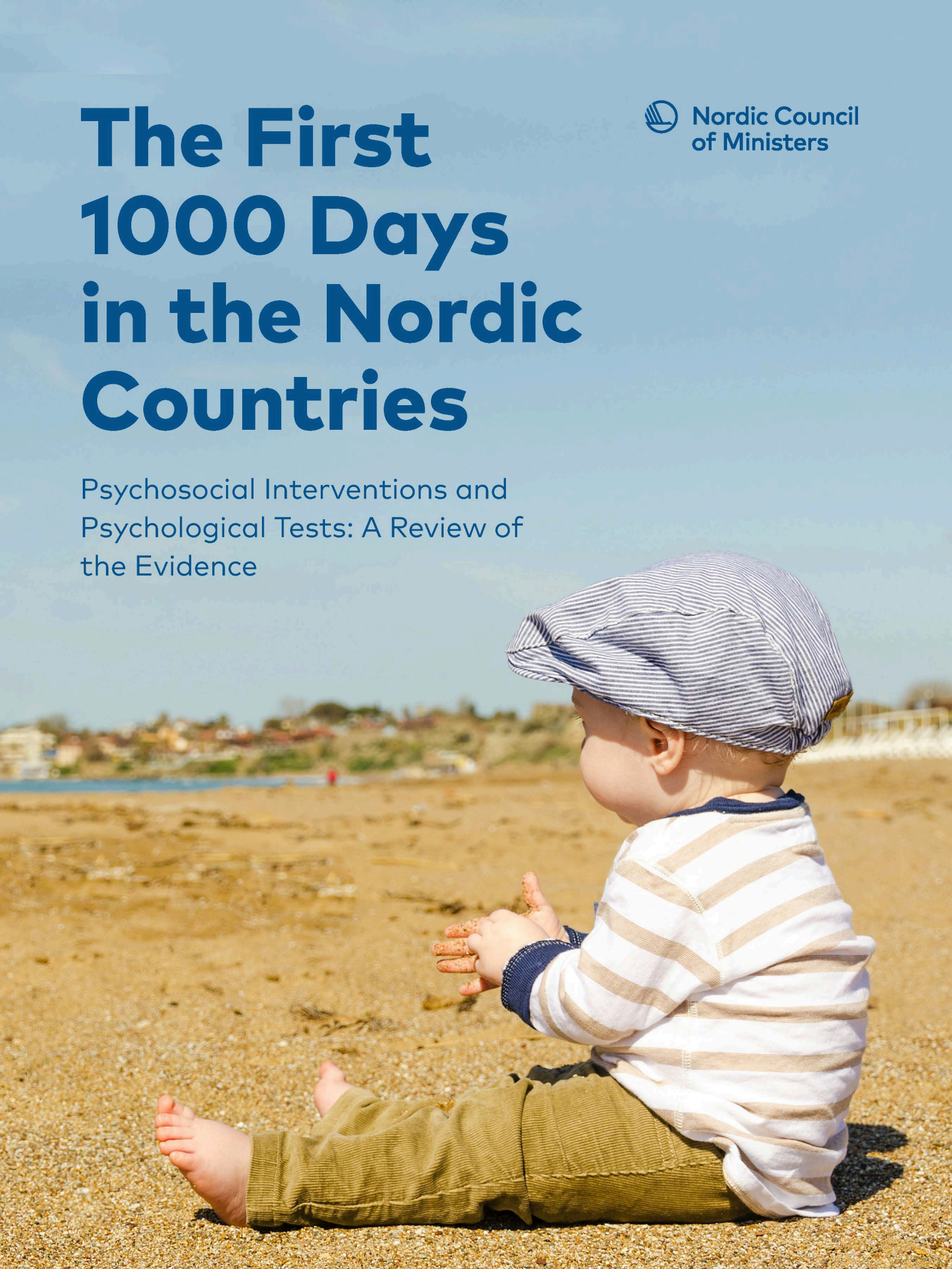
The First 1000 Days in the Nordic Countries

