

Expectant parents with intellectual disabilities in child protection: Risk factors for child safety

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Funding information

ZonMw

Abstract

Background: Newborns of parents with intellectual disabilities face higher risks in their environment for child unsafety, despite parents' good intentions. To help parents prevent unsafe circumstances, a good understanding of the risk factors faced by these parents is needed.

Methods: This casefile study examined (1) which risk factors were present for expectant parents with intellectual disabilities in child protection, (2) which domains of risk factors, and (3) whether a cumulation of risk factors was related to child safety.

Results: Expectant parents with intellectual disabilities in child protection before the child was born often experienced a cumulation of risk factors. Child, family, and care factors best predicted child safety. A cumulation of risk factors over multiple life domains increased the risks for child unsafety.

Conclusions: To reduce the risks of unsafe parenting conditions for newborns, preventive interventions for expectant parents with intellectual disabilities should address their needs from an ecological perspective.

KEYWORDS

child protection services, child safety, parenting, parents with intellectual disability, pregnancy, risk factors

1 | INTRODUCTION

Newborns of parents who have intellectual disabilities¹ face heightened risks of poorer developmental outcomes, starting from pregnancy to later development, such as preterm and low birth weight, mental health problems, and school- and work dropouts (e.g., Emerson & Brigham, 2014; Höglund et al., 2012a, 2012b; McConnell et al., 2008; Murray et al., 2010). These heightened risks

seem not directly related to the intellectual disability itself but are a reflection of the multiple and complex problems these families often face (Meppelder et al., 2015; Wilson et al., 2013). This cumulation of risks may lead to unsafe parenting, such as inconsistency, low sensitivity, and even neglecting (e.g., Aunos et al., 2008; Lindberg et al., 2017; McConnell et al., 2021; Wickstrom et al., 2017). Although an intellectual disability in itself is thus not directly related to unsafe parenting, and other multiple and complex factors are at play, it has been observed that children of parents with intellectual disabilities are overrepresented in child protection services (CPS) in high-income countries (e.g., LaLiberte et al., 2017), particularly children under the age of one (McConnell et al., 2011a). In addition, it appears that these

¹Intellectual disabilities are defined as 'limitations in intellectual functioning and in adaptive behaviour that originates before the age of 22' (Schalock et al., 2021). The exact number of parents with intellectual disabilities is unknown, with estimates worldwide varying between 0.25% and 7% (e.g., Emerson et al., 2005; MacLean & Aunos, 2010; Pixa-Kettner, 2008).

children have a prolonged involvement with CPS and have an increased risk of out-of-home placement (e.g., Buchan & Gunn, 2007; McConnell et al., 2011a, 2011b, 2021; Pacheco et al., 2021; Willems et al., 2007).

However, as recognized in several studies, parents with disabilities are capable of raising their children good enough, provided they are effectively supported in line with their needs (e.g., Collings et al., 2012; IASSID, 2008). Even more specifically, parents with intellectual disabilities have the right to parenthood and family life, and State Parties are obliged to effectively and appropriately support these parents in enabling them to exercise this right (United Nations, 2006). To support parents with intellectual disabilities in preventing their children from unsafe parenting conditions, it is important to intervene as early as possible, even during pregnancy (e.g., O'Keeffe & O'Hara, 2008; Slayter & Jensen, 2019). Successful prevention depends on a good understanding of the risks that come with unsafe circumstances for the child (i.e., child safety) (De Castro & Van Dijk, 2017). However, this knowledge is limited to the general population (Assink et al., 2016) and even more limited to the population of parents with intellectual disabilities (Lightfoot & Slayter, 2014), and it does not apply to the specific population of expectant parents with intellectual disabilities in child protection. To fill this gap, the present study aimed to increase this knowledge by examining risk factors in expectant parents with intellectual disabilities in child protection in relation to child safety.

Child safety can have various meanings. For example, safety measures in the home to protect the child (e.g., a stair gate) or safety measures when a child is injured. In this paper, we refer to child safety from a parenting perspective. From this sense, child safety is defined as: 'the child can structurally rely on an adult who provides for his basic physical and emotional needs, who protects him from danger and who provides continuity and predictability in doing this' (Ten Berge & Bakker, 2005). Therefore, child safety refers to several aspects; the presence of regularity and stability; the child's physical and emotional care; a sense of security; and the absence of protection from violence and abuse (Ten Berge & Bakker, 2005). Child safety in CPS can therefore be indicated by three outcomes: a lower child's safety rating on risk- and safety assessment, out-of-home placement, and a longer duration of a CPM (Turnell & Murphy, 2014).

When specifically considering risk factors related to the three indicators of child safety, research over the years has shown that the duration of a CPM and out-of-home placement is best explained by child-related risk factors, such as the child's age, disability, and mental health problems (e.g., Busschers et al., 2016; Glisson et al., 2000). In addition to child factors, Busschers et al. (2016) found that characteristics of the CPM (such as a provisional CPM and a small number of case managers involved) and youth-care worker characteristics (such as gender and working experience) also have a large contribution to the variation in the duration of a CPM. Research on predictors related to the child safety rating is not known to the best of the authors' knowledge.

