

# **Influential factors of nurses' risk assessment for parenting and developmental problems by 18 months old children**

- A secondary data analysis -

Student name: H. Bouter

Student number: 5681928

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University: Utrecht University, Master Clinical Health Sciences, Nursing Science, University Medical Center Utrecht, Utrecht, the Netherlands

Supervisor: H.F. van Stel

I.I.E. Staal

Lecturer: I. Uitewaal-Poslawsky

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## English abstract

**Title:** Influential factors of nurses' risk assessment for parenting and developmental problems by 18 months old children.

**Background:** For advice and support about raising children, parents can go to Preventive Child Health Care (PCHC). Since it is important to detect parenting and/or developmental problems at an early age, PCHC nurses assess if a child has a low, increased or high risk for these problems. PCHC nurses want more knowledge which factors influence the risk assessment.

**Research question:** How do parental demographic characteristics, perceived needs for support and balance factors - as measured with the Structured Problem Analysis of Raising Kids (SPARK) - influence the risk assessment from a PCHC nurse on parenting and developmental problems by children of 18 months old?

**Method:** A secondary data analysis was conducted by using SPARK-data of 3895 participants, collected in the period December 2006 to January 2008. Ordinal regression analyses were used to gain insight in the associations between variables and the risk assessment.

**Results:** Most variables turned out to be significant, most influential were the variables 'employment father' and 'type of household'. Furthermore, the factors 'family issues', 'developmental stimulation', 'hygiene of the home' and 'hygiene of the family members' have great influence.

**Conclusion:** Study results shows the most influential variables belong to family and living environment. The balance factors are most influential. These findings match with previous research.

**Recommendations:** An overview of the results of this study could be handed out to all PCHC nurses and used in SPARK-training, to pay extra attention to these factors when conducting the SPARK. Further research could be aimed at other provinces of the Netherlands to see if this will result in the same influential factors.

**Keywords:** PCHC nurse, SPARK, risk assessment, parenting problems, child development.

## Dutch abstract

**Titel:** Invloedrijke factoren voor de risico inschatting van een verpleegkundige betreffende opvoedings- en ontwikkelingsproblemen bij kinderen van 18 maanden.

**Achtergrond:** Voor advies en steun over het opvoeden van kinderen kunnen ouders terecht bij de jeugdgezondheidszorg (JGZ). Het is belangrijk om zo vroeg mogelijk opvoedings- en/of ontwikkelingsproblemen te signaleren en de JGZ-verpleegkundige meet of een kind een laag, verhoogd of hoog risico op deze problemen heeft. JGZ-verpleegkundigen hebben aangegeven dat ze graag meer kennis willen over de invloed van de verschillende factoren op de risico inschatting.

**Onderzoeksvraag:** Hoe beïnvloeden demografische gegevens van de ouders, de waargenomen steunbehoefte en de balansfactoren - zoals gemeten met de Structured Problem Analysis of Raising Kids (SPARK) - de risico inschatting van de JGZ-verpleegkundige op opvoedings- en ontwikkelingsproblemen bij kinderen van 18 maanden?

**Methode:** Een secundaire data analyse is uitgevoerd waarbij gebruik is gemaakt van een SPARK-dataset met de gegevens van 3895 participanten, verzameld in de periode December 2006 tot Januari 2008. Ordinale regressie analyses werden uitgevoerd om de associatie te onderzoeken tussen variabelen en de risico inschatting.

**Resultaten:** Het grootste deel van de variabelen bleek significant te zijn. De factoren met de meeste invloed zijn de 'werkstatus van de vader' en de 'gezinssamenstelling'. Daarnaast spelen de factoren 'gezinsproblemen', 'ontwikkelingsstimulering', 'hygiëne woonomgeving' en 'hygiëne gezinsleden' een grote rol.

**Conclusie:** De bevindingen van deze studie laten zien dat de meest invloedrijke factoren gebaseerd zijn op familie en woonomgeving. De balansfactoren hebben de meeste invloed. Deze bevindingen komen overeen met eerder uitgevoerd onderzoek.

**Aanbevelingen:** Een overzicht van de onderzoeksresultaten kan worden uitgedeeld aan JGZ-verpleegkundigen en gebruikt worden tijdens een SPARK-training zodat er extra aandacht is voor de invloedrijke factoren bij het uitvoeren van de SPARK. Toekomstig onderzoek kan toetsen of andere provincies dezelfde resultaten opleveren.

**Trefwoorden:** JGZ-verpleegkundige, SPARK, risico inschatting, opvoedproblemen, ontwikkeling kind.

## Introduction

The transition into parenthood is a profound change for many people<sup>(1-3)</sup>. Besides a lot of joyful moments, being a parent also brings insecurity and questions<sup>(4,5)</sup>. For advice and support about raising children, parents can go to Preventive Child Health Care (PCHC).

In the Netherlands, PCHC offers preventive care and also monitors children growing up to adulthood. In a well-baby clinic, a part of PCHC for children between 0 and 4 years old, standardised consultation moments are available for all parents<sup>(6,7)</sup>. The well-baby clinic is seen by Dutch parents as an important source of information for the development of their child<sup>(8)</sup>. Almost all Dutch parents with children between the age of 0 and 4 visit the well-baby clinic; this is a visitor rate of 99% for children in the age of 0 till 1 years old, decreasing to an attendance rate of 95% when stretching the age group from 0 till 4 years old<sup>(9)</sup>.

In the age group of 0 till 4 years old, an estimated 10 to 25% of the children show a varying degree of problems related to parenting and/or psychosocial development<sup>(10)</sup>, e.g. sleep disorder, language disorder and/or child maltreatment<sup>(6)</sup>. Research has shown that an early intervention has the most beneficial impact on the developmental outcomes of the child<sup>(11)</sup>. Additionally, the infant-toddler years are a sensitive period in human life for effective prevention and intervention efforts<sup>(12)</sup>. Therefore, it is important to detect parenting and/or development problems as soon as possible<sup>(13,14)</sup>. Because of the high visitor rate, the well-baby clinic is a suitable institute to detect parenting and/or developmental problems at an early stage.

In the first years of life, a child's social-emotional development occurs primarily in the context of the relationship with the parents<sup>(15)</sup>. Research has shown that a parent is an accurate source to estimate parenting and/or development problems<sup>(15,16)</sup> enabling parents to express their suspicions and concerns<sup>(17,18)</sup>. The Structured Problem Analysis of Raising Kids (SPARK) is a validated measurement instrument which combines the perspective of the parent(s) and the PCHC nurse. It is a structured interview for early detection and risk assessment of parenting and developmental problems in young children<sup>(19)</sup>. The SPARK is implemented by several PCHC organisations in the Netherlands. The SPARK is administered when a child reaches the age of 18 months<sup>(19,20)</sup>, the age at which a child makes a transition from infant into toddler. At this age most developmental problems are readily evident<sup>(21)</sup>.

When applying the SPARK, the PCHC nurse fills out the demographic characteristics and asks the parents if they have experienced any concerns in the past six months and informs about their needs for support. Then the nurse can decide on follow-up actions together with the parents. Also, the PCHC nurse marks which balance factors are relevant, impacting a

child's development positively or negatively<sup>(20)</sup>. At the end of the SPARK, the PCHC nurse assesses the risk for parenting and/or developmental problems. The risk assessment has 3 possible outcomes: low, increased and high risk<sup>(19,20)</sup>.

However, based on clinical expertise there is a need for additional insight in the risk assessment. PCHC nurses want more knowledge about which SPARK-variables are impacting the risk assessment the most. Although research has proven the ability of PCHC nurses to make a valuable risk assessment, they are feeling insecure about making this assessment. More insight into the impact of the SPARK-variables will stimulate PCHC nurses' trust in a valid and reliable risk assessment by using the SPARK.

The SPARK is validated on several aspects but a recommendation was made for further research on construct validity<sup>(22)</sup>. A construct can be seen as a 'mini-theory' to explain relationships<sup>(23)</sup> and the underlying principle of construct validity is that hypotheses are formulated about the difference in instrument scores between subgroups<sup>(24)</sup>, i.e. groups of parents with different characteristics. The construct of the SPARK can provide insight in the relationships between the variables and the outcomes and differences between subgroups, leading to possible key variables in the risk assessment conducted by the PCHC nurse.

### **Research question**

How do parental demographic characteristics, perceived needs for support and balance factors - as measured with the SPARK - influence the risk assessment from a PCHC nurse on parenting and developmental problems in children of 18 months old?

To answer the research question, the following sub questions will be examined:

- How do parental demographic characteristics influence the risk assessment?
- How do parental perceived needs for support influence the risk assessment?
- How do balance factors influence the risk assessment?

## **Method**

### *Design*

A quantitative, secondary data analysis was conducted to assess the influence of the SPARK-variables on the risk assessment. This design allows for studying new questions on an existing large sample<sup>(25)</sup> by extracting new insights out of the original data set<sup>(26)</sup>.

### *Setting and population*

In this study, 2 datasets were analysed. The first data set consisted of data from a Randomized Controlled Trial (RCT) addressing the question whether, compared to a visit to the well-baby clinic, a home visit improves the early detection of parenting problems and developmental problems in young children – measured with the SPARK (Appendix 1)<sup>(27)</sup>. The RCT was conducted at GGD Zeeland, province Zeeland, in the Netherlands. Data was collected between December 2006 and January 2008. All PCHC nurses of GGD Zeeland were trained in executing the SPARK and eligible to participate in the RCT. The dataset consisted of SPARK-data from 3895 participants and originating from both RCT arms, as the SPARK was executed in the same way; all data was taken into account. The required sample size for the current study was calculated using the model of Tabachnick and Fidell<sup>(20,28)</sup>, resulting in a number of 706 participants, well below the available number.

A second data source provided data for a stakeholder analysis. This data was collected through a survey on opinions containing questions around variables influencing the risk assessment, further referred to as PCHC-survey (Appendix 2). The content of this survey was based on clinical practice. PCHC nurses were invited to participate in this survey during a training day at GDD Zeeland in October 2017.

### *Outcome measures*

The primary outcome of this study are the factors influencing the risk assessment and their individual level of influence measured with the SPARK.

