Chapter 6

Reasons for placement decisions in a case of suspected child abuse: The role of reasoning, work experience and attitudes in decision-making


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Abstract
Child welfare and child protection workers regularly make placement decisions in child abuse cases, but it is not well understood how they reach these decisions. This study focuses on workers' rationales. The aim was to investigate the kinds of arguments provided in placement decisions and whether these arguments were predictors for the decision, in addition to the decision-makers' risk assessment, work experience and attitudes towards placement. The sample consisted of 214 professionals and 381 students from the Netherlands. The participants were presented with a vignette describing a case of alleged child abuse and were asked to determine whether the abuse was substantiated, to assess risks and to recommend an intervention. The participants' placement attitudes were assessed using a structured questionnaire. We found that the participants provided a wide range of arguments. Both arguments and attitudes towards placement strongly influenced placement decisions. No influence of work experience was found. The findings indicate trends in the decision-making process, in the sense that participants who decided to place a child into foster care emphasized different arguments and had different attitudes towards out-of-home placement than those who did not. We discuss the implications of our findings.
1. Introduction

Children are regularly placed into out-of-home care because of abuse or other adverse family circumstances. Out-of-home placement is one of the most intrusive measures that professionals can impose. Decisions on out-of-home placement have far-reaching consequences (e.g., Loewenberg & Dolgoff, 1996; Solnit, Nordhaus, & Lord, 1992; Taylor, 2010). By removing a child, professionals intervene in the relationship between parents and children and in their right to live together. At the same time, there can be very serious consequences to a child remaining at home while in danger of abuse. Professionals are therefore put in a difficult position when deciding whether to remove children from their homes and parents or not (Farmer, Sturgess, & O’Neill, 2008). It is often difficult to tell in advance which decision will have the most desirable outcome: either decision can turn out badly (Munro, 2008; Pösö & Laakso, 2016).

Decision-making is an invisible process, because it occurs in the heads of the decision-makers (i.e., professionals). Usually only the outcomes (i.e., the judgments and decisions themselves) are studied. Professionals often disagree on decisions about whether children are at risk of abuse and should be placed out-of-home (Bartelink, Van Yperen, Ten Berge, De Kwaadsteniet, & Witteman, 2014; Berben, 2000; Britner & Mossler, 2002; Gold, Benbenishty, & Osmo, 2001; Schuerman, Rossi, & Budde, 1999; Ten Berge, 1998). Our understanding of how professionals reach these decisions and what the potential causes of disagreement are is limited. Better understanding could be obtained by studying workers’ reasons for their decisions, which would provide insight into how workers think and reason about a case. Previous studies show that personal beliefs influence the processes by which individuals seek out, store and interpret relevant information (Gambrill, 2005; Kahneman, Slovic, & Tversky, 1990; Munro, 1996). People selectively look for information which confirms their beliefs, more readily adopt information which confirms their views, and are more critical of information which challenges or contradicts their views (Munro, 1999). In complex decision-making situations, such as those in child protection, workers consider salient those aspects of the case which are consistent with their overall attitudes (Beckstead, 2003). We might be able to identify strengths and weaknesses in the decision-making in child welfare and child protection by empirical investigation of workers’ reasoning.

In order to gain more in-depth insight into placement decision-making, in this study we focus on the reasoning decision-makers provide for their recommendations. We also investigate how this reasoning, combined with some of the decision-makers’ characteristics (i.e., risk assessment, work experience, and attitudes towards placement), impacts on a decision whether to remove a child from home or not.

1.1 Decision-Making Ecology

A range of factors related to the case, the decision-maker, the organization and external factors influence the decision-making process and thereby its outcomes. Baumann, Fluke, Dalgleish, and Kern (2014) proposed a framework for decision-making in child welfare and child protection, the Decision-Making Ecology (see Figure 1) (for a similar approach, see Benbenishty et al., 2015). The decision-making process results in both an assessment of the situation and a decision on the course of action to take. Case, decision-maker, organizational and external factors can combine in several ways.
The Decision-Making Ecology was applied in a number of studies on the substantiation of child abuse (Detlaff et al., 2011; Fluke et al., 2001), placement decisions (Fluke, Chabot, Fallon, MacLaurin, & Blackstock, 2010; Graham, Detlaff, Baumann, & Fluke, 2015), and reunification decisions (Wittenstrom, Baumann, Fluke, Graham, & James, 2015). These studies most often focused on the context in which professionals make their decisions (i.e., organizational and external factors; Baumann et al., 2010; Detlaff et al., 2011; Fluke et al., 2010).

Our study will further elaborate on the Decision-Making Ecology, with a focus on decision-makers. In the following, we will explore how decision-makers’ assessments, work experience and attitudes influence their placement decisions.

1.2 Assessment and decision-making
Several studies show that risk assessments are associated with placement decisions (Arad-Davidzon & Benbenishty, 2008; Horwitz, Hurlburt, Cohen, Zhang, & Landsverk, 2011). Higher risk assessments usually lead to a greater chance of out-of-home placement. The case factors which influence risk assessment, substantiation and placement decisions have been widely studied (for an overview see Bartelink, Ten Berge, & Van Vianen, 2015; Font & Maguire-Jack, 2015). Placement is related to child characteristics (e.g., severe behaviour problems, intellectual disabilities), parenting characteristics (including severe child abuse), parent characteristics (e.g., mental health problems, substance abuse, intellectual disabilities and partner violence), family risk factors (e.g., financial problems, unstable family life and unemployment), and previous interventions (e.g., lack of cooperation and no positive results of previous interventions) (Bartelink et al., 2015; Font & Maguire-Jack, 2015).
1.3 Work experience, attitudes and decision-making

Assessment is not the only predictor of a placement decision (e.g. Jent et al., 2011). Decision-maker factors seem to influence the decision-making process as well. Our study investigates the impact of work experience and the attitudes of decision-makers.