However, the studies mentioned above examined risk factors related to indicators of child safety in the general population and made no distinction between parents with and without intellectual

disabilities. Despite parents' best efforts, it can be expected that the risk factors related to child safety are different for parents with intellectual disabilities, because of the cognitive disabilities they face (MacIntyre et al., 2019). For example, parents with intellectual disabilities may find themselves having problems with generalising skills to other situations, adapting to the child's development, and stimulating the development of the child (Wilson et al., 2013). In addition to their cognitive vulnerabilities, parents with intellectual disabilities are often exposed to a cumulation of risk factors, which increases the levels of parenting stress (Meppelder et al., 2015; Wilson et al., 2013). Parenting stress is related to less supportive parenting, more hostile attributions, ineffective parenting styles, less sensitivity, and therefore higher risks for child safety (Aunos et al., 2008).

Factors affecting parenting stress in parents with intellectual disabilities are associated with all life domains, as described in the contextual-interactive model of Feldman and Aunos (2020). First, parents with intellectual disabilities tend to have less access to resources that are important in starting a family, such as financial resources and supportive social networks (e.g., IASSID, 2008; Meppelder et al., 2015; Powell et al., 2017). People with intellectual disabilities not only have, on average, smaller social networks of family and friends; their access to care is also poorer than for other families, due to limited resources, barriers to asking for and finding support (e.g., complex reading, bureaucracy), negative attitudes of professionals towards people with intellectual disabilities becoming parents, and professionals' lack of knowledge, time, and material resources to effectively work with these parents (Castell & Stenfert Kroese, 2016; Glazemakers & Deboutte, 2013). Furthermore, parents with intellectual disabilities often experience problems of their own, such as poor physical health, high levels of mental health problems, psychopathology (McConnell et al., 2011a), and adverse childhood experiences (Lightfoot & Slayter, 2014; O'Keeffe & O'Hara, 2008). Finally, parents with intellectual disabilities often have children with special needs (McGaw et al., 2010).

To detect and support highly vulnerable expectant parents with intellectual disabilities *and* multiple and complex problems, it is important to know which specific risk factors are present and which domains of risk factors affect child safety, even during pregnancy. To the best of our knowledge, this has not yet been examined. Only one study examined the risk factors of this particular group in relation to referral to CPS at birth (Brown et al., 2018). It was found that the most important risk factor was maternal psychotic disorder, followed by risk factors concerning prenatal care. However, this study did not include risk factors in all life domains, while it can be expected that a cumulation of risk factors in all life domains threatens the child's safety, with expectant parents with intellectual disabilities subjected to child protection even before the child was born. The present study, therefore, aimed to increase this knowledge by examining:

1. Which risk factors in relation to child safety are present in expectant parents with intellectual disabilities subject to child protection?
2. Which domains of risk factors are (primarily) related to child safety?

3. Whether a cumulation of risk factors over multiple domains is related to child safety?

We hypothesized (1) that expectant parents with intellectual disabilities subject to child protection experience (a cumulation of) risk factors in all seven domains; (2) that risks are present in each domain and (3) that a cumulation of risks over domains is related to child safety.

2 | METHODS

2.1 | Sample

In the present study, 110 closed casefiles of children (50.9% girls; 49.1% boys) who had a CPM before they were born (mean age at start = -28 days, $SD = 29$ days), were analyzed on risk factors in relation to child safety. The CPM was executed by a Dutch national CPS organization for children and their parents with intellectual disabilities. In the Netherlands, two different CPMs can be imposed before birth if there is a high chance that the child's safety is in jeopardy once the child is born: a family supervision order (FSO) and state custody. During the FSO ($n = 103$; 93.6%), the parents retain custody of their child but are obliged to cooperate with the advice of the youth-care worker. The youth-care worker is a case-coordinator, who initiates care, but does not carry out the care himself. State custody ($n = 7$; 6.4%) is imposed in case the parents have not yet reached the adult age (18 years) or when the safety of the child cannot be guaranteed within an acceptable period; as a result, the parents will lose custody of their child (Person and Family Rights, 2021a, 2021b). Of the children with an FSO, 47.3% escalated to state custody. For these families, only the casefiles of the FSO were considered in this study.

Inclusion criteria were: (1) the child had a CPM before he/she was born, (2) the mother had an intellectual disability according to registration records, (3) the casefile was closed between 2015 and 2019, and (4) a civil report or a risk and safety assessment was needed to be present in the casefile. Taking these criteria into account, a sample of 460 out of 1670 casefiles was established. From this sample, 110 casefiles were randomly sampled. The number of casefiles was based on a-priori power analysis in G Power 3.1.9.2 (Faul et al., 2009), which indicated a required sample size of $N = 103$ for one-tailed logistic regression, with an expected correlation between the nominal predictors of .30 and a power of .90. Thus, the sample size will suffice to detect the effects of the individual predictors and the cumulative effects.