When a PCHC nurse is going to conduct a SPARK, she fills out the demographic characteristics. These characteristics consist of, for example, the variables 'household', 'age' and 'educational level of the parents'. The SPARK consists of 16 topics, ranging from somatic health of the child to family issues. For each topic the PCHC nurses start with a short description of the topic concerned, including examples. Secondly, she asks 6 questions for every topic. The first question is whether there have been concerns or problems in the last 6 months; thus collecting experiences of the parents. Parents are asked to assess these concerns on an adjectival scale<sup>(29)</sup> from 1 'no concern at all' to 5 'very concerned'. If concerns

are cited (answers 3-5 on the adjectival scale), parents are asked to elaborate on the exact nature of these concerns (questions 2, 3 and 4). Each domain ends with question 5 for which parents assess their current need of support - on a 6-points adjectival scale, varying from 1 'no help needed' until 6 'immediate intervention required' - and question 6 for which the PCHC nurse makes a similar assessment.

After all topics are questioned, the PCHC nurse makes a joint decision with the parents about the care they need in the coming months and, if yes, what care specifically. Finally, the PCHC nurse ends the visit and subsequently makes an overall risk assessment if a child has a low, increased or high risk for developing parenting and/or developmental problems. To make this assessment, she uses information from the interview and assesses the pre-printed balance factors. These balance factors might positively or negatively influence the risk assessment of the PCHC nurse; the balance factors have 2 possible answer categories: negative (higher risk) or positive (lower risk)<sup>(20,27)</sup>. Children with a higher risk are further discussed in the PCHC team and support can be provided to the parents.

To answer the research question of this study, the demographic characteristics, the need for support for the 16 topics and the balance factors are used. For this study, only question 1, 5 and 6 are taken into account for the analysis since these 3 questions are filled out by default by each nurse. They will be further referred to as *experience-last-6-months* (question 1), *parent-reported-need* (question 5) and *PCHC-nurse-reported-need* (question 6). An overview of all 54 variables can be found in table 1.

(insert table 1)

A second outcome of this study are the PCHC nurses' opinions regarding what factors are influencing the risk assessment and their level of influence. These outcomes are based on the second dataset.

### *Data analysis*

All data has been analysed by using IBM SPSS Statistics version 25.0 (Armork, New York, USA). The SPARK-data set is an existing SPSS-datafile. To be suitable for analysis, the PCHC-survey and results were entered in Epidata<sup>(30)</sup> and transferred into a SPSS-data set. The relevant variables turned out to have a non-parametric distribution<sup>(31)</sup>. Some variables were recoded to be better suitable for analysis. To describe the population of the SPARK-dataset, a description of the demographic characteristics was created using descriptive statistics.

For determining the level of influence of the different factors on the risk assessment, a non-parametric test was conducted followed by an ordinal regression analysis. The non-

parametric test was performed to measure the absolute risk differences; the regression analysis to create insight into the association between variables<sup>(32)</sup>. For all variables, the non-parametric test Kruskal Wallis (KW)-test was used, with the exception of demographic variables 'age' and 'family order'<sup>(32,33)</sup>; for this, the Analysis of variance (Anova) was chosen due to a normal distribution<sup>(31)</sup>. When performing a regression analysis with ordinal outcomes (such as the risk assessment), it is recommended to use an adaptation of logistic regression, known as ordinal regression analysis with a proportional odds model<sup>(34-36)</sup>.

The KW-test assessed the distribution of the participants over the risk assessment outcome possibilities to see if this is different among the categories of a variable. For example, to check for differences among the categories low, intermediate and high of the variable 'education level'. If a significant difference was found, with a p-value of  $<0.05$ <sup>(31,32)</sup>, the variable is influencing the risk assessment. A significant outcome for the KW was followed by a comparison between the different categories for which the resulting p-value of each comparison was corrected to ensure the overall error rate remains at 5%<sup>(32)</sup>.

To assist the interpretation of significant results of this test for clinical practice, risk differences between the average risk from variable categories were calculated. Dependent outcome categories were assigned numbers, using the number 1 for 'low risk', 2 for 'increased risk' and 3 for 'high risk' assessment. The differences between the categories were presented by using average categories of 0.00-0.50, 0.51-1.00 and  $>1.01$  differences. For example, if a category has an average of 1.2, this category lays in the lower part of the 'low risk' category; a category with an average of 1.9 is in the upper part of the 'low risk' category, close to the 'increased risk' category. For each topic, the total number of within-topic risk differences between categories was 10 for *experience-last-6-months* with 5 categories, and 15 for both *parent-reported-need* and *PCHC-nurse-reported-need* (each with 6 categories). Because the PCHC nurses only fill out the relevant balance factors, a third answer category 'neutral' for blanks was computed and added, resulting in a total of 3 possible risk differences for the balance factors.

Subsequently, a regression analysis was conducted to view the relationship between the independent variables and the risk assessment. An univariate regression analysis was conducted, followed by a multivariate analysis of the variables per research question and a multivariate analysis of all variables.

To help interpretation for clinical practice, an odds ratio (OR) was calculated for significant variables from the regression analyses<sup>(34,37)</sup>. Considerably high OR's were not taken into account for consideration<sup>(38)</sup>.



Some variables had to be recoded to be able to use the recommended largest category as reference category in this study<sup>(39)</sup>; instead of using the default last category.

For the demographic variables, the largest category was determined by using descriptive statistics. As the need for support-questions use an ordinal adjectival scale, the sequence cannot be altered. However, the sequence has been reversed to put category 1 as the last category since category 1 (no help needed) is expected to be the largest category. For the balance factors, the category 'neutral' was used as reference category.

When 75% of a questionnaire from the PCHC- survey was filled out, the questionnaire was taken into account for analysis. The results of the survey were presented with descriptive statistics.

### *Ethical considerations*

This study is a non-Medical Research involving Human Subject Act study<sup>(40)</sup>, due to already anonymized data for which parents gave informed consent to use the data for scientific research<sup>(27)</sup> and the Dutch law 'wet op de geneeskundige behandelingsovereenkomst' is applicable<sup>(41,42)</sup>. The Medical Ethical Review Committee of the University Medical Center Utrecht gave a positive advice for the RCT study (protocol number 06-290/C dated October 21, 2006). The RCT is registered at the Netherlands Trial register (identification number NTR1413)<sup>(27,43)</sup>.

The PCHC nurses received an explanation about this study and the survey. By filling out the survey, nurses gave informed consent<sup>(41)</sup>.

Since personal data is used, the General Data Protection Regulations are applied<sup>(44)</sup>. The study will be conducted according the principles of the declaration of Helsinki<sup>(45)</sup>. All data used in this study was stored on an encrypted usb-stick; a back-up was stored at the secured servers of University Medical Center Utrecht.

## Results

The population characteristics are presented in table 1 and divided over the 3 risk groups; for each risk factor, the percentages for the demographic factor categories are displayed. In all 3 groups, most children are firstborns and boys and households are predominantly households with 2 parents; these percentages are smaller when the risk assessment level increases.

The largest part of the population has a Dutch nationality and an intermediate education level. The high risk group had lower employment figures for both father and mother, and a higher percentage for housewife.

(insert table 2)

A KW-test was conducted for all variables and risk differences between the groups of variables were calculated. All outcomes of the KW-test and the risk differences in averages can be found in Appendix 3.

The majority and largest risk differences in numbers for the demographic characteristics were found between categories of the variables 'household' and 'employment mother'. Concerning the need for support-questions, most differences were found for the variables 'parenting approach', 'family issues' and 'emotional development'. For the balance factors, most differences are present in 'hygiene home' and 'hygiene family members'.

Following the KW-test, an ordinal regression analysis was executed. In chronological order: an univariate analysis, a multivariate analysis per group variables and a multivariate analysis for all variables. All results of the regression analysis are available in Appendix 4.

Most variables in the univariate analysis were significant, 48 out of a total of 53 variables. For the demographic characteristics, the variables 'household' and 'employment mother' are most influential, with the highest OR for an one-parent household and a mother who is unable to work. The need for support-questions turned out to be significant for all 16 variables, containing a number of notably high OR's. Combined with the amount of significant results per variable, the most influential variables turned out to be 'motor development', 'parenting approach' and 'family issues'. The balance factors showed 'hygiene home', 'hygiene family members' and 'addiction parents' for having the highest OR and being most influential.

In the multivariate analysis per group variables, 38 of the 48 significant variables of the univariate analysis remained significant. For the demographic variables, the results from the univariate analysis were reflected. The multivariate analysis for the need for support-

variables resulted in the same influential variables as well. For the balance factors, variable 'hygiene home' remained most influential, together with 'psychiatric problems parents' and 'motor development'.

From the 38 significant variables in the multivariate analysis per group, 37 remained significant in the multivariate analysis of all variables. The demographic variables 'employment father', 'household' and 'education level father' are most influential. For the need for support variables, the previously found 3 variables were significant: 'family issues', 'motor development' and 'parenting approach'. The multivariate analysis shows most variables from the balance factors to be significant with high OR's; the factors 'hygiene home', 'competence of the parents' and 'openness parents during visit' have the highest OR.

An overview of the statistical tests and five most influential factors per category per test can be found in table 3.

(insert table 3)

The PCHC-survey data set consisted of data from 51 participants, this is a response rate of 100%. 50 questionnaires were taken into analysis since 1 questionnaire had less than 75% of the questionnaire filled out. From the PCHC nurses who filled out the PCHC-survey, 62% was trained in how to use the SPARK by a SPARK-developer; 38% was trained by other PCHC nurses and/ or self-study. They were using the SPARK for 8.2 years on average. The factors most influential on the risk assessment were the observation of child behaviour and development (82%), observation of interaction between parents and child (82%) and the need for support from parents (76%). The results of this survey are displayed in table 4.

(insert table 4)

## Discussion

This study on the influence of the SPARK-components on the risk assessment of the PCHC nurse showed that all major components of the SPARK (demographic variables, need for support, balance factors) contributed significantly to the risk assessment.