Previous studies of work experience have yielded mixed results. Young, less experienced or untrained workers tend to assess risks as higher and recommend out-of-home placement sooner than experienced and well-trained workers (Benbenishty, Segev, Surgis, & Elias, 2002; Brunnberg & Pećnik, 2007). Workers who had already encountered child abuse cases in their work were less receptive to indications of child abuse, while workers who had never encountered child abuse cases previously were more likely to perceive ambiguous acts as abusive (Portwood, 1998), which indicates that workers who encounter child abuse cases more often may be more hesitant to identify ambiguous acts as abuse. However, more experienced workers may also be more pessimistic about treatment outcomes and therefore more likely to recommend placement (Roberts, 1970). Other empirical studies found no relationship between work experience and placement decisions (Arruabarrena & De Paúl, 2012; Costin, Bell, & Downs, 1991; Font & Maguire-Jack, 2015; Garb, 1989; Lambert & Ogles, 2004; Minkhorst, Witteman, Koopmans, Lohman, & Knorth, 2016). It thus appears that the research on the impact of work experience is inconclusive.

Professionals’ personal characteristics, such as their beliefs about the acceptability of corporal punishment (Jent et al., 2011), their attitudes towards out-of-home placement (Arad-Davidzon & Benbenishty, 2008; Benbenishty et al., 2015; Davidson-Arad & Benbenishty, 2010), and their biases, personality and values (e.g., Gambrill, 2005; Munro, 2008) all influence risk assessments and placement decisions. Attitudes towards out-of-home placement may be influenced by previous experiences, such as a worker’s own childhood history of corporal punishment or abuse (Brunnberg & Pečnik, 2007; Portwood, 1998) or previous work-related traumas (Regehr, LeBlanc, Shlonsky & Bogo, 2010). Attitudes can change with greater work experience. Experienced workers seem to have fewer negative stereotypes and more positive attitudes in behaviour they disapprove of, such as child sexual abuse or child abuse, than less experienced workers or students (Davidson-Arad & Benbenishty, 2016; Sanghara & Wilson, 2006).

1.4 Reasoning behind decisions

Given the importance and far-reaching consequences of out-of-home placement decisions, the reasoning that underpins these decisions needs to be persuasive. Toulmin (1969) identified the structure of a persuasive reason. A key part is the claim, i.e. the conclusion that the decision-maker puts forward. People should be clear about their conclusions and give reasons in support (i.e., data or evidence). The data or evidence they refer to needs to be relevant and sufficient to support their conclusions. To strengthen their reasoning, workers need to be aware of alternative explanations or conditions under which their conclusions do not hold (i.e., rebuttals and reservations), which requires additional evidence to support their conclusions (i.e., backing). Regarding the content, Bartelink, Ten Berge, and Van Vianen (2015) found in their literature review that placement decisions should be based on an assessment of the balance between a child’s developmental needs and the available parental capacities, and an analysis of the possibilities for support from the family’s social network and professional services.

Empirical evidence suggests that workers typically provide case-related arguments (De Ruiter, De Jong, & Reus, 2013) with only limited alternative explanations or reservations.
In conclusion, previous research found that professionals provide case-related arguments for their decisions and are not always clear about how these case factors are related to their decisions (Benbenishty et al., 2003; Osmo & Benbenishty, 2004). Work experience and attitudes seem to influence out-of-home placement decisions (Benbenishty et al., 2002; Benbenishty et al., 2015; Brunnberg & Pečnik, 2007; Portwood, 1998; Roberts, 1970). The reasoning process might link workers’ attitudes towards out-of-home placement and child and parent participation to the decision made (Spratt et al., 2015).

We further explored the content and structure of the reasoning behind out-of-home placement decisions. In addition, we explored whether these reasons reflect the influence of attitudes and work experience. In particular, we addressed participants’ attitudes towards out-of-home placement and parental participation in the decision-making process. Decision-makers may not be aware of their attitudes or of how work experience may change their attitudes. It is also possible that the reasons for their decisions directly reflect their attitudes. First, we investigated which arguments were given and how often. Next, we studied what might be predictors of a placement decision. We hypothesized that the arguments participants provide can function as additional predictors of a placement decision, in addition to the risks assessed, the work experience, and the attitudes. Our research questions were:

1. What arguments do participants mention, and how often, when asked to clarify their decision about whether to place a child out-of-home?
2. To what extent are the participants’ assessments of risk, attitudes towards placement and client participation, and work experience predictors of placement decisions?
3. Does inclusion of arguments in the prediction model lead to a better prediction of the placement decision?

2. Method
2.1 Design
The present study focuses on the assessment of a vignette describing a case of alleged child abuse. Professionals and students in the Netherlands were asked for their assessments and recommendations concerning out-of-home placement. This study was part of an international study in Israel, the Netherlands, Northern Ireland and Spain (Benbenishty et al., 2015).
The vignette presented in our study is a composite derived from authentic files in Israel and has been used in some previous studies (Arad-Davidzon & Benbenishty, 2008). The original vignette was reviewed in all participating countries and slightly modified to ensure that it was relevant for all countries participating in the international study.