In contrast to the registration records, the casefile study revealed that only 98.2% ($n = 108$) of the children had a mother with an intellectual disability. However, the two cases with a mother without an intellectual disability were still included because the intellectual disability could be suspected based on their adaptive functioning. The other 108 mothers were known to have an intellectual disability based on diagnostic reports kept in the casefile, in which the IQ scores were known for 77 mothers, with a mean score of 66 ($SD = 9$). The IQ

scores of only 27 fathers were known, with a mean score of 67 ($SD = 11$).

2.2 | Procedure

The study procedure has been approved by the Ethics Review Board of the University of Amsterdam (2021-CDE-1872). Under the laws and regulations regarding a CPM, it is allowed to examine casefiles without active consent from those involved for scientific research (Data processing, privacy, and consent, 2022). The data cannot be traced back to the participants, and the lives of those involved are not disproportionately harmed.

The youth-care worker keeps a casefile. The casefiles included reports from (previous) externally involved care settings (e.g., diagnostic reports) as well as council reports, court orders, and internal reports (e.g., intervention plan, risk and safety assessment). The independent trained researchers, screened the qualitative information from the casefiles for problems present in the families from the start of the CPM until 6 months after birth, using a structured coding system, in which the definitions and criteria of the risk factors were well-defined. The casefiles coded in the period between June and December 2021. Of the 110 casefiles, a random sample of 20% ($n = 22$) was independently coded by both researchers to indicate inter-rater reliability. Cohen's Kappa (K) was calculated for all risk factors and had a mean score of $K = .81$, indicating excellent inter-rater reliability (Allen et al., 2014). The agreement between the two researchers was 91.9%. Disagreements were resolved jointly.

The coding system is based on Bodden and Deković (2016) ecological overview of risk factors in families with multiple and complex problems referred to youth-care. The risk factors in this framework are considered to place the child at a heightened risk of developing problems. The risk factors are categorized into seven life domains, based on the ecological-transactional model of family functioning (Bodden & Deković, 2016). The life domains are child, parent, parenting, family functioning, contextual, social, and care.

The *child domain* includes psychological and psychosocial problems of the child (only relevant to the target group of (unborn) babies), (cognitive) disabilities, and victims or witnesses of abuse, neglect, and domestic violence. The *parent domain* refers to psychological and psychosocial problems of the parent, such as psychiatric problems, criminal behaviour, and addictions. (Cognitive) disabilities and a burdened past of adverse childhood experiences are also included within the parent domain. The *parenting domain* concerns childrearing skills, such as inconsistent childrearing and a disbalance between parenting capacity and load, which are assessed by professionals during pregnancy and when the child is born. The *family functioning domain* relates to disorders within the family, such as conflicts, bad cohesion, and communication problems. The *contextual domain* concerns negative life events, financial problems, and low socio-economic status, such as education and income level. The *social domain* covers disturbances within the social network of the family, such as a poor social network or conflict with neighbours. Finally, the *care domain* refers to

TABLE 1 Descriptives of the domains, present risk factors, and outcome measures.

Domains and outcomes	N	Possible range	Standardized M	M (SD)	n (%)	n (%) during pregnancy	n (%) after birth	n (%) mother	n (%) father
<i>Child domain</i>	110	0–19	0.19						
Physical abuse						61 (55.5%)	3 (2.7%)		
Domestic verbal violence						76 (69.1%)	22 (20.0%)		
Domestic physical violence						53 (48.2%)	12 (10.9%)		
Medical problems ^a					40 (36.4%)				
Physical neglect ^a					39 (35.5%)				
Emotional neglect ^a					29 (26.4%)				
Emotional abuse ^a					19 (17.3%)				
Medical risk ^a					13 (11.8%)				
Physical disability ^a					2 (1.8%)				
Life-threatening disease ^a					2 (1.8%)				
Syndrome problems ^a					1 (0.9%)				
Sensory disability ^a					1 (0.9%)				
Cognitive disability ^a					0 (0.0%)				
Chronic disability ^a					0 (0.0%)				
Profound multiple disabilities ^a					0 (0.0%)				
Sexual abuse ^a					0 (0.0%)				
<i>Parent domain</i>	110	0–30	0.27						
Cognitive disability								108 (98.2%)	51 (46.4%)
Mental problems								100 (90.9%)	74 (67.3%)
Psychiatric problems								56 (50.9%)	42 (38.2%)
Emotional/physical neglect/abuse in own childhood								49 (44.5%)	11 (10.0%)
Health problems both parents					42 (38.2%)				
Drug (ab)use								40 (36.4%)	40 (36.4%)
Justice contacts								26 (23.6%)	40 (36.4%)
Domestic violence in own childhood								28 (25.5%)	6 (5.5%)
Sexual abuse in own childhood								27 (24.5%)	5 (4.5%)
Alcohol (ab)use								22 (20.0%)	25 (22.7%)
Suicidal thoughts								24 (21.8%)	9 (8.2%)
Prison								5 (4.5%)	20 (18.2%)
Suicide attempts								15 (13.6%)	5 (4.5%)
					5 (4.5%)				

