of assessment. In contrast, for each factor that is assessed in a safety assessment, it is determined whether a factor poses an immediate safety threat to the child at the time of assessment. For instance, if a caregiver has substance abuse problems, this needs to be identified as a risk factor in a risk assessment, whereas this factor is only identified in a safety assessment when the substance abuse poses an immediate safety threat to the child. Given the similarities between the factors assessed in both assessment types, it is not surprising they are often confused with each other (Hughes & Rycus, 2006).

1.2 SAFETY ASSESSMENT INSTRUMENTS

Many safety assessment instruments have been developed to improve practitioners' decisions on children's immediate safety (DePanfilis & Scannapieco, 1994). In the early nineties, DePanfilis and Scannapieco (1994) compared the aspects that were measured in ten safety assessment instruments, and they found that these aspects only slightly resembled each other. The aspects were categorized as follows: maltreatment aspects, child-related aspects, parent-related aspects, family- and environment-related aspects, and intervention aspects. The majority of the identified aspects were not even measured in half of the safety assessment instruments, indicating a lack of consensus on how a child's immediate safety should be measured. The work of DePanfilis and Scannapieco (1994) also identified a scarcity of research on safety assessment instruments. After this work had been published, only few studies on these instruments have been performed.

First, in a focus group study on the usability of a South African safety assessment instrument practitioners reported positive first experiences with the instrument (Spies, Delport, & Le Roux, 2015). Second, two studies on the reliability of safety assessment instruments have been conducted. The first study on a Dutch safety assessment

instrument (LIRIK) showed low to fair interrater reliability of the items, and moderate interrater reliability of the overall safety outcome (Bartelink, De Kwaadsteniet, Ten Berge, & Witteman, 2017). In the second reliability study, the interrater reliability of the items of multiple American safety assessment instruments was found to vary greatly, as some items showed low reliability and other items substantial reliability.

Multiple studies have studied the criterion validity of safety assessment instruments (predictive validity: Bartelink et al., 2017; Fuller & Wells, 1998; Fuller & Wells, 2003; Fuller, Wells & Cotton, 2001; Wells & Correia, 2012; and concurrent validity: Johnson, 2004; Baird 2004, cited in Baird & Rycus, 2004). However, these studies do not provide the information that is required to determine the quality of the safety assessment instruments, because these studies all compared measures of immediate child safety to measures of *future* child safety, such as risk assessment outcomes, child maltreatment reports, or future out-of-home interventions. Even though it is assuring that outcomes of safety assessments are in line with measures of future child safety, outcomes of safety assessments should be compared to other measures of immediate child safety.

For safety assessment instruments, concurrent validity is the most appropriate form of criterion validity to examine compared to predictive validity, as these instruments do not purport to measure future safety issues. Safety assessment instruments should, therefore, be compared to a measure at the same time as the safety assessment (Cronbach, & Meehl, 1955). Complementary to the concurrent validity, the content validity of safety assessment instruments should be studied to determine whether an instrument assesses all aspects that should be assessed to properly establish a child's immediate safety. Since the concurrent validity and content validity of safety assessment instruments have not been studied thoroughly, no firm conclusions can be drawn on the quality of specific safety assessment instruments.

1.3 RISK FACTORS

In contrast to safety assessment instruments, much research has been conducted on risk assessment instruments and the risk factors these instruments should assess. Many risk factors for child maltreatment have been identified in comprehensive meta-analytic reviews (Assink et al., 2019; Mulder, Kuiper, Van der Put, Stams, & Assink, 2018; Stith et al., 2009). These risk factors can be static (i.e., historic factors), for example, a caregiver who was abused as a child, or dynamic (i.e., changeable factors or factors that are currently problematic), such as mental health problems of a caregiver. Of the risk factors that have been identified, in particular factors related to the caregivers have been shown to be strong predictors of child maltreatment. Moreover, cumulative risk (i.e., the sum of the present risk factors) has been shown to be the best predictor of child maltreatment (Brown, Cohen, Johnson, & Salzinger, 1998; Lamela & Figueiredo, 2018; Li, Chu, Ng, & Leong, 2014; MacKenzie, Kotch, Lee, Augsberger & Hutto, 2011;

Patwardhan, Hurley, Thompson, Mason, & Ringle, 2017; Thornberry et al., 2014; Yang & Maguire-Jack, 2018).

Initially, cumulative risk was described as a linear model in which each risk factor equally increased the risk for child maltreatment (Appleyard, Egeland, Van Dulmen, & Alan Sroufe, 2005; Horan, & Widom, 2015). Recently, cumulative risk has been described as a nonlinear quadratic model, and two studies have shown evidence for this model (Lamela & Figueiredo, 2018; Patwardhan, Hurley, Thompson, Mason, & Ringle, 2017). This model describes a threshold in the sum of the risk factors above which the child maltreatment risk increases exponentially. This quadratic model of cumulative risk suggests that risk factors interact with each other causing the exponential increase in risk.