The family described in the vignette consists of a father, a mother and three young children (ages 7, 4 and 2). The local welfare agency receives a call from a primary school teacher who is worried about Dana (7). She reports that Dana has worrying physical marks and previous injuries. Dana is quiet in combination with unexplained outbursts of rage. The psychologist and classroom assistant in the school have tried to form a relationship with her, but she refuses to answer their questions. The family has few ties within the community and lacks a supportive extended family network. They are struggling financially due to the father’s unemployment.

Participants were presented with one of two randomly assigned versions, differing in terms of the mother’s desire for removal. In one version of the vignette the mother voiced strong objections to the removal of her daughter to a foster family, stating: ‘No way will anyone touch my family and I am ready to go to court’. In the alternative version the mother did not voice an objection, stating: ‘If you think this is best for the family I am willing to try’.

2.2 Sample and procedure
The professionals were recruited from six Regional Child Protection Service Agencies (in Dutch: Bureau Jeugdzorg), distributed across the whole country and operating in urban (Utrecht and Rotterdam) and rural areas (the provinces of Groningen, Drenthe, Limburg and Gelderland). All professionals were case managers or social workers involved daily in risk assessment and decision-making. First, permission from the heads of the agencies’ departments was sought to distribute questionnaires to their employees. In addition, practitioners were invited to participate in leaflets and oral presentations delivered by one or two members of the research team. They could choose between completing a paper or an electronic version of the questionnaire (see below).

The students, following Bachelor’s or Master’s degree programmes in social work and pedagogy or child psychology, were recruited at four universities: the University of Groningen, the Hanze University of Applied Sciences, Radboud University Nijmegen and the HAN University of Applied Sciences. After consultation with and agreement from the relevant lecturer, the students were informed about the research project in an oral presentation conducted by one of the team members during their classes. Like practitioners, the students were offered a paper or electronic version of the questionnaire.

In the sample, 214 professionals (36%) and 381 students (64%) participated: 87 participants were male (15%) and 508 female (85%). Of the participants, 141 (24%) had children.

The mean age of professionals was 38.5 years (SD = 10.5). Most professionals had vocational Bachelor’s qualifications (81%), 14% had Master’s degrees and 1% had PhDs. Fourteen professionals (2%) had less than 1 year’s work experience in their current role, 44 professionals (7%) had 1-3 years, 45 professionals (8%) 3-5 years, 60 professionals (10%) 5-10 years, 37 professionals (6%) 10-15 years, 5 (1%) 15-20 years, and 8 professionals (1%) more than 20 years’ work experience.

The mean age of the students was 24.4 years (SD = 5.4). The students were following academic Masters’ (66%), vocational Bachelors’ (21%) or academic Bachelors’ (9%) degree programmes. Over a third of the students (39%) had no work experience in youth care, about a third (31%) less than one year, and about a third more than one year (16% 1-3 years; 7% 3-5 years; 7% more than 5 years).
2.3 Measures

Personal and professional background. Participants answered questions about their background (e.g., age, education) and professional experience.

*Attitudes.* The Child Welfare Attitudes Questionnaire (Benbenishty et al., 2015) consists of 50 statements covering six content areas. Both positive and negative attitudes were included in each of these areas (reverse coding was used to create an index for each attitude). Participants were asked to indicate their agreement with each item on a five-point scale, from 1 (strongly disagree) to 5 (strongly agree). The following attitudes were included: [the respondent] favours removal of children at risk from home \( (\alpha = \ .79) \), favours reunification and optimal duration of alternative care \( (\alpha = \ .74) \), favours child participation in decisions \( (\alpha = \ .74) \), assesses the ability of foster care to promote children’s development and wellbeing positively \( (\alpha = \ .45) \), and assesses the ability of residential care to promote children’s development and wellbeing positively \( (\alpha = \ .70; \) Benbenishty et al., 2015). In our analyses, we only included attitudes on removal and child and parent participation.

*Abuse substantiation.* Based on their reading of the vignette, the participants were asked to substantiate the alleged abuse and assess whether the child had been abused at home. The types of abuse were: emotional neglect, physical neglect, emotional abuse, physical abuse and sexual abuse. The five-point answer scale ranged from 1 (strongly disagree) to 5 (strongly agree).

*Risk assessment.* Following the presentation of the case vignette, the participants were asked how, considering the information presented to them, they would assess the level of risk of physical and emotional harm to the child if she remained at home. The five-point answer scale ranged from 1 (no risk) to 5 (very high risk).

*Intervention decisions.* Participants were asked to recommend an intervention. They were presented with six alternative options on an ordinal scale, from least intrusive (refrain from further intervention) to most intrusive (place the child with a foster family, even without parental consent). We later dichotomized this ordinal scale to 0 (child remains at home) and 1 (child will be removed from home and placed into foster care), because participants seemed mainly to provide reasons for deciding whether a child could remain at home or needed to be placed in care. After their intervention recommendation, participants were asked to provide reasons for their decision in an open text field.

2.4 Analyses

Participants provided unstructured rationales for their intervention recommendations. The researchers coded the reasons mentioned in these rationales using a code book based on two evidence-based frameworks: the Decision-Making Ecology (Baumann et al., 2014) and the Guidelines for Out-of-Home Placement for child and youth care and child protection (Bartelink et al., 2015). These frameworks were used to determine which factors are important in a placement decision. The Decision-Making Ecology provided the basis for the code book by addressing four important factors: case, decision-maker, organizational and external factors. We found the interaction between clients (parents and children) and decision-maker missing from the Decision-Making Ecology. Several researchers have shown the importance of the alliance or cooperation between client and decision-maker (Alter, 1985; Davidson–Arad, 2001; Davidson–Arad & Kaznelson, 2010; Harnett, 2007; Meddin, 1984; Shapira & Benbenishty, 1993). Therefore, we added the collaboration between professional and the family to the factors in our code book (see first column of Table 1). The Guidelines for Out-of-Home Placement were developed in the Netherlands.
to support professional decision-making in cases in which a child may need to be placed out-of-home and into foster or residential care (Bartelink et al., 2015). It is based on empirical knowledge and professional experience. The Guidelines provide information about the case factor types that are relevant to out-of-home placement decisions.