The majority of the demographic factors have a significant but varying influence on the risk assessment. The multivariate analyses show that 'employment of the father', 'type of household' and 'education level of the father' have the largest influence. For the need for support-factors, these are 'motor development', 'parenting approach' and 'family issues'. The 'hygiene home' and 'hygiene family' are most influential for the balance factors. Overall, the balance factors supply the most significant variables in the multivariate analysis. The PCHC-survey results in the factors 'interaction between parents and child', 'behaviour and development of the child' and 'need for support for the parents'; these factors are most important in the risk assessment according to PCHC nurses.

The findings of this study are in line with the results of other studies about influential factors. Previous research stated that a two parent household<sup>(46,47)</sup> and hygiene<sup>(48,49)</sup> have a positive impact on the development of the child. Also, prior research on the SPARK shows, the factor 'employment father' as a predictor for child abuse and neglect<sup>(50)</sup>, matching the results of this study. The factor 'family issues' corresponds with existing literature about early interventions to prevent developmental problems in children<sup>(51,52)</sup>. Support in parenting approach results in a better development of the child, matching the variable 'parenting approach'<sup>(53,54)</sup>.

The need for support variables and the balance factor 'interaction between parent and child' are designated in the PCHC-survey as influential, reflecting the results from this study. The observation of the development and behaviour of the child are also in line with the study results despite the development of the child being more influential than the behaviour of the child.

This study has a few strengths and limitations. For strengths, the size of the RCT-dataset exceeded the required sample size, resulting in a strong power<sup>(31)</sup>. Secondly, the results of this study are matching with previous research. Third, the results are representative for the age-category due to the high visitor rate of the well-baby clinic, resulting in a 95% response in the RCT. A fourth strength of this study is the fact that the PCHC-survey was filled out by nurses who work with the SPARK in the same region where the RCT-data is coming from, with a 100% response rate.

A limitation is that some of the calculated OR's for the need for support-variables are considerably high. This could be due to the fact that the higher answer categories

(intermediate level intervention needed) has smaller groups but often a higher risk category. To correct for these high OR's in a next study, the higher answer categories could be merged or a relative risk could be calculated<sup>(38)</sup>. A second limitation is the Kruskal Wallis-test using medians when calculating differences between groups, resulting in no differences. This was corrected by using averages for the calculation of risk differences. Third, since the RCT-data was based on cross-sectional data it is not possible to detect any causality.

#### *Practical implications*

This study confirms that PCHC nurses are capable of performing a valid and reliable risk assessment<sup>(50)</sup>. To help them feeling more secure, an overview of the study results could be handed out to all PCHC nurses. This overview would present the most influential SPARK-components enabling the PCHC nurse to pay extra attention to these components when conducting the SPARK. Moreover, the study results and the overview can be integrated in the SPARK-training for PCHC nurses.

Further research could be aimed at other provinces of the Netherlands to explore if this results in similar influential factors. An interesting province could be Zuid-Holland, since it is more urbanized and a higher percentage of non-Dutch inhabitants<sup>(55,56)</sup>.

#### *Conclusion*

This study shows the influential factors of a nurses' risk assessment for parenting and/or developmental problems. Several demographic and need for support-variables turned out to be influential and the balance factors were most influential. These results are matching with previous research and can be used to improve PCHC nurse' skills for conducting a valid and reliable risk assessment.

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## Tables

Table 1. SPARK variables per group

Variables per group		
<b>Demographic variables</b>	<b>Need for support topics</b>	<b>Balance factors</b>
Gender of the child	Infancy review	Motor development
Place in family order	Somatic health	Behaviour
Household	Motor development	Interaction between parent and child
Age mother	Language, speech and cognitive development	Speech
Age father	Language use parents	Eating habits
Ethnicity mother	Emotional development	Atmosphere at home
Ethnicity father	Contact between the child & others	Safety
Language mother	Child behaviour	Child attachment
Language father	Parenting approach	Safety
Education level mother	Developmental stimulation	Hygiene family members
Education level father		
Employment mother	Time spending	Hygiene home
Employment father	Living environment	Furnishing
	Social contacts	Observe other
	Day care of the child	Child factors
	Concerns communicated by others	Difficult infant period experienced
	Family issues	Competence of the parents
		Parents agree among themselves
		Amount of social support
		Financial obstacles
		Chronic health problem parents
		Addiction parents
		Psychiatric problems parents
		Negative childhood parents
		Openness parents during visit

Table 2. Demographic characteristics per risk group

Demographic characteristics	Low risk	Increased risk	High risk
<b>Gender of the child</b>			
Male	52.2%	55.2%	56.6%
Female	47.8%	44.8%	43.4%
<b>Place in family order</b>			
First child	43%	37.6%	41.0%
Second child	35.7%	37.5%	34.4%
Third child	13.3%	15.5%	13.9%
Fourth or higher child	8%(max 12 children)	9.4% (max 15 children)	10.7% (max 8 children)
<b>Household</b>			
Two parent household	95.9%	82.2%	75.4%
One parent household	1.1%	8.9%	13.9%
Shared household	2.0%	4.1%	3.3%
Other	0.9%	4.8%	7.4%
<b>Parent characteristics</b>			
Age mother (mean in year, SD)	32(4.7)	31.4(5.4)	30.2(5.5)
Age father (mean in year, SD)	34.6(5.4)	34.6(6.4)	34.4(6.8)
Ethnicity: non Dutch mother	6.0%	15.7%	11.5%
Ethnicity: non Dutch father	5.6%	14.2%	16.4%
Language non Dutch mother	2.0%	6.1%	5.7%
Language non Dutch father	2.1%	6.3%	6.6%
<b>Education level</b>			
Low education	16.6% mother 19.7% father	28% mother 30.8% father	19.9% mother 22.4%father
Intermediate education	54.6% mother 49.6% father	52.3% mother 42.6% father	53.6%mother 48.0%father
High education	28.2% mother 29.4% father	18.3% mother 20.1% father	25.8% mother 27.0%father
<b>Employment</b>			
Employed	72.9% mother 95.9% father	56.1% mother 82.8% father	45.9% mother 73.0% father
Unemployed	0.5% mother 0.3% father	1.3% mother 2.7% father	2.5% mother 3.3% father
Unable to work	0.2% mother 0.3% father	1.4 % mother 1.7% father	5.7 % mother 4.1% father
Stay-at-home mom/ stay-at-home dad.	23.6% mother 0.6% father	34.7 % mother 1.2% father	36.1 % mother 0.8% father

Table 3. Selection of significant results from the statistic tests

	<i>Kruskal Wallis</i>	<i>Univariate regression analysis</i>	<i>Multivariate per group variables</i>	<i>Multivariate all variables</i>
<b>Demographic characteristics</b>	Household Employment mother Employment father Language father Language mother	Employment mother Household Employment father Language father Education level father	Employment mother Household Education level mother Education level father	Employment father Household Education level father Education mother
<b>Need for support</b>	Parenting approach Family issues Emotional development Living environment How child spends time	Parenting approach Family issues Motor development Concerns communicated by others How child spends time	Family issues Motor development Parenting approach Developmental stimulation Living environment	Family issues Motor development Parenting approach Concerns communicated by others Developmental stimulation
<b>Balance factors</b>	Hygiene family members Hygiene home Living environment Addiction parents Competence parents	Hygiene family members Hygiene home Addiction parents Atmosphere home Competence parents	Hygiene home Psychiatric problems parents Motor development Financial obstacles Competence parents	Hygiene home Competence of parents Openness parents during visit Psychiatric problems parents Observe others

The five variables with the most influence were selected per group variables, per statistic test.

Table 4. Results PCHC-survey

	<i>Level of influence per factor (N=50)</i>			
	<i>Heavy</i>	<i>Medium</i>	<i>Light</i>	<i>None</i>
<b>Observation behaviour and development child</b>	41 (82%)	7 (14%)	1 (2%)	1 (2%)
<b>Observation of interaction between parent and child</b>	41 (82%)	6 (12%)	1 (2%)	2 (4%)
<b>Need for support of the parents</b>	38 (76%)	8 (16%)	4 (8%)	-
<b>Observation environment</b>	28 (56%)	18 (36%)	1 (2%)	2 (4%)
<b>Gut feeling</b>	25 (50%)	18 (36%)	7 (14%)	-
<b>Literature based known risk factors</b>	23 (46%)	18 (36%)	9 (18%)	-
<b>Work experience</b>	19 (38%)	27 (54%)	3 (6%)	1 (2%)
<b>Demographic characteristics</b>	2 (4%)	24 (48%)	18 (36%)	6 (12%)
<b>Other</b>	2 (4%)	1 (2%)	1(2%)	-

## Appendix 1

### SPARK (1)



Wilt u onderstaande gegevens voor alle 18-maands kinderen invullen alvorens met het contactmoment te beginnen.  
Alstublieft ook invullen wanneer de ouder geen gebruik wil maken van dit contactmoment en/of andere diensten vanuit de JGZ.  
De antwoorden worden anoniem gebruikt om een beeld te kunnen geven over de gezondheid van kinderen in Zeeland.