Theories on the etiology of child maltreatment are in line with the quadratic model of cumulative risk, as they generally focus on the interaction between multiple risk and protective factors, and state that how these factors interact determines whether child maltreatment occurs. One of these theories was developed by Belsky (1993), which was based on the ecological perspective on child development of Bronfenbrenner (1979). Belsky conceptualized child maltreatment as a consequence of the interactions in and between the immediate interactional context and the broader context. The immediate context comprises parental factors, child factors, and factors related to parent-child interaction. The broader context comprises community factors, cultural factors, and evolutionary aspects (see Belsky, 1993, for an elaborate explanation). According to Belsky's model and the quadratic model of cumulative risk, the interactions between risk factors eventually lead to child maltreatment.

1.4 RISK ASSESSMENT INSTRUMENTS

Many risk assessment instruments have been developed based on research on risk factors. These instruments can generally be divided into two types: The clinical type (this includes consensus-based instruments and structured clinical judgment instruments) and the actuarial type. In clinical assessments, it is the practitioner who decides on the overall risk level based on the risk factors measured with the instrument, whereas in actuarial assessments the overall risk is calculated by an algorithm that takes a practitioner's assessment of the risk factors as input. These actuarial risk classifications are often based on cumulative risk, as this is far more predictive of child maltreatment than individual risk factors.

Actuarial risk assessment instruments showed to have higher predictive validity than clinical instruments (Van der Put, Assink, & Van Solinge, 2017). However, with an average moderate predictive validity of actuarial risk assessment instruments, there is still room for improvement (AUC = .704; Van der Put, Assink, & Van Solinge, 2017). Additionally, the reliability of risk assessment instruments varies greatly, as results showed interrater reliability to vary from very low to very high (Baird, Wagner, Healy,

& Johnson, 1999; Barber, Shlonsky, Black, Goodman, & Trocmé, 2008; Bartelink, De Kwaadsteniet, Ten Berge, & Witteman, 2017; Cash, 2001; D'andrade, Austin, & Benton, 2008; Knoke, & Trocmé, 2005).

1.5 THE ARIJ SAFETY AND RISK ASSESSMENT INSTRUMENTS

In the Netherlands, the ARIJ (Actuarial Risk assessment Instrument Youth Protection; Van der Put, Assink, & Stams, 2016) is widely used and the number of agencies using the ARIJ is still increasing. Similar to international decision-making models the ARIJ contains a safety and risk assessment instrument. The ARIJ risk assessment instrument was developed when at that time a widely used clinical risk assessment instrument (LIRIK) showed to have low predictive validity (Van der Put, Assink, & Stams, 2016). With the risk factors measured in this clinical instrument, an actuarial risk classification was developed. This risk classification was based on 25 risk factors for future child maltreatment. Additionally, a dynamic risk classification was developed, which was based on 13 dynamic risk factors. Experimental factors were also added to the instrument, so further research could assess their predictive value. These experimental factors were based on the literature on risk factors (Van der Put, Assink, & Stams, 2016). To complement the ARIJ risk assessment instrument, a safety assessment instrument was developed in cooperation with the Child Welfare Agency Amsterdam (Jeugdbescherming Regio Amsterdam). This instrument contains eight items describing different immediate safety threats.

1.6 DISSERTATION OUTLINE

The primary aim of this dissertation was to improve safety and risk assessment procedures in child welfare. To do this, six studies have been conducted. The first study reviewed internationally used safety assessment instruments and how these measure immediate child safety (Chapter 2). This study was a first step in evaluating the quality of child safety assessment instruments, as we first need to reach (more) consensus on how immediate child safety can best be conceptualized, and what immediate child safety aspects need to be measured.

The second study examined the content validity and usability of the ARIJ safety assessment instrument (Chapter 3). In two sub-studies, interviews were conducted with practitioners that used the instrument and independent experts on child safety. The results of these sub-studies provided detailed information on how the usability and the content validity of the instrument could be improved.

The third study examined the concurrent validity of the ARIJ safety assessment instrument using mixed methods (Chapter 4). Safety decisions made with the

instrument were compared to safety decisions made by expert panels. This study gave insight into the quality of the instrument, and provided directions on how the instrument could be improved.

The fourth study examined the reliability of the ARIJ safety and risk assessment instrument (Chapter 5). Both the interrater and intrarater reliability of the items and the outcomes of the instruments were measured. Professionals of two different agencies rated vignettes similar to the cases they handle in the daily practice of their agency. Additionally, master students rated those same cases. This provided a comprehensive overview of the reliability of both instruments.

The fifth study described the validation and further development of the ARIJ risk assessment instrument (Chapter 6). The predictive validity of risk assessments performed for families enrolled at five different agencies was examined. Additionally, it was examined whether the risk classifications could be improved and if the instrument could be made more applicable for different types of agencies serving different populations. With the results of this study, a new version of the ARIJ risk assessment instrument was developed.

The sixth, and final study, explored the interrelatedness of risk factors for child maltreatment using a network approach (Chapter 7). For both high-risk and lower-risk families, networks were constructed to examine relations between the risk factors present in these families. This study provided not only knowledge on the etiology of child maltreatment, but also provided directions for further improvement of risk assessment instruments and interventions.

This dissertation closes with a summary of the main findings of the studies along with the most notable strengths and limitations of the studies (Chapter 8). This final chapter concludes with a discussion of the implications for clinical practice and directions for future research.