Case factors were divided into five domains: abuse (variables: physical abuse, emotional abuse, neglect, safety in biological family), child development (variables: child's current and future wellbeing and development), parenting (variables: parent–child relationship, parenting skills), family and environment (variables: family circumstances, past interventions), and anticipated and actual outcomes (variables: parent progress, safety in foster family, advantages and limitations of other interventions, advantages and limitations of placement). The decision-maker factor is the attitude towards the importance of remaining in the family (permanence). Family–worker collaboration factors are the child’s wishes, cooperation with the child, the parents’ wishes and cooperation with the parents. The organizational factor is the mentioning of a protocol which needs to be followed. External factors are the children’s rights, the parents’ rights and legislation. A final variable was added to analyse whether participants mentioned that they needed more information to make a decision (variable: lack of information). All variables were coded on a two-point scale: 0 = not mentioned; 1 = mentioned.

We double coded 30 rationales to test inter-rater reliability. The inter-rater reliability of most variables was perfect (100% agreement). A small number of variables had low reliability (Cohen’s kappa below .60). These variables were discussed and coded again to achieve acceptable inter-rater reliability, at least a Cohen’s kappa of .60. The eventual mean kappa was .85.

Statistical analyses of the total sample (n = 595) were then performed. A principal components analysis (PCA) was performed on all arguments to discover whether arguments could be combined into groups. Eight groups were found, which did not explain much variance. In addition, groups did not seem to make sense. Therefore, we did not combine arguments in the further analysis.

A PCA was also performed to discover whether the variables in which participants gave their assessment of the presence of child abuse (i.e., emotional abuse, emotional neglect, physical abuse, physical neglect, and sexual abuse) and emotional and physical harm could be combined into a single risk assessment variable. Because sexual abuse was weakly correlated to the other variables, it was decided to exclude it from the ‘risk assessment’ scale containing the other variables. Cronbach’s alpha for the scale ‘risk assessment’ is .72.

We calculated Pearson’s chi-squares to establish differences in the types of reasons put forward by participants who decided to place a child into foster care and those who did not. Based on these analyses, we decided to include variables indicating a difference (p < .10) in further logistic regression analyses. A significance level of .10 was chosen to avoid wrongly excluding variables which differed between the two groups. Variables were excluded if mentioned by fewer than 30 participants (i.e., 5% of the sample) because these apparently did not seem relevant to most participants.

Stepwise logistic analyses with forward and backward inclusion of predictors were performed to gain insight into the factors which predicted the placement decision. Wald statistics were used to assess the contribution of individual predictors to the model. The significant predictors (p < .05) were included in the final regression analyses with forced entry. Risk assessment, work experience (students vs professionals) and attitudes towards placement and parent and child participation were included in the first model. The reasons provided by participants were included in the second model. The interactions between reasons and attitudes towards placement were included in a third model.
3. Results
3.1 Characteristics of rationales provided
Almost all the participants provided reasons for their decisions. We counted the number of reasons the respondents provided. There was no significant difference ($-.24, 95\% CI [-.59, .12]$) in the number of reasons provided by participants who decided to place a child into care ($M = 3.15, SE = 0.16$) and participants who did not ($M = 2.81, SE = 0.10$; $t(593) = -1.82, p = .07$).

Table 1 lists the reasons mentioned and provides insight into differences between participants who decided to place a child into care and those who did not. A considerable group (19%) said that they lacked information. Participants who decided that the child should remain at home reported lacking information about the case significantly more often than participants who decided the child needed to be placed into foster care.

Participants rarely mentioned the rights and wishes of parents and children, or cooperation with the child. About a quarter of the participants mentioned the child’s development. Participants who decided that a child could remain at home mentioned the child’s development less often than participants who placed the child into care. About a third of the participants mentioned the abuse in the case. Participants who decided that the child could remain at home mentioned the abuse less often than participants who placed the child into care. About a quarter of the participants put forward a reason concerning the parenting situation (i.e., parenting skills or parent-child relationship): there was no difference between participants who decided to place the child into care and those who did not.

Participants were not always clear about the organizational and external factors influencing their decision. Legislation and organizational protocols were seldom mentioned, while the advantages and limitations of out-of-home placement or other interventions were more common. A third of the participants mentioned the advantages and limitations of out-of-home placement or other interventions. A combination of the advantages and limitations of out-of-home placement and other interventions was mentioned by 5% of participants.
Table 1. Reasons mentioned by participants who decided to place the child into care and those who did not, in frequencies and proportions per group, and chi-square tests of the differences between the two groups for the reasons mentioned.