TABLE 1 (Continued)

Domains and outcomes	N	Possible range	Standardized M	M (SD)	n (%)	n (%) during pregnancy	n (%) after birth	n (%) mother	n (%) father
Life-threatening disease one or both parents									
Physical disability								3 (2.7%)	1 (0.9%)
Sensory disability								1 (0.9%)	3 (2.7%)
<i>Parenting domain</i>	110	0–8	0.51						
Inadequate parenting skills						102 (92.7%)	38 (34.5%)		
Emotional/physical neglect of other children (n = 78)					62 (79.5%)				
Inconsistent parenting						86 (78.2%)	33 (30.0%)		
Emotional/physical abuse of other children (n = 78)					53 (68.0%)				
Imbalance parenting capacity versus parenting load						72 (65.5%)	25 (22.7%)		
<i>Family functioning domain</i>	110	0–6	0.45						
Relational problems					75 (68.2%)				
Conflicts within the family					71 (64.5%)				
Bad cohesion					62 (56.4%)				
Divorce					41 (37.3%)				
No contact with the parent								8 (7.3%)	36 (32.7%)
<i>Contextual domain</i>	110	0–14	0.52						
Burden past								96 (87.3%)	45 (40.9%)
Financial problems								84 (76.4%)	54 (49.1%)
Unemployment								84 (76.4%)	40 (36.4%)
On welfare								64 (58.2%)	38 (34.5%)
Housing problems								63 (57.3%)	45 (40.9%)
Statutory debt restructuring								60 (54.5%)	27 (24.5%)
Debts								55 (50.0%)	39 (35.5%)
<i>Social domain</i>	110	0–4	0.31						
Non/small social network								72 (65.5%)	38 (34.5%)
Police involvement within the family					50 (45.5%)				
Conflicts with neighbours					23 (20.9%)				

(Continues)

TABLE 1 (Continued)

Domains and outcomes	N	Possible range	Standardized M	M (SD)	n (%)	n (%) during pregnancy	n (%) after birth	n (%) mother	n (%) father
<i>Care domain</i>	110	0–3	0.46						
Avoiding care					62 (56.4%)				
Acceptance problems related to the CPM					50 (45.5%)				
Large number of care involved ^b					38 (34.5%)				
<i>Cumulative risk over the domains</i>	110	0–7		6.37 (0.81)					
<i>Outcomes</i>									
Child's safety rating	78	0–10		5.51 (2.06)					
Out of home placement ('yes')	110				54 (49.1%)				
Duration of the CPM (>2 years)	110				54 (49.1%)				

^aThe percentages may be biased because if the child was placed out of home, and there was no information available, the factors were scored as 'missing'.

^bMore than 5 care trajectories before start CPM.

a long history of care and out-of-home placement (Bodden & Deković, 2016).

2.3 | Measures

2.3.1 | Risk factors

Risk factors were scored as 'present' (1) if there was a description in the casefile that matched the criteria as operationalized in the coding system. The factor was scored as 'not present' (0) if there was no information present or if it was specifically noted in the casefile that the risk factor was not present. The risk factors were scored separately for the mother and father, and before and after birth. For the analyses, the number of risk factors within each life domain (child, parent, parenting, family functioning, contextual, social, and care) was summed, resulting in a sum score for each life domain. The sum of risk factors of each life domain was considered, rather than each individual risk factor, to prevent data fishing in a large number of separate tests (Evans et al., 2013). Furthermore, a cumulative risk factor over all the domains was established, which consisted of the sum of the number of domains on which risk factors were present, ranging from 0 to 7. The domains and the studied risk factors are presented in the first column of Table 1.

2.3.2 | Child's safety

The child's safety was estimated with three indicators: the child's safety rating, the duration of the CPM, and out-of-home placement

within 6 months after birth. First, the child's safety rating was established with the use of a standardized checklist for risk- and safety assessment used by the CPS organization, based on the validated LIRIK (Bartelink et al., 2015). Example items of the checklist are: 'insufficient skills to cope with the child's disability' and 'substance use problems'. The checklist was filled in by the youth-care worker, based on information provided by and discussed with the family. The final child safety rating was established in consultation with colleagues and a behavioural scientist, varying between 1 to 10, where '1' means the child is considered unsafe, and '10' means the child is considered completely safe. Second, an out-of-home placement was scored as 'yes' (1) if the child was placed out-of-home within 6 months after birth. The child might have returned home in the same period, but in those cases, the score remained 'yes'. Third, the duration of the CPM was operationalized as shorter than 2 years (0), versus longer than 2 years (1). This dichotomy is based on Slot et al. (2001) who questioned whether a CPM would be effective if there was no improvement in the child's safety after 2 years.