Kindnummer     -   -   -   -    
code jgz.WV      jaar      maand      dag      volgnummer  
contact (per dag)

BSN code

Jongen      Geboortedatum:   -   - 20    
 Meisje      Plaats in de kindertijd:       Totaal aantal kinderen:

#### Gezinsinfo:

Gezinssamenstelling:  twee-oudergezin    één-oudergezin    samengesteld gezin    anders \_\_\_\_\_

Geboortjaar ouder(s): moeder  1  9   vader  1  9

Indien van toepassing etnische achtergrond ouder(s): ♀ \_\_\_\_\_  
♂ \_\_\_\_\_

#### SPARK-info:

Contact vorm:

- Huisbezoek  
 Verlengd CB  
 Geen contact

Wie aanwezig tijdens contactmoment:

- Moeder  
 Vader  
 Betreffende kind  
 Andere kinderen  
 Anders \_\_\_\_\_

Tijdsduur:

Invullen SPARK:    minuten

Totale contacttijd:    minuten

Postcode:

### Scorekaart 1

SPARK:Zorgtaxatie inventariseren waar ouders mee zitten (eerdere en huidige behoefte aan hulp en ondersteuning)	1. Heeft u in de afgelopen 6 maanden vragen gehad of problemen ervaren bij (domein + voorbeelden):  1 = geen 2 = weinig 3 = redelijk wat 4 = veel 5 = heel veel					2. Heeft u behoefte aan hulp en ondersteuning gehad?  1 = geen behoefte gehad 2 = wel behoefte gehad, maar niets gevraagd 3 = wel behoefte gehad, maar niets gevonden 4 = wel behoefte gehad én gebruikt				3. Van welke hulp en ondersteuning heeft u gebruik gemaakt? (kruis aan op scorekaart 2)  4. Kunt u er na deze hulp en ondersteuning beter mee omgaan? 1 = ja 2 = min of meer 3 = nee			5. Heeft u NU (nog) behoefte aan hulp en ondersteuning?  1 = geen 2 = info uit interesse 3 = persoonlijk advies 4 = begeleiding 5 = hulp nodig 6 = direct ingrijpen nodig						6. Inschatting van de JGZ over de nodige hulp en ondersteuning  1 = geen 2 = anticiperende voorl. 3 = persoonlijk advies 4 = begeleiding 5 = hulp nodig 6 = direct ingrijpen nodig					
	1	2	3	4	5	1	2	3	4	1	2	3	1	2	3	4	5	6	1	2	3	4	5	6
a. samenvatting zuigelingenperiode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. gezondheid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. motorische ontwikkeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. taal-spraak-denk ontwikkeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. taalgebruik ouders "indien van toepassing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. emotionele ontwikkeling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. omgang met anderen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. gedrag van het kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. aanpak van opvoeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. ontwikkelingsstimulering & vroeg/voorschool educ <input type="checkbox"/> VVE <input type="checkbox"/> KOV <input type="checkbox"/> straks PSZ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. tijdsbesteding van kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. woon- en leefsituatie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. (sociale) contacten & informele steun aantal contacten: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. opvang van kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. zorgen aangegeven door anderen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. gezinszaken	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. iets vergeten, namelijk: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Scorekaart 2, SPARK zorgaanbod:** in kaart brengen welke zorg/steun al ontvangen is door de ouder. Daarna het nieuwe zorgaanbod afspreken

**Invulinstructie:** omschrijf waarom/waarvoor dit bijbehorend zorgaanbod is/wordt aangeboden, onderwerpletter uit de inventarisatie kan hierbij hulpmiddel zijn.

Verleden (vraag 3)	Bijbehorend zorgaanbod:	NU (vraag 5/6): probleemomschrijving en onderwerpletter	Vervolg afspraken contactmomenten:
<input type="checkbox"/>	informele steun	<input type="checkbox"/>	<input type="checkbox"/> ≈ 3,9jr
<input type="checkbox"/>	positieve bevestiging	<input type="checkbox"/>	<input type="checkbox"/> ≈ 2,5jr ≈ 3,9jr
<input type="checkbox"/>	anticiperende voorlichting over.....	<input type="checkbox"/>	<input type="checkbox"/> ≈ 2jr ≈ 3jr ≈ 3,9jr
<input type="checkbox"/>	advisering mbt....	<input type="checkbox"/>	<input type="checkbox"/> ≈ 2jr ≈ 2,5jr ≈ 3jr ≈ 3,9jr
<input type="checkbox"/>	folder / informatieverstrekking	<input type="checkbox"/>	<input type="checkbox"/> ≈ vervolg afspraak nav 18 mnd ≈ verder afspreken
<input type="checkbox"/>	inhalen vaccinatie	<input type="checkbox"/>	<input type="checkbox"/> ≈ anders, nl
<input type="checkbox"/>	extra consult arts ivm.....	<input type="checkbox"/>	
<input type="checkbox"/>	extra consult wv ivm .....	<input type="checkbox"/>	
<input type="checkbox"/>	telefonisch contact	<input type="checkbox"/>	
<input type="checkbox"/>	HB op indicatie ivm.....	<input type="checkbox"/>	
<input type="checkbox"/>	VHT	<input type="checkbox"/>	
<input type="checkbox"/>	opvoedondersteuning	<input type="checkbox"/>	
<input type="checkbox"/>	opvoedcursus	<input type="checkbox"/>	
<input type="checkbox"/>	anders (omschrijven)	<input type="checkbox"/>	
Informatie inwinnen bij derden:	<input type="checkbox"/>	HA	
	<input type="checkbox"/>	KOV	
	<input type="checkbox"/>	pedagoog	
	<input type="checkbox"/>	kinderarts	
	<input type="checkbox"/>	AMK / RvK	
<input type="checkbox"/>	anders (omschrijven)	<input type="checkbox"/>	
Verwijzing naar:	<input type="checkbox"/>	HA	
	<input type="checkbox"/>	HA voor doorverwijzing naar...	
	<input type="checkbox"/>	Diëtist	
	<input type="checkbox"/>	PSZ	
	<input type="checkbox"/>	VVE project	
	<input type="checkbox"/>	peutergym	
	<input type="checkbox"/>	AMW	
	<input type="checkbox"/>	opvoedsteunpunt	
	<input type="checkbox"/>	jeugdzorg	
	<input type="checkbox"/>	AMK/RvK	
<input type="checkbox"/>	anders (omschrijven)	<input type="checkbox"/>	
			Toestemming ouders om SPARK info door te geven bij verwijzing: <input type="checkbox"/> ja <input type="checkbox"/> nee

Bij de overall **risico-inschatting** maak je als professional (met JGZ doelstelling) een risico-analyse over de mogelijkheden van/voor dit kind in deze situatie.

*Het doel van de jeugdgezondheidszorg is een gezonde lichamelijke, geestelijke en sociale ontwikkeling van kinderen te bevorderen en veilig te stellen zodat het kind een optimaal niveau van individueel en maatschappelijk functioneren kan bereiken. Hierbij wordt uitgegaan van de eigen verantwoordelijkheid van de ouders of verzorgers van het kind.*

De volgende definiëring van laag, verhoogd en hoog risico is hierbij van toepassing:

- **hoog risico:** risico-analyse geeft een situatie weer waarbij draagkracht en draaglast uit balans zijn waardoor een bedreiging voor de ontwikkeling van het kind op somatisch, psychisch, sociaal en pedagogisch gebied is of kan ontstaan. De draagkracht en draaglast is zodanig uit evenwicht dat het bijbehorende zorgaanbod meer vraagt dan ondersteuning vanuit JGZ.
- **verhoogd risico:** risico-analyse geeft een situatie weer die meer draagkracht van de ouders vraagt om tot een gezonde ontwikkeling van het kind op somatisch, psychisch, sociaal en pedagogisch gebied te komen. Extra ondersteuning vanuit JGZ is wenselijk en wordt aangeboden.
- **laag risico:** risico-analyse geeft een in evenwicht verkerende situatie weer waarin voor de ontwikkeling van het kind op somatisch, psychisch, sociaal en pedagogisch gebied een gunstig leefklimaat heerst.



**scorekaart 3: SPARK overall risico-inschatting van de JGZ-professional**

**Doel:** risico-analyse op basis van de info vanuit dit contactmoment, jouw professionele blik, en de eventueel al aanwezige kennis van dit gezin/kind.

**Invulinstructie:** positieve dan wel negatieve factoren ALLEEN aankruisen als deze van invloed zijn op je inschatting.

**Belangrijk:** je overall risico-inschatting voor dit kind in deze situatie aan kruisen.

Pos. Neg.

<input type="checkbox"/>	<input type="checkbox"/>	motoriek van het kind
<input type="checkbox"/>	<input type="checkbox"/>	gedrag van het kind
<input type="checkbox"/>	<input type="checkbox"/>	interactie/leerervaringen tussen ouder en kind
<input type="checkbox"/>	<input type="checkbox"/>	spraak/taal ontwikkeling van het kind
<input type="checkbox"/>	<input type="checkbox"/>	eet/drink/speen-gewoonten
<input type="checkbox"/>	<input type="checkbox"/>	gewicht van het kind
<input type="checkbox"/>	<input type="checkbox"/>	leefklimaat en voelen van de sfeer
<input type="checkbox"/>	<input type="checkbox"/>	hechting en exploratie-gedrag van het kind
<input type="checkbox"/>	<input type="checkbox"/>	hygiëne gezinsleden
<input type="checkbox"/>	<input type="checkbox"/>	hygiëne woonomgeving
<input type="checkbox"/>	<input type="checkbox"/>	woonomgeving: (on)veiligheid, grootte en materiële zaken (o.a. hoeveelheid/soort speelgoed, asbak, eettafel, gas, water, elektriciteit)
<input type="checkbox"/>	<input type="checkbox"/>	kindfactoren (o.a. slechte start, achterstand in ontwikkeling, gezondheidsproblemen, moeilijk temperament)
<input type="checkbox"/>	<input type="checkbox"/>	moeilijk ervaren zuigelingenperiode door ouder(s) (o.a. ongewenste zwangerschap, vermoeidheid, sombere gedachten, gebrek aan steun)
<input type="checkbox"/>	<input type="checkbox"/>	competentie ouder(s) (o.a. leeftijd, opleiding, vaardigheden, sensitiviteit, responsiviteit)
<input type="checkbox"/>	<input type="checkbox"/>	ouders zijn het onderling oneens
<input type="checkbox"/>	<input type="checkbox"/>	gezinsamenstelling (o.a. alleenstaand ouder, samengesteld gezin, andere gezinsvorm)
<input type="checkbox"/>	<input type="checkbox"/>	hoeveelheid sociale steun
<input type="checkbox"/>	<input type="checkbox"/>	financiële zorgen (o.a. laag inkomen, schulden)
<input type="checkbox"/>	<input type="checkbox"/>	chronische gezondheidsproblemen ouder of broer/zus
<input type="checkbox"/>	<input type="checkbox"/>	verslaving ouders (alcohol, drugs, gokken)
<input type="checkbox"/>	<input type="checkbox"/>	psychiatrische problemen ouder(s)
<input type="checkbox"/>	<input type="checkbox"/>	negatieve jeugdervaring ouder(s)
<input type="checkbox"/>	<input type="checkbox"/>	eerder huiselijk geweld
<input type="checkbox"/>	<input type="checkbox"/>	bekend bij AMK/BJZ
<input type="checkbox"/>	<input type="checkbox"/>	ingrijpende gebeurtenissen (o.a. geboorte, overlijden, echtscheiding)
<input type="checkbox"/>	<input type="checkbox"/>	openheid ouders tijdens dit contactmoment
<input type="checkbox"/>	<input type="checkbox"/>	anders, omschrijven:

Als JGZ-professional kom ik tot de volgende risico-inschatting:

hoog risico

verhoogd risico

laag risico

## Appendix 2

### Inschatten van risico op opvoed- en opgroei problemen

Hoe lang werkt u met de SPARK? ..... jaar

Met welke SPARK hebt u afgelopen drie maanden gewerkt? (meerdere antwoorden mogelijk)

- preSPARK
- SPARK18
- SPARK60
- Geen

Heeft u een uitleg/of training gehad over de SPARK voordat u begon met het afnemen van de SPARK?