<table>
<thead>
<tr>
<th>Rationale provided</th>
<th>Stay at home (n = 420)</th>
<th>Placement out-of-home (n = 175)</th>
<th>(\chi^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Proportion</td>
<td>Frequency</td>
<td>Proportion</td>
</tr>
<tr>
<td>Rationale provided</td>
<td>410</td>
<td>.98</td>
<td>174</td>
</tr>
<tr>
<td>Lack of information</td>
<td>97</td>
<td>.23</td>
<td>14</td>
</tr>
</tbody>
</table>

### Case factors

1. **Abuse**
   - Physical injury | 29 | .07 | 36 | .21 | 23.71*** |
   - Neglect | 18 | .04 | 13 | .07 | 2.47 |
   - Emotional abuse | 23 | .06 | 38 | .22 | 35.40*** |
   - Safety in biological family | 71 | .17 | 65 | .37 | 28.69*** |
2. **Child development**
   - Child's current wellbeing and development | 50 | .12 | 49 | .28 | 23.07*** |
   - Child's future wellbeing and development | 37 | .09 | 28 | .16 | 6.56* |
3. **Parenting**
   - Parent-child relationship | 113 | .27 | 42 | .24 | 0.54 |
   - Parenting skills | 80 | .19 | 22 | .13 | 3.65 |
4. **Family and environmental factors**
   - Family circumstances | 86 | .21 | 31 | .18 | 0.60 |
   - Past interventions | 72 | .17 | 6 | .03 | 20.40*** |
5. **Anticipated and actual outcomes**
   - Parent progress | 126 | .30 | 11 | .06 | 39.20*** |
   - Safety in foster family | 0 | .00 | 13 | .07 | 31.90*** |
   - Advantages/limitations of out-of-home placement | 55 | .13 | 34 | .19 | 3.90 |
   - Advantages/limitations of other interventions | 135 | .32 | 8 | .05 | 51.43*** |

* \(p < .10\), ** \(p < .05\), *** \(p < .01\)
Table 1. Reasons mentioned by participants who decided to place the child into care and those who did not, in frequencies and proportions per group, and chi-square tests of the differences between the two groups for the reasons mentioned (continued)

<table>
<thead>
<tr>
<th></th>
<th>Stay at home (n = 420)</th>
<th>Placement out-of-home (n = 175)</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-maker factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Permanence/importance of biological family</td>
<td>69 (.16)</td>
<td>9 (.05)</td>
<td>13.81***</td>
</tr>
<tr>
<td>Family-worker collaboration factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Wishes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Wishes of the parents</td>
<td>20 (.05)</td>
<td>16 (.09)</td>
<td>4.17</td>
</tr>
<tr>
<td>• Wishes of the child</td>
<td>7 (.02)</td>
<td>1 (.01)</td>
<td>1.12</td>
</tr>
<tr>
<td>2. Cooperation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cooperation with the parents</td>
<td>96 (.23)</td>
<td>102 (.58)</td>
<td>69.51***</td>
</tr>
<tr>
<td>• Cooperation with the child</td>
<td>7 (.02)</td>
<td>3 (.02)</td>
<td>0.00</td>
</tr>
<tr>
<td>Organizational factor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Protocols</td>
<td>3 (.01)</td>
<td>1 (.01)</td>
<td>0.04</td>
</tr>
<tr>
<td>External factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Rights</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rights of the parents</td>
<td>14 (.03)</td>
<td>1 (.01)</td>
<td>3.83</td>
</tr>
<tr>
<td>• Rights of the child</td>
<td>5 (.01)</td>
<td>9 (.05)</td>
<td>8.40**</td>
</tr>
<tr>
<td>2. Legislation</td>
<td>0 (.00)</td>
<td>2 (.01)</td>
<td>4.82</td>
</tr>
</tbody>
</table>

* p < .10, ** p < .05, *** p < .01

Professionals and students largely mentioned the same reasons for their decision, though there were some differences. Professionals mentioned more often than students the cooperation with parents (.40 and .30 respectively; \( \chi^2 (1) = 6.14, p < .01 \)), the parenting skills (.22 and .14 respectively; \( \chi^2 (1) = 6.58, p < .01 \)), and the child’s current well-being and development (.22 and .14 respectively; \( \chi^2 (1) = 5.68, p < .05 \)). They mentioned less often than students the parent-child relationship (.07 and .17 respectively; \( \chi^2 (1) = 11.40, p < .000 \)), permanence of the biological family (.05 and .18 respectively; \( \chi^2 (1) = 18.63, p = .000 \)), and parent progress (.13 and .29 respectively; \( \chi^2 (1) = 20.43, p = .000 \)).

There were hardly differences between participants who were being presented with the vignette with the cooperating and the non-cooperating mother. Participants who evaluated the vignette with the cooperating mother mentioned less often than their counterparts with the
vignette of the non-cooperating mother the physical injury (.08 and .14 respectively, $\chi^2 (1) = 5.78$, $p < .05$), and more often the family circumstances (.24 and .16 respectively, $\chi^2 (1) = 5.12$, $p < .05$) and advantages and limitations of out-of-home placement (.19 and .11 respectively, $\chi^2 (1) = 8.10$, $p < .05$).

3.2 Predictors of the placement decision

In Table 2, we present our prediction models for the placement decision. Without any predictors in the model, 70.6% of the decisions could be predicted correctly. In our first model, we found that assessment, attitude towards placement and work experience are separate predictors of the placement decision. Attitude towards parent participation in the decision-making process was not a separate predictor of the placement decision. Using the variables in model 1, 74.6% of the decisions could be predicted correctly. Participants who provided higher risk assessments and more positive attitudes towards placement were more likely to place a child in care. Professionals were 1.5 times as likely to place a child into care than students. If the mother consented to the out-of-home placement recommendation, the child was 1.5 times more likely to be placed into care than if the mother did not consent.