Psychosocial Interventions and Psychological Tests: A Review of the Evidence

Nordic Council of Ministers



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Preface

The First 1000 Days in the Nordic Countries is a three-year collaborative project focused on the mental well-being of infants, toddlers and their parents. It includes the period from pregnancy until the child's two years of age. The project has three main deliverables; a situation analysis, an evaluation of evidence, and policy recommendations to support mental health and wellbeing in the early years. A further description of the project and results from the situation analysis can be found in the report *The First 1000 Days in the Nordic Countries: A Situation Analysis*. The current report covers the second deliverable, which is to review the scientific evidence of psychosocial interventions and psychological tests used in the Nordic countries for the target groups. The report provides an overview and short systematic review of psychosocial interventions and psychological tests used during the first 1000 days of life, including pregnancy, in Denmark, Sweden, Finland, Norway, and Iceland. The project is funded by the Nordic Council of Ministers, and the lists of interventions and tests to be evaluated were provided by the Nordic partners in the project. The reviews were conducted by 14 researchers from the Regional Centre for Child and Youth Mental Health and Child Welfare (RKBU North) at UiT the Arctic University of Norway and researchers from the Itla Children's Foundation. An overview of the team and its members' competencies is presented in the Appendix. The project coordinator was Susann Dahl Pettersen and the editors were Monica Martinussen and Marjo Kurki.

Due to coronavirus restrictions in 2020, most of the interaction among the team members has been accomplished by means of video-meetings and email. The group had a first video meeting in April 2020, comprising key members of the online journal *Ungsinn*, the online resource Kasvun tuki, and Sigrun Danielsdottir, project leader of the *First 1000 Days in the Nordic Countries* from the Directorate of Health in Iceland. Other team members later met online in May, received training in June, and met regularly during the fall of 2020 with a final meeting in December. The first meetings included discussions about the criteria that should be used to decide which interventions and tests would be included. During subsequent meetings, criteria for assessing the evidence and literature searches were developed, and researchers were trained in the review process. The team members also had some valuable discussions around methodological problems. The content of this report represents the combined effort of the team of researchers.

Tromsø, December 2020
Monica Martinussen, *Editor*

Helsinki, December 2020
Marjo Kurki, *Editor*

Abstract

The aim of this report is to provide an overview and short systematic reviews of psychosocial interventions and psychological tests that are being used in the Nordic countries during the first 1000 days of a child's life, including the prenatal period and the child's first two years. To this end, each participating country provided information about interventions and tests used for the target groups (i.e., children and parents from pregnancy to the first two years of life) in their respective country. This resulted in a total of 63 interventions and 33 tests to be reviewed. A systematic and standardized literature search was performed for each intervention and test, using specific databases that provide reviews about interventions and tests (such as *Ungsinn*, Kasvun tuki and *PsykTestBarn*) and a literature search of the databases PsycInfo, Embase and Medline. Inclusion and exclusion criteria were used in order to identify relevant articles. Each review was performed by at least two trained researchers and included a review process conducted by the editors of this report. Based on the identified literature, the quality of the studies and the information they provided, an overall assessment of quality was given to each intervention and test, ranging from "Level 1: Intervention or test with no evidence/low level of quality for the target groups" to "Level 4: Intervention or test with a high level of evidence/ quality for the target groups". Of the 63 psychosocial interventions, 57% were rated at level 1, 29% at level 2, 11% at level 3, and 3% at level 4. Of the 33 psychological tests, 12% were rated at level 1, 61% at level 2, 15% at level 3, and 12% at level 4. The findings reveal that, although a large number of interventions and tests are available for the target groups, evidence regarding their effectiveness or psychometric properties was often lacking or insufficient. Thus, it is important that research efforts be enhanced in the Nordic region to strengthen the evidence-base of the interventions and instruments that practitioners rely upon in order to assess and support mental wellbeing for Nordic children and families during this critical period in their lives.

Background

Project Objective

The First 1000 Days in the Nordic Countries is a three-year Nordic collaborative project initiated in 2019 as part of the Icelandic Presidency of the Nordic Council of Ministers. It centers on the first 1000 days of a child's life, from the prenatal period until the child is two years of age. The project focuses on how Nordic countries:

- promote mental health and well-being during pregnancy
- promote emotional bonding and well-being among children and families
- identify and respond to early risk factors in infants and toddlers and their families
- support mental well-being among the youngest children in daycare and preschool.