2.4 | Data analysis

Statistical analyses were performed using IBM Statistics SPSS 25. First, the descriptive data were analyzed to identify which risk factors were relatively common in expectant parents with intellectual disabilities subject to child protection (aim 1). Second, to identify which domains of risk factors were (primarily) related to the child's safety (aim 2), three separate multivariate (logistic) linear regression analyses, with method 'Forward', were conducted with the three indicators of the child's safety as dependent variables, and the seven domains as

independent variables. Finally, to test whether a cumulation of risk factors over multiple domains was related to the child's safety (aim 3), three univariate (logistic) regression analyses were conducted with the three indicators of the child's safety as dependent variables, and the cumulative risk over the domains as independent variable.

Before these analyses were interpreted, the assumptions of linearity, independence of errors, and multicollinearity were tested (e.g., Field, 2009). None of the assumptions were violated. However, the scatterplots of the analysis with the cumulative risk factor over the domains as the independent variable and the child's safety rating as the dependent variable were skewed. This may suggest that there was heteroscedasticity in this single analysis, and therefore the results of this analysis need to be interpreted carefully.

3 | RESULTS

3.1 | Prevalence of risk factors

To examine which risk factors were present in expectant parents with intellectual disabilities subject to child protection (aim 1), the percentages of present risk factors were inspected (Table 1). When inspecting these percentages, it is striking that some risk factors were relatively common (more than 50%). In the child domain, during pregnancy, children were frequently (55.5%) exposed to physical abuse (such as physical abuse towards the mothers' abdomen) and to domestic verbal violence (69.1%). In the parent domain, parents often had mental problems (mothers 90.9%; fathers 67.3%), and mothers often had psychiatric problems (50.9%). In the parenting domain, parents were expected to have inadequate parenting skills (92.7%) and they were likely to abuse and neglect their other children (abuse 68%; neglect 79.5%). Furthermore, in the family functioning domain, the families often experienced relational problems (68.2%), conflicts within the family (64.5%), and bad cohesion (56.4%). Mothers often had a burdened past (87.3%), financial problems (76.4%), debts (50%), and were often unemployed (76.4%). Furthermore, mothers were often on welfare (58.2%) and statutory debt restructuring (54.5%), and they often had housing problems (57.3%). Socially, mothers often had a non/small social network (65.5%). Finally, in the care domain, these families were likely to avoid care (56.4%).

Cumulatively, on average families experienced risk factors within six of the seven life domains ($M = 6.37$, $SD = 0.71$), while 60 families (54.5%) experienced cumulative risk in all seven domains.

3.2 | Associations between the domains and the child's safety

To identify which domains of risk factors were (primarily) related to the child's safety (aim 2), predictors and outcomes were correlated, and three multivariate regression analyses were conducted. Concerning the child's safety rating, the results showed that risks in the child and social domain were correlated with the child's safety rating (see

Table 2). The child domain explained the most variance (8%) in the child's safety rating. A negative relationship was found between the child domain and the child's safety rating, which means the more child risk factors present, the lower the child's safety rating (see Table 3). After entering the child domain into the regression equation, no other domains significantly explained additional variance. However, as can be seen in Table 2, almost all the other factors were positively correlated with the child domain, which suggests that variance in the other domains was captured in the regression analysis through the child domain.

Concerning out-of-home placement, the results of the multivariate logistic regression showed that out-of-home placement was best explained by the family functioning domain. This model was accurate for 62.7% of the cases. Nevertheless, the model with the family functioning and care domain was even better in predicting out-of-home placement. This model was accurate for 66.4% of the cases. The coefficients of both models are presented in Table 4. Both domains had a positive relationship with out-of-home placement, which means the more risk factors present within both domains, the higher the chance for out-of-home placement.

Finally, to predict the duration of the CPM, the results of the multivariate logistic regression analysis showed that only the care domain explained the duration of the CPM. The model was accurate for 62.7% of the cases. There was a negative relationship between the care domain and the duration of the CPM, which means the more risk factors present within the care domain, the smaller the chance of a long duration of the CPM (see Table 5).

3.3 | Association between the cumulative risk over the domains and the child's safety

To test whether cumulative risk over the domains explained the child's safety (aim 3), three univariate regression analyses were conducted. The cumulative risk over the domains significantly accounted for 7% of the variance in the child's safety rating. A negative relationship was found between the cumulative risk over the domains and the child's safety rating, which means the more domains with risk factors were present, the lower the score on the child's safety rating. The cumulative risk over the domains also significantly predicted out-of-home placement. This model was accurate for 50.9% of the cases. The model indicated that the more domains with risk factors present, the higher the chance for out-of-home placement. The cumulative risk over the domains did not significantly predict the duration of the CPM (see Table 6).

4 | DISCUSSION

This study examined risk factors in expectant parents with intellectual disabilities in relation to the child's safety. To prevent stigmatisation of parenting with intellectual disabilities, we would like to reiterate that the results of this study only regard expectant parents with

TABLE 2 Pearson correlations between the child's safety rating and domains.