Using the variables in model 2, 86.9% of the decisions could be predicted correctly. The attitude towards placement and the mother’s consent to the placement were still significant predictors in this model. It should be noted that in the second model, which included the participants’ reasoning, work experience was not a significant predictor of the placement decision anymore. In addition, several reasons were significant predictors of the placement decision. Participants who mentioned missing information, parental progress, past interventions, the advantages and limitations of other interventions, and the importance of the permanence of the biological family were less likely to place a child into care. Participants who referred to abuse, child development, the advantages and limitations of placement and parental cooperation, were more likely to place the child into foster care. The standard errors of the regression coefficients (b) for some variables were hard to estimate because of low numbers in some cells. Specifically, these variables were: attitude towards placement, advantages and limitations of other interventions, and parental cooperation. It should be noted that the ‘safety in the foster family’ reason was only mentioned by participants who decided to place the child into foster care and as a result, is a perfect predictor of that decision.

The interactions in model 3 were not significant: they did not have additional value for our prediction model. Therefore, model 3 is not further reported.
Table 2. Regression coefficients of the model predicting whether a child would be placed into foster care

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (SE b)</td>
<td>Odds ratio [95% CI]</td>
</tr>
<tr>
<td>Constant</td>
<td>-13.24 (1.36)</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>-12.61 (1.75)</td>
<td>0.00</td>
</tr>
<tr>
<td>Risk assessment</td>
<td>1.79 (0.27)</td>
<td>6.01 [3.53, 10.21]</td>
</tr>
<tr>
<td></td>
<td>1.48 (0.35)</td>
<td>4.38 [2.22, 8.64]</td>
</tr>
<tr>
<td>Attitude towards placement</td>
<td>1.50 (0.22)</td>
<td>4.48 [2.92, 6.87]</td>
</tr>
<tr>
<td></td>
<td>1.75 (0.29)</td>
<td>5.77 [3.28, 10.15]</td>
</tr>
<tr>
<td>Work experience (student vs professional)</td>
<td>0.46 (0.22)</td>
<td>1.59 [1.04, 2.43]</td>
</tr>
<tr>
<td></td>
<td>-0.12 (0.30)</td>
<td>0.89 [0.49, 1.60]</td>
</tr>
<tr>
<td>Mother’s consent to out-of-home placement</td>
<td>0.43 (0.20)</td>
<td>1.54 [1.03, 2.29]</td>
</tr>
<tr>
<td></td>
<td>0.64 (0.28)</td>
<td>1.89 [1.09, 3.28]</td>
</tr>
</tbody>
</table>

Reasons

Lack of information                                   -1.60 (0.40) | 0.20 [0.09, 0.44]
Abuse                                                1.02 (0.29) | 2.78 [1.58, 4.87]
Child development                                     1.11 (0.32) | 3.04 [1.62, 5.68]
Past interventions                                    -1.77 (0.53) | 0.17 [0.06, 0.49]
Parental progress                                     -2.68 (0.44) | 0.07 [0.03, 0.16]
Advantages and limitations of placement               1.12 (0.39) | 3.07 [1.44, 6.57]
Advantages and limitations of other interventions     -3.04 (0.51) | 0.05 [0.02, 0.13]
Importance of permanence of biological family         -1.03 (0.52) | 0.36 [0.13, 0.99]
Parental cooperation                                  1.82 (0.30) | 6.20 [3.48, 11.05]

Note. Model 1: $R^2 = .28$ (Nagelkerke), $\chi^2 (3) = 123.34$, $p < .000$. Model 2: $R^2 = .65$ (Nagelkerke), $\chi^2 (8) = 360.30$, $p < .000$.

4. Discussion
This study investigated the reasons for out-of-home placement decisions. Our first research question was which reasons were provided, and how often. A wide range of reasons were mentioned, which indicates great diversity in reasoning. The mean number of reasons mentioned per person was low. The rationales of students and professionals hardly differed from each other. Also, hardly any differences existed between participants who received the vignette with the consenting mother and the one with the non-consenting mother. Our second research question concerned the extent to which risk assessment, work experience and attitudes towards placement and client participation predict placement decisions. Our findings show that the risk assessment and attitude towards placement predicted the placement decision; the higher people assessed the risks and the more positive they were about placement, the more likely it was that they would recommend to place the child into foster care. Our third research question was whether the
inclusion of arguments in the prediction model led to better prediction of placement decisions. A range of arguments improved the prediction of the placement decision in addition to the risk assessment, attitude towards placement and the mother’s cooperation. We found clear patterns in the reasoning put forward by all participants. Influential reasons concerned the disposal of information, the abuse suspected, the child’s development, past interventions, the advantages and limitations of placement and other interventions, the importance of the permanence of the biological family, and the participant’s assessment of parental cooperation with the services.

Our results regarding the influence of risk assessment, attitude towards placement and work experience are in line with previous research (Arad-Davidzon & Benbenishty, 2008; Arruabarrena & De Paúl, 2012; Costin et al., 1991; Font & Maguire-Jack, 2015; Garb, 1989; Horwitz et al., 2011; Jent et al., 2011; Lambert & Ogles, 2004; Minkhorst et al., 2016) and with the Decision-Making Ecology (Baumann et al., 2014). In addition, our study shows that rationales seem to connect assessment and the decision proposed. Previous studies have shown which case factors are deemed important in placement decisions (see for an overview Bartelink et al., 2015; Font & Maguire-Jack, 2015). This study adds insight into the relative weight of the reasons child protection workers and students provide for their placement decisions.