The project is managed by the Directorate of Health in Iceland (DOHI) in partnership with Sundhedsstyrelsen in Denmark, Folkhälsomyndigheten in Sweden, Helsedirektoratet and RBUP Øst & Sør in Norway, and Itla Children's Foundation and the Finnish Institute for Health and Welfare (THL) in Finland. A total of three reports will be produced during the project period, the first of which was a situation analysis and comparison across the Nordic countries (Danielsdottir & Ingudottir, 2020). In the second year of the project, the Regional Centre for Child and Youth Mental Health and Child Welfare (RKBU North) at UiT the Arctic University of Norway and the Children's Foundation were asked to assess the evidence base for identified psychosocial interventions and psychological tests from each participating country. The result of this work is summarized in this report, which is the second report in the main project. The third and final report will include policy recommendations for how the Nordic countries can best support healthy emotional development among young children and make sure that every child born in the Nordic countries has the best possible start in life.

Aim of the Report

The aim of this report is to evaluate the evidence base on psychosocial interventions and psychological tests that are being used in the Nordic countries for expectant parents and children up to the age of two years. The overall evaluation is based on short systematic reviews that have been conducted for each identified psychosocial intervention and psychological test. The next sections describe what psychosocial interventions and psychological tests are and how they have been defined.

What is a Psychosocial Intervention?

The term "intervention" refers to methods, treatments and programs that are intended to promote good mental health and/or prevent or treat mental health problems and disorders. It is important to note that this report only looks at evidence of effectiveness *for the target group*, i.e., children and parents during the prenatal period and the first two years of life. This may include, for example, parent training programs designed to promote positive interaction and secure attachment between parents and children, treatment of maternal depression, or the prevention of child abuse through systematic screening and parent counselling. The interventions may be offered by public healthcare services, early childhood education and care (ECEC), social services, family centers or other relevant organizations. They may be group-based, individual or online. In its standards (2a), the Society for Prevention Research (SPR) states that "The intervention must be described at a level that would allow others to implement/replicate it" (Gottfredson et al., 2015). This means that in order to be included for evaluation, a written and complete description of the intervention must be available to everyone, not only those who have developed it, for example, in a manual or handbook, academic articles, online, books, reports or the like. Many providers of specific interventions have developed their own materials to describe their interventions. At a minimum, the description should provide insight into the objectives of the intervention, whom the intervention is meant for and under what conditions, and how it is conducted. The level of detail needs to be sufficient so that others would be able to replicate the intervention.

Levels of Evidence

There are many possible research questions relevant to the evaluation of an intervention. Different issues require the use of different research designs, depending on the aim of any particular study. It may include user satisfaction studies, implementation studies, cost-benefit analyses, and, most importantly for the purpose of this evaluation, effect studies. Randomized controlled trials (RCTs) are best suited to finding out whether an intervention has the intended effect. In experimental trials such as these, one or more groups receive an intervention and one or more control groups receive either a different intervention or no intervention at all. A randomized distribution of participants between intervention and control groups ensure that the groups are as equal as possible at the start of the process and that any differences in the groups' results are more likely to be attributable to the intervention. However, it is not always possible or beneficial to undertake an

actual experiment. In such cases, the researcher may employ various quasi-experimental designs, such as selecting a comparison group instead of randomly allocating participants to different conditions (Shadish, Cook, & Campbell, 2002). In addition to the design of the study, there are many other aspects that determine the methodological quality of the study and thus the degree to which we can trust the results. This includes assessing aspects such as the statistical analyses, the measurement instruments used, internal validity (causality), fidelity and external validity (generalization) (see e.g., the criteria for evaluating interventions in *Ungsinn* and Kasvun tuki) (Martinussen et al., 2019). It is also important to assess the size of the effect, and whether the intervention has led to a noticeable difference in favor of the intervention group. Effect size is often computed as the standardized mean difference between groups and labelled small (d = .20), medium (d = .50) and large (d = .80) (Cohen, 1988). These labels must be used with caution as they do not take into account the context, such as the type of intervention (universal, selective, indicated, or treatment), the problem, or the target group. One would expect smaller effects for a short universal preventive intervention compared to a comprehensive treatment program for a selected group, for example.