Domains	1	2	3	4	5	6	7	8
1. Child's safety rating								
2. Child domain	-.27 ($p = .008$)**							
3. Parent domain	.01 ($p = .475$)	.38 ($p = .000$)***						
4. Parenting domain	-.10 ($p = .205$)	.20 ($p = .041$)*	-.16 ($p = .085$)					
5. Family functioning domain	-.09 ($p = .207$)	.43 ($p = .000$)***	.10 ($p = .196$)	.22 ($p = .027$)*				
6. Contextual domain	-.15 ($p = 0.91$)	.35 ($p = .001$)**	.54 ($p = .000$)***	.13 ($p = .131$)	.23 ($p = .020$)*			
7. Social domain	-.25 ($p = .012$)*	.43 ($p = .000$)***	.41 ($p = .000$)***	.09 ($p = .217$)	.24 ($p = .018$)	.42 ($p = .000$)***		
8. Care domain	-.11 ($p = .165$)	.05 ($p = .330$)	.08 ($p = .330$)	-.40 ($p = .378$)	.10 ($p = .191$)	.22 ($p = .025$)*	.23 ($p = 0.23$)*	

* $p < .05$. ** $p < .01$. *** $p < .001$.

TABLE 3 Associations between the domains and the child's safety rating ($n = 78$).

Domains	B	SE B	t (p-value)
Model 1			
Constant	6.45	0.44	
Child domain	-0.27	0.11	-2.48 ($p = .050$)*

Note: ($R^2 = .08$, $F(7, 76) = 6.15$, $p = .015$).

* $p < .05$.

intellectual disabilities who were subjected to CPS before the child was even born. In line with our hypotheses, the results show that expectant parents with intellectual disabilities in child protection experience a broad range and a cumulation of risk factors in all life domains. The child's safety is best explained by risk factors within the child, family functioning, and care domain.

Comparing our results with the percentages of risk factors of other high-risk populations who were referred to care, but without an intellectual disability and a CPM (Bodden & Deković, 2016; Fernandez, 2007), it can be concluded that in our study more families experienced more risk factors. For example, 68.2% of our families had relational problems (vs 33.8% in Bodden & Deković; 13.7% in Fernandez) and 76.4% of the mothers and 49.1% of the fathers had financial problems (vs 59% in Bodden & Deković; 31.4% in Fernandez). Also, we found that more than half of our families (54.5%) experienced risk factors concurrently in all life domains. It was not possible to compare this result with other studies. With some caution, it can thus be concluded that our families are more troubled than other high-risk populations. This is not completely surprising, since experiencing multiple and complex problems is the main reason for imposing a CPM (Buysse et al., 2010; Slot et al., 2001). Yet the extent to which risk factors accumulate over all life domains for the majority of families is striking and had not been documented before.

The importance of the cumulative risk in predicting the child's safety rating, at first sight, seems odd when considering the result that the child's safety rating was best predicted by risk factors in the child domain. However, it seems like the other domains affected the child's safety rating through the child domain, which was also confirmed in the correlation analysis and the regression predicting the child's safety

rating by the cumulative risk over all domains. It is widely recognized that the risk for child unsafety does not have a single cause, but is a result of a cumulation of the presence of multiple risk factors (Brown et al., 1998; Mulder et al., 2014). The high correlations between the domains may have impacted the statistical power to disentangle unique contributions in regression analysis predicting the child's safety rating.

Cumulative risk also has an important role in predicting out-of-home placement, given that the odds of out-of-home placement increased when families experienced risk factors over multiple life domains. Moreover, this study showed that out-of-home placement was best predicted by the model with the family functioning and care domain. This can perhaps be explained by the fact that common risk factors within these domains (relational problems, conflicts within the family, bad cohesion in the family) are presumably the main focus of the care families received. On top of that, families often avoided care (care domain), which may increase the chances of out-of-home placement. These findings are contradictory to results previously found, which showed that child mental health problems better predicted out-of-home placement (e.g. Farmer et al., 2008; Park et al., 2007). We studied a younger group, in which mental health problems of children were not (yet) present. To the best of the authors' knowledge, risk factors related to out-of-home placement in newborns have not previously been studied.

Surprisingly, the more risk factors present within the care domain, the smaller the chance of a long duration of the CPM. Considering the risk factors within this domain (avoiding care, acceptance problems related to the CPM, a large number of care involved before start CPM), we expected that care factors increased the chance for a long duration. Also, against all expectations, we did not find that a cumulative risk over the domains was related to the duration. A possible explanation for both findings is that our study only included the duration of the first CPM, while for 47.3% of the children, the FSO escalated to state custody. Thus, for these families, a shorter duration indicated larger severity of problems. It is also possible that we obtained anomalous results because we did not include characteristics of the youth-care worker (such as work experience), while previous research has shown that 13%–21% of the variation in the duration is due to these characteristics (Busschers et al., 2016; Stams et al., 2010).