Our findings on the content of the reasoning reveal some weaknesses. First, important reasons were missing in the majority of explanations put forward. For example, only half of the participants mentioned reasons regarding the parenting situation and only a quarter referred to the child’s development. In accordance with the Dutch Guidelines for Out-of-Home Placement for child and youth care and child protection (Bartelink et al., 2015), parenting and child development should be at the heart of all such decisions. The main reason for an out-of-home placement in these Guidelines is a severe imbalance between parenting capacities and the child’s developmental needs, which impedes the child’s development, wellbeing or safety. Difficulties in making clear judgments about parenting capacities and a child’s development could be caused by a lack of clear guidelines (Budd & Holdsworth, 1996; Budd, Poindexter, Felix, & Naik-Polan, 2001) and a lack of skills to balance the establishment of a working relationship with discussion on concerns about child safety (Turnell & Edwards, 1999; Van Montfoort, Slot, Perquin, & Lever, 2009).

Second, the rationales are unconvincing in terms of Toulmin’s typology of arguments. A majority did not mention the advantages and limitations of placement or other interventions. In most cases, the participants only mentioned the advantages of the intervention they recommended and none of its disadvantages, or the advantages of alternatives. In terms of Toulmin’s argumentation model (1969), this means that the rebuttal and backing are lacking. This seriously compromises the persuasiveness of the reasoning. Osmo and Benbenishty (2004) found previously that professionals mentioned resources for their decisions, but only when prompted. Benbenishty and colleagues (2003) argue that incorporation of rebuttals and qualifiers makes people less prone to biases and more open to new and different information.

Third, our results show signs of trends in the decision-making process, because workers who decided to place children into care clearly had different patterns of reasoning than workers who did not. For example, workers who decided to place the child into care mentioned reasons related to the supposed child abuse and the advantages of placement more often, while participants who decided that the child could remain at home more strongly emphasized the importance of the biological family and advantages of other interventions. Whatever decision is made, we might expect reasons related to the advantages and limitations of placement and other interventions, as
well as arguments related to the supposed abuse and the importance of the biological family in a balanced explanation. The workers’ reasoning in a case therefore seems biased. This may result from the complexity of placement decisions. It is cognitively demanding to deliberately consider the many factors related to a case. In such situations, workers tend to use heuristics and decide early in the assessment and decision-making process (Gambrill, 2005; Kahneman et al., 1990). Moreover, placement decisions are not only cognitively challenging; they also seem emotionally challenging (Knorth, 1991; Munro, 1999). The confrontation with adverse circumstances of children may appeal to the workers’ sense of justice and thereby may result in a decision based more on their emotions and less on relevant case factors.

Finally, workers’ reasoning seems greatly influenced by their perceptions of parental cooperation – or the absence thereof –, which is particularly interesting because the case used did not present severe child abuse. A substantial proportion of the participants mentioned a lack of cooperation as a reason for placement or threatened placement if the parents did not become more cooperative: this applied to both versions of the case described above, irrespective of whether consent of the mother was indicated. This finding is in line with previous research (Davidson-Arad, 2001; Davidson-Arad & Kaznelson, 2010; Meddin, 1984; Shapira & Benbenishty, 1993). Davidson-Arad and Kaznelson (2010) argue that professionals consider cooperative parents as more receptive to intervention and therefore needing less drastic measures to ensure child safety. In such cases, cooperativeness would correctly be a case factor. However, perceptions of uncooperativeness can also bias the decision-maker by arousing negative emotions, resulting in more drastic intervention. Another explanation could be the great pressure to avoid risks which workers have confronted over the last few years, due to several fatal or nearly fatal incidents (Landelijk Toezicht Jeugd, 2015; Onderzoeksraad voor de Veiligheid, 2011). This may have increased the tendency to order drastic interventions in even minor cases.

Concerning the second and third research questions, we found that in line with Decision-Making Ecology (Baumann et al., 2014), attitudes influence decision-making. People who are more pro-removal are more likely to place a child into foster care. It is unlikely that professionals are always aware that their attitudes influence their risk assessments and placement decisions and therefore directly refer to them in their reasoning. Attitude seems to have a more indirect influence: people who are more positive about removal assess the child as at greater risk than people who are less positive about removal and therefore more prone to place the child into foster care. These results indicate the existence of bias, as previously mentioned by several researchers (Arad-Davidzon & Benbenishty, 2008; Benbenishty et al., 2015; Davidson–Arad & Benbenishty, 2010; Gambrill, 2005; Munro, 1996; 1999). Our study shows that this does seem to influence not only the information-gathering part of the decision-making process, but also the reasoning about the available case information.

Confirming several studies (Garb, 1989; Lambert & Ogles, 2004; Minkhorst et al., 2016), we found no relationship between work experience and the decision proposed, despite other studies having found this relationship (Benbenishty et al., 2002; Brunberg & Pečnik, 2007; Portwood, 1998; Roberts, 1970). The relationship between experience and decision-making seems complex. Work experience may add little or nothing when making complex decisions (Spengler et al., 2009; Devaney, Hayes & Spratt, 2017). Davidson–Arad and Benbenishty (2016) assume that similarities in the risk assessments and intervention recommendations of students and professionals reflect a shared professional culture. Other factors may be at work instead of the amount of work experience:
for example, the training received (i.e., legal versus social work or mental health training; see. Britner & Mossler, 2002) or work-related traumatic experiences (Regehr et al., 2010).

We can conclude from our study that professionals and students seem equally prone to confirmatory hypothesis testing (e.g. Strohmer et al., 1990) or the tendency to seek selective evidence to support rather than refute their assumptions (e.g. Munro, 1996). A reason why workers' capabilities do not change with experience is the lack of feedback about their judgments (e.g., Dawes, Faust, & Meehl, 1989; Ericsson & Lehmann, 1996; Finnila, Santtila, Mattila, & Niemi, 2012; Garb, 1998; Lichtenberg, 1997). The effect of feedback is still barely studied (see Spengler et al., 2009). Garb (1998) notes that the use of feedback to improve accuracy might not be without challenges, because feedback can be misleading (i.e., most professionals receive feedback about clients when they relapse, which might lead to the conclusion that their prognoses are uniformly poor).