To sum up, the overall evidence that supports the conclusion that an intervention is effective for a given problem in a certain target group, depends on both the number and the quality of the studies conducted, in addition to the observed effect sizes. If several effect studies have been conducted, it may be possible to perform a meta-analysis where the mean effect size is computed and the variation between studies is examined. This makes it possible to study whether findings are consistent across different studies conducted by different research groups and in different settings. This highlights an important principle in research: that studies should be replicated, and that they should be replicated by research groups that are independent from the developer of the intervention or test.

What is a Psychological Test?

According to the American Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014, p. 2), "a test is a device or procedure in which a sample of an examinee's behavior in a specified domain is obtained and subsequently evaluated and scored using a standardized process". Given this definition, a test may include ability tests, measures, inventories, and scales, in addition to more diagnostic or observational procedures. Tests may also focus on other things besides behavior, such as emotions and cognitive abilities. Sometimes the label "test" is used for devices with a right or wrong response, whereas scales, inventories, and instruments are used when assessing traits, attitudes, and other personal characteristics. In this report we will use the generic term "test" for all types of standardized devices and procedures, in line with the APA definition and as adopted in the European Federation of Psychologists' Associations (EFPA) guidelines (EFPA, 2013). Assessment procedures that are not standardized, or that include a combination of many methods, are outside the scope of this review. Also, as previously noted for interventions, the evaluation of evidence for psychological tests in this report focuses only on their application among the target group, i.e., children and parents during the prenatal period and the first two years of life.

Test quality

Both the Standards (AERA et al., 2014) and the EFPA guidelines (2013) emphasize three important aspects to be taken into account when evaluating tests. These are reliability, validity and norms. There are many different studies that may be relevant to documenting these aspects of test quality. This includes studies that are explicitly designed to examine the psychometric properties of the test, but empirical studies where the test has been used may also be relevant. One important aspect is the sample that has been used, in terms of both the number of participants and their representativeness. A test may be used for different purposes and target groups, and the study in question should reflect this. In other words, a test may have good psychometric properties for a certain age group or predictive validity for some criteria, but not for others. This has particular relevance for the current evaluation which only focuses on pregnancy and the first two years after birth.

Most tests are developed in one language and in a specific cultural context. Thus, whenever a test is translated to another language or used in a different cultural context, care should be taken to assess the psychometric properties of the new version. Even a carefully conducted translation process may result in different psychometric properties for the test.

Another aspect of test use involves the qualifications of the test user. Most tests require some level of user qualification and training before they can be administered and interpreted correctly. The publishers of the test often have specific requirements regarding formal education and competencies before a person is allowed to purchase a test, for example, that the test user needs to be a certified psychologist. Other tests may be freely available, with no specific requirements for training or formal education. Even if this is the case, it is always the responsibility of the test user to ensure that he or she has the necessary qualifications and knowledge in psychometric testing to ensure a safe and proper use of the test.

Test validity. The most important aspect to assess is test validity – the degree to which the theory and evidence support the interpretation of test scores for the intended use of a test. For example, if a test is intended for screening purposes for a certain age group and problem, evidence that supports this claim is needed. If a test is used for assessing a specific construct, such as developmental level or language skills, evidence that supports this claim is needed, for example by comparing the test scores with other tests measuring the same construct, or by examining relationships between the test and other related constructs. Different types of test validity include construct validity and criterion-related validity. Construct validity signifies the extent to which it is possible to document that a test measures the intended construct (e.g., depression or attachment). There are many different ways to examine the construct validity. One option is to examine the factor structure of the test to see if it matches the underlying theory or model. Another approach may be to examine correlations between other measures of the same construct or to study hypothesized relationships between the test in question and other variables. Criterion-related validity looks at the extent to which a test may be used to predict something like the presence of a concurrent condition, such as autism, or a future outcome, such as a drinking problem. These two types of criterion-related validity are known as concurrent validity and predictive validity. Criterion-related validity,

which is typically reported as a correlation coefficient (*r*), is often examined by comparing test results with a particular criterion (e.g., a diagnosis or an objective measure of the behavior in question). When the test's purpose is screening, it is important that it is accurate in its ability to identify whether a condition, for example depression, is likely to be present or absent. Based on a reference standard (e.g., a diagnostic classification or a defined outcome measure), *sensitivity* refers to the test's ability to correctly classify an individual as having the condition (true positive) while at the same time avoiding classifying individuals with a condition they do not have (false positive). *Specificity* is the test's ability to correctly identify an individual as not having the condition (true negative).