TABLE 4 Associations between the domains and out of home placement ($N = 110$).

Domains	B (p -value)	SE B	Exp(B) (95% CI)
Model 1			
Constant	-1.07	0.44	0.35
Family functioning domain	0.38 ($p = .007$)*	0.14	1.47 (1.11, 1.94)
Model 2			
Constant	-1.94	0.57	0.14
Family functioning domain	0.40 ($p = .007$)*	0.15	1.49 (1.11, 1.98)
Care domain	0.61 ($p = .008$)*	0.23	1.84 (1.18, 2.89)

Note: Model 1: $R^2 = .01$ (Hosmer & Lemeshow), $.07$ (Cox and Snell), $.09$ (Nagelkerke). Model ($X^2(1) = 7.87$, $p = .005$). Model 2: $R^2 = .06$ (Hosmer & Lemeshow), $.13$ (Cox and Snell), $.18$ (Nagelkerke). Model ($X^2(1) = 15.58$, $p = .000$).

* $p < .01$.

TABLE 5 Associations between the domains and the duration of the CPM ($N = 110$).

	B (p -value)	SE B	Exp(B) (95% CI)
Model 1			
Constant	0.65	0.35	0.60
Care domain	-0.51 ($p = .019$)*	0.22	.60 (0.40, 0.92)

Note: Model 1: $R^2 = .01$ (Hosmer & Lemeshow), $.05$ (Cox and Snell), $.07$ (Nagelkerke). Model ($X^2(1) = 5.78$, $p = .016$).

* $p < .05$.

Concluding, in line with our hypothesis, the results of the current study seem to endorse that it is not parents' intellectual disability in itself that leads to unsafe parenting conditions, but the cumulation of developmental and contextual problems, starting from parents' own youth, that seems to influence the child's safety.

When interpreting the results, several limitations should be taken into account. First, the current sample was very specific, consisting of parents with disabilities who were subjected to CPS before the child was even born, which can lead to an overestimation of the impact of parenting with intellectual disabilities on the child's safety (Emerson et al., 2015; Powell et al., 2017). Moreover, the variance in risk factors could have been limited due to the specific sample, which may (partly) explain why no or weaker associations between the risk factors and outcomes were found, also known as 'reduction of range' (Kelley & Preacher, 2012). Even though the sample size of 110 was sufficiently large to find medium effects with high power within this restricted range (Faul et al., 2009), clearer relations may exist when also including parents who are not subject to child protection orders.

Second, the data collection method—a casefile study—has its limitations. Casefiles within CPS are likely to be incomplete (Stams et al., 2010). It is, therefore, possible that the information from the casefiles was not representative, which means that there is a chance of bias in the assessment of risk factors and in the relationships between the domains and the child's safety. Furthermore, professionals may have under- or over-reported risk factors for child safety. Underreporting may be due to insufficient knowledge of signs and risk factors for child abuse (Gubbels et al., 2021). Overreport may be due to professionals' attitudes or prejudice towards parents with

intellectual disabilities, or a 'halo effect' where the presence of some risks is unwarrantedly generalized to the assumption that other risk factors will be present too (Proctor & Azar, 2013). Despite these limitations of casefile research in parents with intellectual disabilities, a casefile study also has several advantages. Practically, it is the least burdensome for both clients and organisations (Zegers & Wollersheim, 2012). More importantly, it concerns the actual information and decisions that are made in practice, and may therefore be most directly relevant to families.

Finally, the results regarding the child's safety rating can be biased because this is a clinical judgement and the instrument is not validated. It is widely recognized that the validation performance of clinical judgements is questionable (van der Put et al., 2017). Nonetheless, the use of clinical instruments is relatively common in CPS. Moreover, the child safety rating was not only based on the professional opinion of the youth care worker involved but it was made in consultation with colleagues and the behavioural scientist.

Although the aforementioned limitations may have affected the results, the current study is, to our knowledge, unique in its focus on this specific population, and the first that provided insight into present risk factors in expectant parents with intellectual disabilities discharged to child protection even before the child was born, and which domains of risk factors affected the child's safety. The results of this study contribute to the scientific literature on parenting among parents with intellectual disabilities and underline the need for effective preventive interventions for expectant parents with intellectual disabilities in order to reduce the risks of unsafe circumstances for the child. To get a better understanding of the risk factors that influences child safety in parents with intellectual disabilities, it is recommended for follow-up research to further expand the framework of risk factors, including youth-care worker characteristics, and also include protective factors. Also, additional interviews with caseworkers, clients, and other involved professionals are needed, to further examine the specific needs of these families.