4.1 Strengths and limitations
This study analysed arguments that were given spontaneously. Participants received no further instructions or guidance. Their reasoning about the case could have been far more complex, but they may have only written down the main decisive reasons which were explicitly case-related, and have left out external influences, such as references to the law and guidelines. It is often argued that written communication must be precise for the reader to be able to understand the author's precise meaning. However, the rationales we analysed were often short and not very precise. Previous practice-oriented research revealed that many professionals have limited reporting skills and therefore difficulties in reporting on their cases in case files (Bartelink, 2006; De Kwaadsteniet, Bartelink, Witteman, Ten Berge, & Van Yperen, 2013). We might have obtained other results if we had asked participants to think aloud about the case rather than writing down their thoughts. Verbal communication enables the researcher to ask in-depth questions to reach better understanding.

This study used a single case, which could be viewed as a weakness because it limits the external generalisability. However, case factors could be excluded as possible explanations for different decisions because only a single case was used, and the role of the reasoning process could be determined better, which provides insight into possible explanations for the differences in decisions. Based on previous studies (Bartelink, 2006; De Kwaadsteniet et al., 2013; Ten Berge, 1998), we do not expect that we would have obtained principally different results if more cases had been included.

A strength of this study is the large group of participants, included through convenience sampling from several agencies and universities across the country. Convenience sampling may have led to the inclusion of workers who perceive themselves as adequate decision-makers, more than their non-participating colleagues (Bornstein, Jager, & Putnick, 2017). As a result, our findings could be more positive than if a random sample had been included. Given the relatively weak rationales we found in our sample, it is unlikely that random sampling would have yielded ‘better’ results.

4.2 Recommendations
Despite some study limitations, we conclude that our findings indicate that reflection is required on how decision-making in child welfare and child protection practice can be improved.

First, our study indicates that the content of reasoning needs to be strengthened. In cases such as the one we used in our study, a discussion of parenting capacities (including threats in
the form of possible child abuse or neglect) and the child’s developmental needs should be at the heart of decision-making. We propose that the Guidelines for Out-of-Home Placement for child and youth care and child protection (Bartelink et al., 2015) are used, which provide a decision tree to support reasoning on placement decisions. These Guidelines were developed based on research and practical knowledge and the clients’ experiences, and they were authorized by the professional associations of social workers, pedagogues, psychologists and child psychologists. It therefore provides a standard for professional judgment and placement decisions, and it provides clarification for professionals about which case-related factors are most important and how to weigh relevant case factors.

Second, decision-makers’ attitudes need to be addressed in training and supervision. Decision-makers should be aware of their attitudes towards out-of-home placement and how their attitudes influence their judgments and decisions. Training could support professionals in learning to be open-minded and developing a willingness to challenge ideas about their cases, and to question their beliefs (Gambrill, 2005).

Third, the case-related reasoning could possibly be improved by the use of critical thinking and discussion among co-workers, though the effectiveness of these measures is still being debated. Improvement in case-related reasoning is needed to increase the transparency of the decisions and the reasons for these decisions. Instruments and decision-making methods, which prescribe the case-related factors to consider, have often been proposed (Munro, 1999), though with limited results (Ágisdóttir et al., 2006; Bartelink, Van Yperen & Ten Berge, 2015; Bartelink et al., 2014; De Kwaadsteniet et al., 2013; D’Andrade, Benton, & Austin, 2005). Another solution could be found in critical thinking about alternatives and pros and cons (Toulmin et al., 1984). Though intuitive processes might remain important because of the complexity of the decision-making task (Munro, 1999), critical thinking about alternative explanations and the pros and cons of both the proposed intervention and its alternatives could prevent tunnel vision and keep people receptive to new information (see also Gambrill, 2005; Knorth, Van den Bergh, & Smit, 1997; Toulmin et al., 1984). At last, individuals’ vulnerability to intuitive reasoning and the use of heuristics can be counteracted by discussions with co-workers where views about cases are challenged. Training and ongoing on-the-job supervision could support critical thinking about alternative explanations and the pros and cons of both the proposed and alternative interventions.

Finally, given its important influence on the ultimate decision, the reasoning process requires further investigation. This could be done at least in two ways. Firstly, the reasons underpinning decisions could be studied using a questionnaire in which the participants could explain which reasons out of a fixed set presented to them they find most important. Such a study is a way to increase insight into reasoning processes in a structured way. Secondly, the reasoning processes could be studied by asking professionals to explain their thoughts about a case orally (i.e., a thinking-aloud method). This could help to obtain deeper insight into the reasoning process and to discover whether decision-makers think critically about cases.

4.3 Conclusion
To conclude, this study enhances the empirical underpinning of the Decision-Making Ecology model (Baumann et al., 2014) by adding knowledge on decision-maker factors and the reasoning process underlying placement decisions. It showed that placement decisions systematically varied depending on decision-maker factors and the reasoning put forward. Attitudes towards placement
clearly seem to influence placement decisions. We agree with other researchers’ recommendation (e.g., Munro, 1999; Osmo & Benbenishty, 2004) that reasoning processes and the influence of attitudes need to be further addressed in professional training to improve decision-making and, as a consequence, the outcomes for children and their families.