- Ontwikkelaar SPARK
- Collega
- Zelfstudie (e-learning en handleiding)
- Anders namelijk .....
- Nooit uitleg of training ontvangen

Hieronder volgen enkele uitspraken over het werken met de SPARK. Geef aan in hoeverre u het met de uitspraak 'eens' of 'oneens' bent.

	zeer mee oneens	mee oneens	eens nog oneens	mee eens	zeer mee eens
De SPARK laat genoeg ruimte om zelf afwegingen te maken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De SPARK geeft genoeg ruimte om de wensen van de ouders/verzorgers mee te laten wegen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het werken volgens de SPARK kost veel tijd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders/verzorgers werken niet mee aan het toepassen van de SPARK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De SPARK past niet goed bij mijn manier van werken in de praktijk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik kan met de SPARK een goed onderbouwde risico inschatting maken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sinds ik de SPARK gebruik kan ik een betere risico inschatting maken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Met de SPARK maakt u een inschatting van het risico op opvoed- en opgroei problemen. Geef bij elke van onderstaande factoren aan in welke mate zij meewegen in de risico-inschatting.

	Zwaar	Matig	Licht	Niet
Demografische kenmerken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zorgbehoefte van de ouders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uit de literatuur bekende risicofactoren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Observeren interactie ouder en kind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Observeren omgeving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Observeren gedrag en ontwikkeling kind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onderbuikgevoel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Werkervaring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anders namelijk.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Hartelijk dank voor het invullen!*

## Appendix 3

Table 1. *Kruskal Wallis demographic characteristics*

Demographic Characteristics	P value*	Difference in averages**
<b>Gender of the child</b>	0.095	
<b>Place in family order</b>	0.200	
<b>Household</b>		
Two parent versus shared household	0.001	0.19
Two parent versus other household	< 0.001	0.52
Two parent versus one parent household	< 0.001	0.63
Shared versus other household	< 0.001	0.33
Shared versus one parent household	< 0.001	0.44
Other versus one parent household	0.781	
<b>Parent characteristics</b>		
Age mother	< 0.001	
Age father	< 0.001	
Ethnicity: non Dutch mother	< 0.001	0.23
Ethnicity: non Dutch father	< 0.001	0.26
Language non Dutch mother	< 0.001	0.29
Language non Dutch father	< 0.001	0.31
<b>Education</b>		
Low versus intermediate	< 0.001 mother	-0.20
	< 0.001 father	-0.14
Low versus high	< 0.001 mother	-0.26
	< 0.001 father	-0.20
Intermediate versus high	0.002 mother	-0.07
	0.037 father	-0.06
<b>Employment</b>		
Employed versus unemployed	0.003 mother	0.39
	< 0.001 father	0.65
Employed versus unable to work	< 0.001 mother	0.80
	< 0.001 father	0.59
Employed versus stay-at-home mom/ stay-at-home dad.	< 0.001 mother	0.15
	0.904 father	
Unemployed versus /unable to work	0.450 mother	
	1.000 father	
Unemployed versus stay-at-home mom/ stay-at-home dad.	0.534 mother	
	0.007 father	-0.47
unable to work versus stay-at-home mom/ stay-at-home dad.	< 0.001 mother	-0.65
	0.195 father	

\*p-value blue<0.05 yellow <0.01

\*\* Differences in averages: white (0-0.5), light grey (0.51-1.0), dark gray (>1.01)

Table 2a t/m 2q. *Kruskal Wallis Need for support-variables*

2a. Infancy review	Column <i>Experience-last-6-months</i>		Column <i>Parent-reported-need</i>		Column 6 <i>CHC-nurse-reported-need</i>	
	<i>P-value</i>	<i>Average difference</i>	<i>P-value</i>	<i>Average difference</i>	<i>P-value</i>	<i>Average difference</i>
1-2	1.000		0.140		1.000	
1-3	<0.001	0.13	<0.001	0.39	<0.001	0.41
1-4	<0.001	0.31	<0.001	0.66	<0.001	0.76
1-5	<0.001	0.51	<0.001	1.11	<0.001	1.18
1-6	X		1.000		1.000	
2-3	<0.001	0.10	0.003	0.28	<0.001	0.37
2-4	<0.001	0.28	<0.001	0.55	<0.001	0.72
2-5	<0.001	0.48	<0.001	0.99	<0.001	1.14
2-6	X		1.000		1.000	
3-4	<0.001	0.17	0.413		0.008	0.35
3-5	<0.001	0.38	<0.001	0.71	<0.001	0.77
3-6	X		1.000		1.000	
4-5	<0.001	0.20	0.345		1.000	
4-6	X		1.000		1.000	
5-6	X		1.000		1.000	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2b. Somatic health	Column <i>Experience-last-6-months</i>		Column <i>Parent-reported-need</i>		Column 6 <i>CHC-nurse-reported-need</i>	
	<i>P-value</i>	<i>Average difference</i>	<i>P-value</i>	<i>Average difference</i>	<i>P-value</i>	<i>Average difference</i>
1-2	1.000		0.002	0.11	<0.001	0.10
1-3	<0.001	0.11	<0.001	0.18	<0.001	0.18
1-4	<0.001	0.26	<0.001	0.56	<0.001	0.64
1-5	<0.001	0.59	<0.001	0.93	<0.001	0.82
1-6	X		1.000		1.000	
2-3	0.001	0.09	1.000		0.881	
2-4	<0.001	0.25	<0.001	0.45	<0.001	0.54
2-5	<0.001	0.58	<0.001	0.82	<0.001	0.72
2-6	X		1.000		1.000	
3-4	0.002	0.16	<0.001	0.38	<0.001	0.46
3-5	<0.001	0.49	<0.001	0.74	0.001	0.64
3-6	X		1.000		1.000	
4-5	0.068		0.986		1.000	
4-6	X		1.000		1.000	
5-6	X		0.953		1.000	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2c. Motor Development	Column <i>Experience-last-6-months</i>		Column <i>Parent-reported-need</i>		Column 6 <i>CHC-nurse-reported-need</i>	
	<i>P-value</i>	<i>Average difference</i>	<i>P-value</i>	<i>Average difference</i>	<i>P-value</i>	<i>Average difference</i>
1-2	0.190		0.385		0.341	
1-3	<0.001	0.25	<0.001	0.35	<0.001	0.30
1-4	<0.001	0.67	<0.001	0.66	<0.001	0.70
1-5	<0.001	0.93	X		X	
1-6	X		<0.001	1.07	<0.001	1.04
2-3	<0.001	0.21	<0.001	0.29	<0.001	0.26
2-4	<0.001	0.63	<0.001	0.59	<0.001	0.65
2-5	<0.001	0.89	X		X	
2-6	X		0.001	1.00	<0.001	1.00
3-4	0.005	0.42	0.472		0.001	

3-5	0.001	0.69	X	X	
3-6	X		0.443	0.013	0.74
4-5	1.000		X	X	
4-6	X		1.000	1.000	
5-6	X		X	X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2d. Language, speech and cognitive development	Column Experience-last-6-months	Column Parent-reported-need	Column 6 CHC-nurse-reported-need
1-2	0.340	1.000	0.164
1-3	<0.001	0.30	<0.001
1-4	<0.001	0.75	<0.001
1-5	0.006	0.98	<0.001
1-6	X	1.000	1.000
2-3	<0.001	0.27	<0.001
2-4	<0.001	0.71	<0.001
2-5	0.012	0.94	<0.001
2-6	X	1.000	1.000
3-4	0.009	0.44	<0.001
3-5	0.482	0.156	0.003
3-6	X	1.000	1.000
4-5	1.000	1.000	1.000
4-6	X	0.438	1.000
5-6	X	0.459	1.000

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2e. Language use parents	Column Experience-last-6-months	Column Parent-reported-need	Column 6 CHC-nurse-reported-need
1-2	0.111	1.000	0.007
1-3	0.981	0.015	<0.001
1-4	0.030	0.67	0.997
1-5	X	X	0.018
1-6	X	1.000	X
2-3	1.000	0.386	<0.001
2-4	0.156	0.973	1.000
2-5	X	X	0.070
2-6	X	1.000	X
3-4	0.291	1.000	1.000
3-5	X	X	0.787
3-6	X	1.000	X
4-5	X	X	1.000
4-6	X	1.000	X
5-6	X	X	X

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2f. Emotional development	Column Experience-last-6-months	Column Parent-reported-need	Column 6 CHC-nurse-reported-need
1-2	0.417	1.000	0.021
1-3	<0.001	0.16	<0.001
1-4	<0.001	0.48	<0.001
1-5	<0.001	1.27	<0.001
1-6	X	1.000	X
2-3	<0.001	0.11	<0.001
2-4	<0.001	0.44	<0.001
2-5	<0.001	1.23	<0.001
2-6	X	1.000	X
3-4	<0.001	0.32	0.003
3-5	<0.001	1.11	0.001
3-6	X	1.000	X
4-5	0.002	0.79	1.000
4-6	X	0.992	X
5-6	X	0.229	X

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2g. Contact between child and others	Column Experience-last-6-months	Column Parent-reported-need	Column 6 CHC-nurse-reported-need
1-2	0.032	0.05	0.001
1-3	<0.001	0.16	<0.001
1-4	<0.001	0.54	X
1-5	0.013	1.77	0.015
1-6	X	1.000	X
2-3	0.022	0.11	0.080
2-4	<0.001	0.49	X
2-5	0.022	1.72	0.053
2-6	X	1.000	X
3-4	0.025	0.38	X
3-5	0.074	0.228	0.204
3-6	X	0.464	X
4-5	1.000	X	1.000
4-6	X	X	X
5-6	X	0.016	-2.00

