Summary
This dissertation aims to gain insight into the factors which influence the decision-making of professionals in child welfare and child protection and which could improve decision-making in cases of suspected or actual child maltreatment. Therefore, research was conducted on: 1) the effects of structured decision-making on the systematicity, transparency and inter-rater reliability of judgments and decisions; 2) the effects of the use of a risk assessment instrument on the inter-rater reliability and predictive validity of risk judgments; 3) the influence of reasoning of decision-makers on intervention recommendations, in addition to the influence of risk assessments, attitude and work experience of the decision-maker.

Child maltreatment is a severe problem with long-term consequences for the children involved. It requires timely recognition and effective interventions, which are not easy for professionals. Previous research has repeatedly showed that professionals often disagree on judgments and decisions in child maltreatment cases, and have difficulty assessing the problems effectively and deciding on appropriate care.

**Literature review**
Chapter 2a presents a literature review of studies focused on methods which could support and optimize the decision-making process. It seems that only a few studies have been performed on the effectiveness of these methods. Four types appeared in the review: 1) methods for structured decision-making, 2) risk assessment instruments, 3) methods for shared decision-making with parents and children, and 4) methods for decision-making within the social network of families (family group conferencing). The review shows that structured decision-making contributes to a child-centred and integral assessment in which professionals also take into account family and environmental factors. The use of risk assessment instruments seems to lead to valid judgments of the risk of the (re)occurrence of child maltreatment to a limited extent. Shared decision-making may possibly improve parent and child participation and the quality of decisions made by including their preferences in the decision-making process; however, there is only little evidence available on child welfare outcomes. Finally, the review shows that family group conferences can lead to increased participation of parents and children in decision-making, but child safety is not effectively guaranteed with this method.

Van der Put, Assink and Stams (2016) commented on our review in *Child Abuse and Neglect*, in which they particularly discussed the conclusions on the value of risk assessment instruments. Chapter 2b presents our published response on this commentary.

**Effects of structured decision-making**
A structured decision-making method, called ORBA, was then investigated. ORBA\(^{15}\) aims to structure decision-making and make it explicit by discerning the core phases of the decision-making process and describing for each phase which information professional working for Advice and Reporting Centres of Child Abuse and Neglect (ARCCAN) need to make judgments and decisions.

\(^{15}\) ORBA is the Dutch acronym for Onderzoek, Risicotaxatie en Besluitvorming AMKs (in English: Investigation, Risk Assessment and Decision-Making by ARCCANs).
Chapter 3 presents the effects of the ORBA structured decision-making method on the systematicity and transparency of decisions made by professionals before and after the introduction of ORBA. The central question of this study was to what extent ARCCAN case files contain relevant information, process steps and decision rationales. This study compared 60 case files from the period before the implementation of ORBA (in 2006), with 100 case files from the period since the implementation of ORBA (in 2010). We discovered that the case files since ORBA implementation contained more relevant information and process steps than before. However, rationales for judgments and decisions were still often lacking.

Chapter 4 presents the effects of ORBA on the inter-rater reliability of judgments and decisions by ARCCAN professionals. This study examined the extent to which inter-rater reliability improves when ORBA is used. Forty ORBA-trained professionals and forty untrained professionals were asked to make judgments and decisions on several vignettes (in particular, to decide whether a case needed to be investigated and to decide on interventions after the ARCCAN investigation). The inter-rater agreement was determined using intra-class correlation coefficients. Both ORBA-trained and untrained professionals turned out to agree in their judgments and decisions to a limited extent. The judgments and decisions of ORBA-trained professionals did not correspond more often, compared to the judgments and decisions of untrained professionals. We conclude that ORBA did not convincingly lead to more uniform decision-making.

Effects of a risk assessment instrument
The risk assessment instrument we investigated was the LIRIK. The LIRIK\textsuperscript{16} aims to support child welfare and child protection workers in making safety and risk assessments through the structured evaluation of the relevant signals and risk and protective factors of child maltreatment. Originally, the LIRIK was developed for the Regional Child Protection Service Agencies and ARCCANs, but in the meantime an increasing number of organizations have come to use the LIRIK, such as child welfare agencies, local teams and public child healthcare.

Chapter 5 presents the inter-rater reliability and predictive validity of the LIRIK in relation to unstructured safety and risk judgments. Inter-rater reliability was investigated in a vignette study; the predictive validity was investigated in a prospective study. Both studies compared professionals using the LIRIK to professionals not using an instrument. In the vignette study, professionals using (n=43) and professionals not using the LIRIK (n=36) assessed twelve vignettes on safety and risks. The results showed that agreement was low, that the differences between the groups were small, and that the LIRIK group did not agree more often on the safety and risk assessments.

In the prospective study, the safety and risk assessments of professionals using and not using the LIRIK were compared to the outcomes in client files after six months. A total of 370 case files were analysed – 278 with the LIRIK and 92 without – for the presence of signs of real danger. The predictive validity of safety and risk judgments in both groups was low. The number of unsafe outcomes did not increase with increasing danger or risk assessed six months previously for either group. We conclude that safety and risk assessments made with the LIRIK were not more reliable or valid than assessments without the use of this instrument.

\textsuperscript{16} LIRIK is the Dutch acronym for Licht Instrument Risicotaxatie Kindveiligheid (in English: Light Instrument for Risk Assessment of Child Safety).
Influence of reasoning on intervention recommendations

The limited effects of the ORBA method and the LIRIK led us to enquire into what other factors might play a part in decision-making. Therefore, we focused on the characteristics of the decision-makers in child welfare and child protection.

Chapter 6 reports on a study of the rationales presented by students and professionals regarding their recommendations for whether a child should be placed into care or not, in a case of suspected child maltreatment. The study investigates the decision-making in greater depth to gain a better understanding of which decision-maker factors influence the decision-making process, in particular his/her reasoning process and attitudes towards out-of-home placement. We assume that the rationales decision-makers provide for intervention recommendations link their personal characteristics to their situational assessments and decisions. This study’s main question was to what extent and how arguments, in addition to the decision-maker’s attitudes towards out-of-home placement and work experience, influence a decision to place a child into care. Professionals working for child welfare agencies (n=214) and students (n=381) assessed a vignette and decided whether the child needed to be placed into care, and then explained their rationales for their recommendations. In addition, they completed a questionnaire on their attitudes towards out-of-home placement. Professionals and students mentioned a large number of arguments for their intervention recommendation. Their attitudes and several arguments appeared to be strong predictors for a placement decision, while work experience did not influence the decision made. It appeared that professionals and students showed some ‘bias’ in their decisions, given the influence of personal attitudes and varying approaches to reasoning they adopted: participants who recommended out-of-home placement had more positive attitudes towards placement and emphasized the nature and severity of the problems more strongly in their rationales than participants who recommended that the children should stay at home.

General discussion

Chapter 7 presents the general conclusions and discussion of the results of this dissertation. We found that the effects of the ORBA structured decision-making method and the LIRIK risk assessment instrument are limited. Though they support professionals in considering relevant case factors, the use did not increase inter-rater reliability and validity of judgments in child maltreatment cases. Furthermore, we found that the reasoning and attitudes of professionals influenced decision-making substantially. This finding provides a potential explanation for the limited effects of the use of ORBA and the LIRIK. As a recommendation, we present some options how decision-making could be further improved, namely by using ‘critical thinking’ (i.e. hypothesis testing, thinking of alternative explanations, generating counterarguments for the decision made, and generating arguments and counterarguments for alternative decisions), by applying structured team decision-making, and by shared decision-making with parents and children.