Based on the current results, we recommend for the (further) development of supportive interventions to take the remarkably high risks and cumulative risks of this specific population into account, rather than the intellectual disability itself, in understanding unsafe circumstances for the child. In doing so, it is important to use an

	B (p-value)	SE B	β	Exp(B) (95% CI)
The child's safety rating (n = 78)				
Constant	9.78	1.81		
Cumulative risk over the domains	-0.66 (p = .020)*	0.28	-.26	
Out-of-home placement (n = 110)				
Constant	-3.81	1.69		0.02
Cumulative risk over the domains	0.59 (p = .024)*	0.26		1.81 (1.08, 3.01)
Duration of the CPM (n = 110)				
Constant	1.81	1.55		6.13
Cumulative risk over the domains	-0.29 (p = .230)	0.24		0.75 (0.47, 1.20)

Note: The child's safety rating: ($R^2 = .07$, $F(1, 76) = 5.64$, $p = .020$). Out-of-home placement: $R^2 = .01$ (Hosmer & Lemeshow), .05 (Cox and Snell), .07 (Nagelkerke). ($X^2(1) = 5.63$, $p = .018$). Duration of the CPM: ($X^2(1) = 1.48$, $p = .224$).

* $p < .05$.

TABLE 6 Association between the cumulative risk over the domains and the child's safety.

ecological approach when working with these families, where the risk and protective factors of the different domains are considered in interaction with each other (Feldman & Aunos, 2020). For example, in teaching parents with intellectual disabilities to cope with their child's crying, it is not only important to pay attention to parents' empathy, which may be limited due to the cognitive and adaptive disabilities they face, but also to the interpersonal traumas parents' may have experienced (Hammarlund et al., 2022). From these traumas, parents themselves have learned behaviour and examples of how to deal with a child crying. In addition, the traumas may have limited their empathy. Finally, as the accumulation of risk factors related to child safety is already present during pregnancy, it is important to support these parents in an early stage, even during pregnancy, to shift away from a crisis-driven model (O'Keeffe & O'Hara, 2008).

Besides these specific recommendations, we would like to provide some more general recommendations for working effectively with parents with an intellectual disability based on previous research. First, to tailor the intervention to parents' needs arising from the intellectual disability, interventions must be skill-focused, use behavioural strategies, are home-based, long-term, and intensive (Aunos & Pacheco, 2021; Feldman, 1994; Koolen et al., 2020). Furthermore, the intervention must be in partnership with the family and the informal network of the family, to increase resilience in parents with intellectual disabilities (Atkin & Stenfort Kroese, 2021; Scheffers et al., 2020). The professional needs to be supportive and tailored to the needs of parents with intellectual disabilities, to promote working alliance and increase parents' trust in support (Hanson et al., 2023). Moreover, the professional should know the rights of children and the rights of parents with intellectual disabilities (Hanson et al., 2023).

Unfortunately, current preventive interventions specifically designed for parents with intellectual disabilities are scarce and do not include all seven key elements to effectively work with parents with intellectual disabilities (Zijlstra et al., 2023). Given the rights of parents with intellectual disabilities to adequate and effective support in raising their children, it is strongly recommended to implement a youth

care system in which preventive continuous sustainable support, based on effective key elements described above, can be provided to families with intellectual disabilities, in conjunction with periods of more intensive help tailored to the family. In doing so, professionals should be supported, with training and supervision in working with parents with intellectual disabilities to fit the needs of these families. Moreover, as professionals often lack the time and materials in implementing this, professionals must be supported in this by policy regulations, such as reducing the caseload so that the professional has more time for the family.

5 | CONCLUSION

This study shows that expectant parents with intellectual disabilities subject to child protection before the child is born, experience a cumulation of risk factors over multiple life domains, which increase the risks for the child's safety once the child is born. This indicates that it is not the intellectual disability itself that leads to unsafe conditions for the newborn child, but the cumulation of problems that affects the child's safety. The current findings suggest that preventive interventions for this specific group should therefore address their needs from an ecological perspective. By intervening with effective interventions that are directed to the specific needs of this group in an early stage, even during pregnancy, unsafe conditions for the newborn can potentially be prevented.

ACKNOWLEDGEMENTS

This publication resulted (in part) from research supported by the Netherlands Organisation for Health Research and Development (ZonMw), Program Unintentional Pregnancy and Vulnerable (Young) Parenthood (project number: 554002013). The content is solely the responsibility of the authors and does not necessarily represent the official views of ZonMw.

FUNDING INFORMATION

This work was supported by the Netherlands Organisation for Health Research and Development (ZonMW) Program Unintentional Pregnancy and Vulnerable (Young) Parenthood (project number: 554002013).

CONFLICT OF INTEREST STATEMENT

Bram Orobio de Castro reports financial support was provided by ZonMw. Rest of the authors have no conflict of interest in the publication of this article.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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How to cite this article: Zijlstra, A., Sterenborg, T., van Nieuwenhuijzen, M., & de Castro, B. O. (2024). Expectant parents with intellectual disabilities in child protection: Risk factors for child safety. *Journal of Applied Research in Intellectual Disabilities*, 37(3), e13230. <https://doi.org/10.1111/jar.13230>