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

2h. Child behaviour	Column Experience-last-6-months	Column Parent-reported-need	Column 6 CHC-nurse-reported-need
1-2	1.000	0.653	0.352
1-3	<0.001	0.20	<0.001
1-4	<0.001	0.44	<0.001
1-5	<0.001	0.96	<0.001
1-6	X	1.000	X
2-3	<0.001	0.17	<0.001
2-4	<0.001	0.40	<0.001
2-5	<0.001	0.92	<0.001
2-6	X	1.000	X
3-4	<0.001	0.24	<0.001
3-5	<0.001	0.76	<0.001
3-6	X	1.000	X
4-5	<0.001	0.52	1.00

4-6	X	1.000	X
5-6	X	1.000	X

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## 2i. Parenting approach

	Column Experience-last-6-months		Column Parent-reported-need		Column 6 CHC-nurse-reported-need	
1-2	0.059		<0.001	0.08	<0.001	0.09
1-3	<0.001	0.26	<0.001	0.36	<0.001	0.38
1-4	<0.001	0.65	<0.001	1.10	<0.001	1.01
1-5	<0.001	1.52	<0.001	1.43	<0.001	1.42
1-6	X		1.000		X	
2-3	<0.001	0.21	<0.001	0.28	<0.001	0.30
2-4	<0.001	0.60	<0.001	1.02	<0.001	0.93
2-5	<0.001	1.47	<0.001	1.35	<0.001	1.33
2-6	X		1.000		X	
3-4	<0.001	0.39	<0.001	0.74	<0.001	0.62
3-5	<0.001	1.27	<0.001	1.07	<0.001	1.03
3-6	X		1.000		X	
4-5	0.016	0.88	1.000		0.511	
4-6	X		0.226		X	
5-6	X		0.054		X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## 2j. Developmental Stimulation

	Column Experience-last-6-months		Column Parent-reported-need		Column 6 CHC-nurse-reported-need	
1-2	0.429		<0.001	0.12	<0.001	0.09
1-3	<0.001	0.32	<0.001	0.53	<0.001	0.42
1-4	<0.001	0.79	0.012	1.11	<0.001	1.29
1-5	1.000		<0.001	1.77	<0.001	1.59
1-6	X		1.000		X	
2-3	<0.001	0.32	<0.001	0.41	<0.001	0.33
2-4	<0.001	0.79	0.052		<0.001	1.20
2-5	1.000		0.001	1.65	<0.001	1.50
2-6	X		1.000		X	
3-4	0.168		1.000		<0.001	0.88
3-5	1.000		0.136		0.012	1.18
3-6	X		0.938		X	
4-5	1.000		1.000		1.000	
4-6	X		0.142		X	
5-6	X		0.022	-2.00	X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## 2k. Time Spending

	Column Experience-last-6-months		Column Parent-reported-need		Column 6 CHC-nurse-reported-need	
1-2	0.008	0.06	0.001	0.14	<0.001	0.14
1-3	<0.001	0.22	<0.001	0.36	<0.001	0.38
1-4	<0.001	0.66	<0.001	1.31	<0.001	1.24
1-5	0.188		<0.001	1.14	<0.001	1.32

1-6	X		1.000		X	
2-3	<0.001	0.16	0.065		<0.001	0.24
2-4	<0.001	0.60	<0.001	1.17	<0.001	1.10
2-5	0.337		0.001	1.00	<0.001	1.18
2-6	X		1.000		X	
3-4	<0.001	0.45	0.003	0.95	<0.001	0.86
3-5	1.000		0.087		0.001	0.94
3-6	X		1.000		X	
4-5	1.000		1.000		1.000	
4-6	X		0.033	-1.55	X	
5-6	X		0.083		X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## 2l. Living environment

	Column Experience-last-6-months		Column Parent-reported-need		Column 6 CHC-nurse-reported-need	
1-2	0.070		0.001	0.29	<0.001	0.20
1-3	<0.001	0.19	<0.001	0.57	<0.001	0.55
1-4	<0.001	0.56	<0.001	1.18	<0.001	1.06
1-5	<0.001	0.89	<0.001	0.99	<0.001	1.04
1-6	X		1.000		X	
2-3	0.001	0.13	0.019	0.28	<0.001	0.36
2-4	<0.001	0.50	<0.001	0.89	<0.001	0.87
2-5	<0.001	0.82	<0.001	0.71	<0.001	0.84
2-6	X		0.752		X	
3-4	<0.001	0.37	0.714		0.312	
3-5	<0.001	0.70	1.000		0.249	
3-6	X		0.003	-0.69	X	
4-5	0.222		1.000		1.000	
4-6	X		<0.001	-0.13	X	
5-6	X		<0.001	-1.12	X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## 2m. Social contacts

	Column Experience-last-6-months		Column Parent-reported-need		Column 6 CHC-nurse-reported-need	
1-2	0.001	0.07	<0.001	0.41	<0.001	0.39
1-3	<0.001	0.44	<0.001	0.61	<0.001	0.52
1-4	<0.001	0.68	<0.001	1.17	<0.001	1.28
1-5	<0.001	1.00	<0.001	0.91	<0.001	1.18
1-6	X		1.000		X	
2-3	<0.001	0.37	0.130		0.387	
2-4	<0.001	0.61	0.004	0.76	<0.001	0.89
2-5	<0.001	0.93	0.099		0.001	0.79
2-6	X		1.000		X	
3-4	0.017	0.24	0.722		0.003	0.76
3-5	0.039	0.56	1.000		0.035	0.66
3-6	X		0.304		X	
4-5	1.000		1.000		1.000	
4-6	X		0.025	-1.40	X	
5-6	X		0.066		X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)



**2n. Daycare of child**

	Column <i>Experience-last-6-months</i>		Column <i>Parent-reported-need</i>		Column 6 <i>CHC-nurse-reported-need</i>	
1-2	1.000		<0.001	0.31	<0.001	0.33
1-3	<0.001	0.31	<0.001	0.83	<0.001	0.57
1-4	<0.001	0.50	0.004	1.43	<0.001	1.44
1-5	<0.001	1.11	<0.001	0.86	<0.001	1.27
1-6	X		1.000		X	
2-3	<0.001	0.28	0.001	0.56	0.175	
2-4	<0.001	0.47	0.166		0.005	1.11
2-5	<0.001	1.08	0.148		0.016	0.94
2-6	X		1.000		X	
3-4	1.000		1.000		0.085	
3-5	<0.001	0.80	1.000		0.302	
3-6	X		0.994		X	
4-5	0.005	0.61	1.000		1.000	
4-6	X		0.452		X	
5-6	X		1.000		X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

**2o. Concerns communicated by others**

	Column <i>Experience-last-6-months</i>		Column <i>Parent-reported-need</i>		Column 6 <i>CHC-nurse-reported-need</i>	
1-2	0.139		0.001	0.33	<0.001	0.33
1-3	<0.001	0.31	<0.001	0.65	<0.001	0.57
1-4	<0.001	0.84	<0.001	0.95	<0.001	1.17
1-5	<0.001	1.28	0.011	0.96	<0.001	1.38
1-6	X		1.000		X	
2-3	<0.001	0.26	0.016	0.33	0.003	0.26
2-4	<0.001	0.79	0.050	0.62	<0.001	0.86
2-5	<0.001	1.23	0.747		<0.001	1.06
2-6	X		1.000		X	
3-4	<0.001	0.53	1.000		0.112	
3-5	<0.001	0.97	1.000		0.027	0.80
3-6	X		1.000		X	
4-5	1.000		1.000		1.000	
4-6	X		0.991		X	
5-6	X		1.000		X	

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

**2p. Family issues**

	Column <i>Experience-last-6-months</i>		Column <i>Parent-reported-need</i>		Column 6 <i>CHC-nurse-reported-need</i>	
1-2	0.235		<0.001	0.24	<0.001	0.25
1-3	<0.001	0.23	<0.001	0.54	<0.001	0.44
1-4	<0.001	0.52	<0.001	0.65	<0.001	0.88
1-5	<0.001	0.72	<0.001	1.01	<0.001	1.07
1-6	X		1.000		<0.001	1.58
2-3	<0.001	0.18	<0.001	0.29	<0.001	0.19
2-4	<0.001	0.48	<0.001	0.41	<0.001	0.62
2-5	<0.001	0.68	<0.001	0.77	<0.001	0.82
2-6	X		1.000		0.009	1.33
3-4	<0.001	0.30	1.000		<0.001	0.43
3-5	<0.001	0.50	0.001	0.47	<0.001	0.63

3-6	X	0.641	0.137
4-5	0.140	0.083	1.000
4-6	X	0.306	1.000
5-6	X	0.010	-0.81

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## 2q. Any topic forgotten

	Column <i>Experience-last-6-months</i>	Column <i>Parent-reported-need</i>	Column <i>CHC-nurse-reported-need</i>
	<i>(p-value 0.740)</i>		
1-2	1.000		1.000
1-3	1.000		1.000
1-4	0.266		0.025
1-5	0.004	0.67	0.001
1-6	X		X
2-3	1.000		1.000
2-4	1.000		0.048
2-5	0.024	0.62	0.001
2-6	X		X
3-4	0.960		0.077
3-5	0.012	0.66	0.002
3-6	X		X
4-5	0.579		1.000
4-6	X		X
5-6	X		X

Answer categories column experience-last-6-months: 1: no concerns, 2: little concerns, 3: concerned, 4: quite concerned, 5: very concerned.

Answer categories other columns: 1: no help needed, 2: information wanted, 3: personal advice, 4: counselling, 5: intensive help, 6: immediate intervention required.