Test reliability. Reliability refers to the extent to which a test measures the target phenomenon consistently, with little measurement error. It is a necessary but insufficient condition for test validity. Test reliability may be estimated in several ways, for example by computing the test-retest reliability or by estimating the internal consistency (e.g., Cronbach's alpha). Test-retest reliability indicates stability over time and is frequently used for tests conducted under time constraints. Other forms of reliability provide information about internal consistency (split-half and Cronbach's alpha) or consistency across versions (parallel form). The calculated correlations should be as high as possible, preferably .70 or .80; however, lower values may sometimes be accepted. For tests based on observations of behavior, it may be relevant to estimate inter-rater reliability. More modern test theory, including item response theory (IRT), may use other approaches for estimating reliability (e.g., Thompson, 2003). A more general definition of test reliability is the ratio of *true variance* over *observed variance*. The observed variance includes true variance as well as random or occasionally systematic error. Many factors may influence test reliability, some of which include standardized ways of administering and scoring the test, the number of items, and other aspects related to the person such as motivation or fatigue.

Test norms. In order to compare a child's or adult's performance with that of other children or adults, the raw score is frequently converted into something that may be easier to use and communicate (e.g., T-scores (M = 50, SD = 10)). The raw score itself has little meaning unless it is compared to something, such as developmental level or a well-known comparison group. In order to do this, it is important to have a norm group that is relevant to the use of the test. Norms may differ between countries and cultures, and should therefore be based on local samples, or evidence should be available that documents that the original norms may be used in the new setting.

Method

The lists of interventions and tests submitted by the network of partners in the *First 1000 Days in the Nordic Countries* were reviewed in line with the inclusion and exclusion criteria described below.

Which Psychosocial Interventions were Included?

Psychosocial interventions were included if they were: (1) health promoting, preventive, or treatment interventions; (2) directed at pregnant women, parents or caregivers with children up to 2 years old; or (3) directed at babies and toddlers up to 2 years old. In addition, (4) the intervention needed to be described and considered to be in accordance with the previously mentioned criteria formulated by Gottfredson et al. (2015), as well as (5) available through public services in the Nordic countries.

Psychosocial interventions were excluded if they: (1) were medical or drug treatment interventions; (2) included the wrong age group (i.e., children older than 2 years); (3) included parents/caregivers of children older than 2 years; or (4) were training procedures or education directed at healthcare personnel.

Which Psychological Tests were Included?

Tests were included if they were: (1) tests, instruments, scales, observational methods, or diagnostic systems for assessing parental risk factors including mental health problems, drug and alcohol use, domestic violence, parenting styles, parenting, and stress among pregnant women, parents and caregivers of young children (0–2 years of age); or (2) tests, instruments, scales, observational methods and diagnostic systems for assessing social, emotional, cognitive and motoric development, attachment, developmental problems, social withdrawal, or autism among young children (0–2 years). In addition, (3) the tests needed to be available in one or more Nordic language.

Tests were excluded if they were: (1) un-standardized tests, or without a written description (including information about items, administration, and scoring); or (2) the target group did not include young children, pregnant women, parents or caretakers of young children.

Literature Search

The literature search consisted of three steps. First, the project's partners who provided the list of the interventions and tests were asked for additional information about each intervention and test if needed. The project coordinator performed a thorough review of this information, finding additional information about each intervention and test to ensure its suitability for further review.

Second, a search was conducted in databases that summarize the evidence of interventions and tests. Relevant databases that were searched for psychosocial interventions were *Ungsinn*, Kasvun tuki, the California Evidence-Based Clearinghouse for Child Welfare database, Blueprints Programs and the EIF Guidebook. Relevant databases that were searched for psychological tests were *PsykTestBarn* and Metodguiden (in English "Method Guide", which collects assessment methods relevant to social work in Sweden).