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

Table 3. *Kruskal Wallis balance factors*

Balance factor	Answer categories					
	0-1		0-2		1-2	
	p-value	Average difference	p-value	Average difference	p-value	Average difference
Motor development	1.000		<0.001	0.46	<0.001	0.46
Behaviour	0.054		<0.001	0.54	0.58	
Interaction between parent and child	<0.001	-0.08	<0.001	0.91	<0.001	0.99
Language child	1.000		<0.001	0.44	<0.001	0.43
Eating habits	1.000		<0.001	0.24	<0.001	0.24
Atmosphere at home	<0.001	-0.06	<0.001	1.01	<0.001	1.07
Child attachment	1.000		<0.001	0.69	<0.001	0.71
Safety	1.000		<0.001	0.56	<0.001	0.54
Hygiene family members	1.000		<0.001	1.23	<0.001	1.22
Hygiene home	1.000		<0.001	1.07	<0.001	1.06
Furnishing	1.000		<0.001	0.70	<0.001	0.69
Observe others	0.104		<0.001	0.47	<0.001	0.38
Child factors	1.000		<0.001	0.41	<0.001	0.40
Difficult infant period experienced	0.316		<0.001	0.44	<0.001	0.40
Competence of parents	<0.001	-0.11	<0.001	0.92	<0.001	1.03
Parents agree among themselves	0.267		<0.001	0.61	<0.001	0.58
Amount of social support	0.567		<0.001	0.67	<0.001	0.65
Financial obstacles	0.094		<0.001	0.92	<0.001	0.86
Chronic health problem parents	0.002	0.11	<0.001	0.33	<0.001	0.22
Addiction parents	<0.001	0.17	<0.001	1.01	<0.001	0.84
Psychiatric problems parents	<0.001	0.14	<0.001	0.92	<0.001	0.78
Negative childhood experiences parents	<0.001	0.15	<0.001	0.69	<0.001	0.54
Openness parents during visit	<0.001	0.12	<0.001	0.75	<0.001	0.63
Other	<0.001	0.35	<0.001	0.59	<0.001	0.24

Answer categories 0 not filled in, 1 positive, 2 negative

P-value yellow <0.01 , blue <0.05

Differences in averages: white (0-0.5), light grey (0.51-1.0), dark grey (>1.01)

## Appendix 4

Table 1. Univariate regression analysis demographic characteristics

Factor	Reference category	Category	b (estimate)	Odds ratio
<i>Household</i>	Two-parent household	Other	1.8	6.3
		One-parent household	2.2	8.7
		Shared household	0.8	2.3
<i>Ethnicity mother</i>	Dutch	Non-Dutch	1.0	2.7
<i>Ethnicity father</i>	Dutch	Non –Dutch	1.0	2.8
<i>Language mother</i>	Dutch	Other	1.1	3.1
		Dutch and dialect	-0.2	0.8
		Dutch and other	0.7	2.0
<i>Language father</i>	Dutch	Other	1.2	3.3
		Dutch and Other	0.	2.3
		low	0.7	2.1
<i>Education level mother</i>	Intermediate	high	-0.4	0.7
		low	0.9	2.5
<i>Education level father</i>	Intermediate	high	0.3	1.3
		low	0.9	2.5
<i>Employment mother</i>	Employed	Study	1.4	4.1
		Volunteer	1.1	2.9
		unemployed	1.5	4.3
		unemployed/unable to work	2.6	14.0
		housewife	0.7	2.0
<i>Employment father</i>	Employed	Study	-1.2	0.3
		unemployed	1.1	2.9
		housewife	0.7	2.0

Only significant variables are displayed.

Table 2a tm/q. Univariate analysis need for support

<b>2a. Infancy review</b>	<i>Column</i>	<i>Answer category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
Experience-last-6-months		1	2.0	7.7
		2	1.4	4.3
		3	0.8	2.2
		4	0.2	1.3
Parent-reported-need		2	3.5	34.7
		3	2.2	9.2
		4	1.5	4.3
CHC-nurse-reported-need		5	0.5	1.7
		2	3.8	45.9
		3	2.5	12.4
		4	1.5	4.5

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2b. Somatic health</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
Experience-last-6-months		1	2.0	7.4
		2	1.1	3.0
		3	0.5	1.7
Parent-reported-need		2	3.0	20.0
		3	2.0	7.2
		4	0.8	2.3
CHC-nurse-reported-need		5	0.6	1.8
		2	2.7	15.2
		3	2.2	9.1
		4	0.8	2.3
		5	0.5	1.7

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2c. Motor development</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
Experience-last-6-months		1	3.0	19.6
		2	2.2	9.1
		3	1.0	2.8
		4	0.2	1.3
Parent-reported-need		1	3.6	35.8
		3	2.2	8.8
		4	1.3	3.8
CHC-nurse-reported-need		5	0.3	1.4
		1	3.5	31.8
		3	2.3	10.4
		4	1.2	3.3
		5	0.3	1.3

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2d. Language speech and thought development</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	3.1	23.1
		2	2.5	11.8
		3	1.2	3.4
		4	0.2	1.2
	Parent-reported-need	2	3.8	46.3
		3	3.3	26.6
		4	1.4	3.9
	CHC-nurse-reported-need	2	4.6	97.4
		3	3.2	24.8
		4	1.3	3.6
		5	0.2	1.3

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2e. Language use of parents</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	2	2.1	8.1
		4	0.4	1.4
	Parent-reported-need	4	1.0	2.8
		4	1.5	4.5
	CHC-nurse-reported-need	4	1.5	4.5
		5	0.6	1.8

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2f. Emotional development</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	4.0	55.5
		2	1.8	6.1
		3	0.8	2.1
		4	0.2	1.2
	Parent-reported-need	2	4.9	130.7
		3	3.1	23.2
		4	1.4	4.0
	CHC-nurse-reported-need	2	4.9	139.5
		3	3.4	29.1
		4	1.2	3.2
		5	0.3	1.4

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2g. Contact between the child and others</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	2	1.9	6.5
		3	0.8	2.1
		4	0.3	1.3
	Parent-reported-need	4	1.1	3.1
		5	0.6	1.8
	CHC-nurse-reported-need	3	4.2	69.8
		4	1.2	3.3
		5	0.5	1.6

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2h.Child behaviour</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	3.1	23.2
		2	1.7	5.3
		3	0.9	2.6
	Parent-reported-need	2	4.2	65.6
		3	3.2	25.0
		4	1.3	3.7
		5	0.2	1.3
	CHC-nurse-reported-need	2	4.2	64.3
		3	3.1	21.3
		4	1.4	3.9
		5	0.2	1.3

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2i. Parenting approach</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	5.0	141.6
		2	2.4	10.5
		3	1.2	3.3
		4	0.3	1.4
	Parent-reported-need	2	4.7	105.4
		3	3.7	38.9
		4	1.5	4.4
	CHC-nurse-reported-need	5	0.5	1.6
		2	4.8	121.5
		3	3.6	37.2
		4	1.7	5.5
		5	0.6	1.7

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2j. Developmental stimulation</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
Experience-last-6-months		2	2.7	14.4
		3	1.2	3.5
		4	0.2	1.2
Parent-reported-need		3	3.3	28.1
		4	1.8	6.2
		5	0.5	1.7
CHC-nurse-reported-need		2	5.3	196.8
		3	4.1	63.1
		4	1.6	4.7
		5	0.5	1.6

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2k. How child spends time</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
Experience-last-6-months		1	3.9	49.2
		2	2.2	9.4
		3	1.0	2.6
		4	0.3	1.4
Parent-reported-need		2	3.9	47.1
		3	4.2	63.4
		4	1.3	3.8
CHC-nurse-reported-need		5	0.6	1.9
		2	4.3	70.6
		3	3.8	44.8
		4	1.4	4.1
		5	0.7	2.0

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2l. Living environment</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
Experience-last-6-months		1	2.9	18.5
		2	2.0	7.2
		3	0.9	2.4
		4	0.3	1.3
Parent-reported-need		2	3.1	23.2
		3	3.7	42.0
		4	2.0	7.4
CHC-nurse-reported-need		5	1.0	2.9
		2	3.4	29.1
		3	3.5	32.7
		4	2.0	7.1
		5	0.9	2.4

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed



<b>2m. Social contacts</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	3.2	24.9
		2	2.4	10.8
		3	1.6	5.2
		4	0.4	1.5
	Parent-reported-need	2	2.8	16.9
		3	3.5	33.7
		4	2.1	8.2
		5	1.5	4.3
	CHC-nurse-reported-need	2	3.6	37.4
		3	3.9	51.2
		4	1.9	6.5
		5	1.5	4.3
		5	1.5	4.3

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2n. Daycare</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	3.4	28.6
		2	1.7	5.6
		3	2.0	7.03
	Parent-reported-need	2	2.7	15.6
		3	4.4	80.5
		4	2.7	14.3
		5		
	CHC-nurse-reported-need	2	4.1	61.0
		3	4.5	87.8
		4	1.9	7.0
		5	1.3	3.6
		5	1.3	3.6

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2o. Concerns communicated by others</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	4.1	59.9
		2	2.8	15.8
		3	1.2	3.4
		4	0.3	1.3
	Parent-reported-need	2	3.1	21.3
		3	3.0	19.8
		4	2.2	8.7
		5	1.2	3.2
		5	1.2	3.2
	CHC-nurse-reported-need	2	4.3	72.8
		3	3.9	47.1
		4	2.0	7.4
		5	1.2	3.2
		5	1.2	3.2

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2p. Family issues</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	2.6	14.0
		2	2.1	7.9
		3	1.1	3.0
		4	0.3	1.4
		5		
	Parent-reported-need	2	3.4	29.7
		3	2.4	10.5
		4	2.0	7.7
		5	1.1	3.0
	CHC-nurse-reported-need	1	5.6	259.3
		2	3.8	45.7
		3	3.2	24.6
		4	1.9	6.7
		5	1.2	3.5

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

<b>2q. Anything forgotten</b>	<i>Column</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
	Experience-last-6-months	1	2.2	8.8
		2	0.8	2.2
	Parent-reported-need	none		
	CHC-nurse-reported-need	2	3.4	29.2
		3	1.7	5.5

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns:1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5:information wanted, 6: no help needed (reference category).

Only significant variables are displayed

Table 3. Univariate regression analysis *balance factors*

<i>Balance factor</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
<i>Motor development</i>	0	1.6	5.2
<i>Behaviour</i>	0	1.9	6.5
	1	-0.2	0.8
<i>Interaction between parent and child</i>	0	2.9	18.3
	1	-0.5	0.6
<i>Language child</i>	0	1.7	5.3
<i>Eating habits</i>	0	0.9	2.6
<i>Atmosphere at home</i>	0	3.1	22.4
	1	-0.3	0.7
<i>Child attachment</i>	0	2.2	9.3
<i>Safety</i>	0	1.8	6.2
<i>Hygiene family members</i>	0	3.8	44.0
<i>Hygiene home</i>	0	3.4	28.5
<i>Furnishing</i>	0	2.3	9.8
<i>Observe others</i>	0	1.7	5.5
	1	0.4	1.5
<i>Child factors</i>	0	1.6	4.7
<i>Difficult infant period experienced</i>	0	1.7	5.5
<i>Competence of parents</i>	0	3.1	21.3
	1	-0.6	0.5
<i>Parents agree among themselves</i>	0	2.1	8.3
<i>Amount of social support</i>	0	2.3	10.2
<i>Financial obstacles</i>	0	3.0	21.0
	1	0.3	1.3
<i>Chronic health problem parents</i>	0	1.2	3.5
	1	0.4	1.5
<i>Addiction parents</i>	0	3.1	22.7
	1	0.7	1.9
<i>Psychiatric problems parents</i>	0	3.0	20.9
	1	0.6	1.8
<i>Negative childhood experiences parents</i>	0	2.3	9.9
	1	0.6	1.9
<i>Openness parents during visit</i>	0	2.5	12.7
	1	0.5	1.7
<i>Other</i>	0	2.3	9.6
	1	1.4	4.1

Answer categories: 0 negative, 1 positive, 2 neutral (reference category)

Only significant variables are displayed.

Table 4. *Multivariate regression analysis per group demographic characteristics*

<i>Factor</i>	<i>Reference category</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
<i>Household</i>	Two-parent household	Other	1.5	4.4
		One-parent household	1.6	5.1
		Shared household	0.6	1.8
<i>Employment mother</i>	Employed	Volunteer	1.1	3.0
		unable to work	2.0	7.2
		housewife	0.4	1.5
<i>Education level mother</i>	Intermediate	Low	0.4	1.9
<i>Education level father</i>	Intermediate	Low	0.5	1.7

Only significant variables are displayed.

Table 5. Multivariate regression analysis per group need for support

Domain	Column	Answer category	b (estimate)	Odds ratio	
Infancy review	Experience-last-6-months	1	0.7	2.1	
		2	0.8	2.3	
		3	0.4	1.5	
Somatic health	Parent-reported-need	2	2.3	9.9	
	Motor development	Experience-last-6-months	2	1.4	4.2
			3	0.5	1.6
	Parent-reported-need	4	-0.7	0.5	
	CHC-nurse-reported-need	1	2.3	9.5	
		3	1.7	5.5	
		4	1.5	4.4	
Language speech and thought development	Experience-last-6-months	3	0.6	1.9	
		Parent-reported-need	3	2.0	7.4
		CHC-nurse-reported-need	4	0.6	1.8
Language use of parents	Parent-reported-need	5	-0.9	0.4	
	CHC-nurse-reported-need	4	1.1	2.9	
Emotional development	Experience-last-6-months	1	2.3	9.7	
	Child behaviour	Experience-last-6-months	1	1.5	4.4
		Parent-reported-need	2	3.2	24.9
Parenting approach	Parent-reported-need	3	1.4	4.0	
		4	-0.5	0.6	
		5	-0.6	0.5	
	CHC-nurse-reported-need	3	1.9	6.8	
		4	1.3	3.5	
		5	0.7	2.1	
		4	-0.5	0.6	
Developmental stimulation	Experience-last-6-months	4	-0.5	0.6	
		Parent-reported-need	3	-4.7	0.0
		CHC-nurse-reported-need	3	3.0	20.8
		4	0.7	2.0	
How child spends time	Experience-last-6-months	3	1.0	2.7	
Living environment	Experience-last-6-months	1	1.1	3.1	
		2	0.8	2.1	
	Parent-reported-need	3	4.0	56.7	
Social contacts	Experience-last-6-months	3	0.5	1.7	
	Parent-reported-need	3	2.5	11.6	
Concerns communicated by others	CHC-nurse-reported-need	3	2.7	14.8	
		4	1.3	3.8	
Family issues	Experience-last-6-months	1	0.9	2.5	
		2	0.8	2.2	
	CHC-nurse-reported-need	1	7.1	1253.9	
		2	3.3	27.1	
		3	2.9	17.2	
		4	1.3	3.8	
	5	1.1	3.1		
Anything forgotten	Experience-last-6-months	3	0.8	2.3	
		Parent-reported-need	3	-3.4	0.0
		4	-1.4	0.3	
	CHC-nurse-reported-need	2	5.9	380.7	
		3	3.2	24.5	

Answer categories column experience-last-6-months : 1: very concerned, 2: quite concerned, 3: concerned, 4: little concerns, 5: no concerns (reference category).

Answer categories other columns: 1: immediate intervention required, 2: intensive help, 3: counselling, 4: personal advice, 5: information wanted, 6: no help needed (reference category)

Only significant variables are displayed

Table 6. Multivariate regression analysis per group balance factors

<i>Balance factor</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
<i>Motor development</i>	0	2.1	8.2
<i>Behaviour</i>	0	1.8	6.3
<i>Interaction between parent and child</i>	0	1.6	5.0
	1	-0.4	0.7
<i>Language child</i>	0	1.5	4.5
<i>Eating habits</i>	0	0.7	2.1
<i>Atmosphere at home</i>	0	1.2	3.2
	1	-0.338	0.7
<i>Child attachment</i>	0	1.1	3.0
<i>Hygiene home</i>	0	2.8	16.1
<i>Observe others</i>	0	1.7	5.7
<i>Child factors</i>	0	1.3	3.6
<i>Difficult infant period experienced</i>	0	1.4	4.0
	1	0.8	2.3
<i>Competence of parents</i>	0	1.9	7.0
	1	-0.9	0.4
<i>Parents agree among themselves</i>	0	0.9	2.5
<i>Amount of social support</i>	0	1.2	3.4
<i>Financial obstacles</i>	0	2.0	7.2
<i>Chronic health problem parents</i>	0	1.1	3.0
<i>Addiction parents</i>	0	1.9	6.8
<i>Psychiatric problems parents</i>	0	2.5	12.2
<i>Negative childhood experiences parents</i>	0	1.0	2.8
<i>Openness parents during visit</i>	0	1.6	5.1
<i>Other</i>	0	2.5	11.6

Answer categories: 0 negative, 1 positive, 2 neutral (reference category)

Only significant variables are displayed

Table 7. Multivariate regression analysis all variables; demographic characteristics

Factor	Reference category	Category	b (estimate)	Odds ratio
Age mother			-0.1	1.0
Household	Two parent household	Other	1.5	4.6
Employment father	Employed	Study	-1.6	0.2
Education level mother	Intermediate	Low	0.5	1.7
Education level father	Intermediate	Low	0.6	1.8

Only significant variables are displayed.

Table 8. Multivariate regression analysis all variables; need for support.

Domain	Column	Answer category	b (estimate)	Odds ratio
Infancy review	Experience-last-6-months	1	1.0	2.7
Somatic health	Parent-reported-need	2	3.6	37.2
Motor development	Experience-last-6-months	2	1.4	3.9
	Parent-reported-need	5	-0.8	0.5
	CHC-nurse-reported-need	4	1.4	4.0
Language speech and thought development	Experience-last-6-months	4	0.5	1.7
	Parent-reported-need	3	4.9	127.7
Emotional development	Experience-last-6-months	2	1.5	4.3
	Parent-reported-need	2	3.7	38.6
Behaviour child	CHC-nurse-reported-need	2	-3.2	0.0
		4	0.7	2.1
Parenting approach	Parent-reported-need	3	3.6	36.3
Developmental stimulation	CHC-nurse-reported-need	3	2.7	15.3
		5	-0.7	0.5
Living environment	Experience-last-6-months	3	-0.7	0.5
	Parent-reported-need	3	6.4	572.5
	CHC-nurse-reported-need	3	-3.7	0.0
Social contacts	Experience-last-6-months	2	-1.5	0.2
Concerns communicated by others	CHC-nurse-reported-need	3	3.2	25.1
Family issues	Parent-reported-need	4	1.3	3.5
	CHC-nurse-reported-need	1	8.9	7273.6
		2	4.2	65.6
		3	2.0	7.1
		5	1.1	3.0
Anything forgotten	Experience-last-6-months	1	-3.0	0.1
	CHC-nurse-reported-need	2	16.3	-

Table 9. Multivariate regression analysis all variables; balance factors

<i>Balance factor</i>	<i>Category</i>	<i>b (estimate)</i>	<i>Odds ratio</i>
<i>Motor development</i>	0	2.2	8.8
<i>Behaviour</i>	0	2.3	9.9
<i>Interaction between parent and child</i>	0	2.0	7.3
	1	-0.6	0.6
<i>Language child</i>	0	2.2	9.2
	1	0.5	1.6
<i>Eating habits</i>	0	0.5	1.7
<i>Atmosphere at home</i>	0	1.3	3.7
<i>Child attachment</i>	0	1.0	2.8
<i>Hygiene home</i>	0	3.6	34.9
<i>Observe others</i>	0	2.3	9.7
<i>Child factors</i>	0	1.4	4.0
<i>Difficult infant period experienced</i>	0	1.6	5.0
	1	0.8	2.1
<i>Competence of parents</i>	0	2.4	11.5
	1	-0.7	0.5
<i>Parents agree among themselves</i>	0	1.0	2.8
<i>Amount of social support</i>	0	1.3	3.7
<i>Financial obstacles</i>	0	1.9	6.9
<i>Chronic health problem parents</i>	0	0.8	2.2
<i>Addiction parents</i>	0	1.9	6.7
	1	2.0	7.6
<i>Psychiatric problems parents</i>	0	2.3	10.1
<i>Negative childhood experiences parents</i>	0	1.5	4.5
	1	-1.8	0.2
<i>Openness parents during visit</i>	0	2.3	10.2
<i>Other</i>	0	2.9	17.3

Only significant variables are displayed.