Third, a systematic search was performed in the PsycInfo, Embase and Medline databases. For psychosocial interventions, the name of the test or intervention was initially applied and if it yielded more than 200 studies, a study design/child filter was applied. This search strategy included 42 steps. In steps 1 to 28 a search was conducted for different study designs (e.g., "Randomized Controlled Trial or Controlled Clinical Trial or Pragmatic Clinical Trial or Equivalence Trial or Clinical Trial, Phase III"), and these were combined with "OR" in step 29. In steps 30 to 36 a search was conducted for terms including pregnancy, infant and early childhood development, and these were combined with "OR" in step 37. In steps 38 to 41 a search was conducted for the name of the psychosocial intervention in English, the original language and in its abbreviated forms. In a last step, duplicates were removed from the combined search. For psychological tests, the search strategy included eight steps. In the first five steps searches were conducted for the Nordic countries (i.e., Norway, Sweden, Denmark, Finland or Iceland) and larger cities in those countries (e.g., "oslo or bergen or trondheim or NTNU or tromso or tromsoe or Stavanger"). These steps were combined with "OR". In step 7, a search was conducted for the name of the psychological test and/or its abbreviated name. In the final step, duplicates were removed. The total number of hits varied from intervention to intervention and from test to test.

Inclusion and Exclusion Criteria for Studies Evaluating Psychosocial Interventions

Studies were included if they were: (1) effect (efficacy or effectiveness) studies or meta-analyses; (2) adopting an experimental (randomized controlled trial (RCT)) or quasi-experimental design (using a comparison group); (3) conducted in the Nordic countries, Europe or North America; and (4) published in peer-reviewed journals or (5) PhD dissertations. In addition, (6) reviews from Kasvun tuki, *Ungsinn* and other relevant databases were included in the evaluation. Excluded were studies using a simple pre/post design without a control condition, as well as multiple-baseline studies, norm studies or studies adopting a qualitative design. Studies examining aspects other than the effect of the intervention (e.g., user satisfaction, implementation) or based on other samples than the target groups included in the First 1000 Days project (e.g., older children) were also excluded.

Inclusion and Exclusion Criteria for Studies Evaluating Psychological Tests

Studies were included if they: (1) examined the psychometric properties (e.g., reliability, validity or norms) of tests (including scales, measurement instruments, observational methods, or diagnostic systems); and were (2) conducted in the Nordic countries. If there were no Nordic studies, international studies from Europe and North America were included. In addition, (3) studies published in peer-reviewed journals, PhD dissertations and reviews from *PsykTestBarn* were included. Excluded were studies based on samples outside the scope of the First 1000 Days project (e.g., older children).

Rating the Evidence of Psychosocial Interventions

Interventions were rated on four different levels, from "Level 1: Interventions with no evidence for the target groups" to "Level 4: Interventions with a high level of evidence for the target groups". In general, a higher rating required more studies in addition to higher quality studies, as well as information that supported the evidence regarding the intervention and its intended use in the Nordic countries. The criteria for the four different levels were as follows:

Level 4. Interventions with a High Level of Evidence

For the intervention to be rated at level 4, there had to be at least two independent studies (at least one of which was Nordic), which were of good methodological quality (statistics, measures, design and follow-up), and the intervention had to have effects on primary outcome measures for the target group. If there was only one study, it had to be Nordic and supported by a positive evaluation in *Ungsinn*, Kasvun tuki, or another database.

Level 3. Interventions with a Good Level of Evidence

To be rated at level 3, there had to be one Nordic effect study with at least satisfactory methodological quality and some effects on either primary or secondary outcome measures for the target group. If the only studies available were international effect studies (e.g., European or North American), or the intervention had a good rating in international databases, the intervention was also classified as level 3.

Level 2. Interventions with Some Level of Evidence

Interventions were rated at level 2 if there was at least one international study where at least the minimum requirements were met regarding methodological quality, and there were some effects on either primary or secondary outcome measures for the target group. Interventions that did not fully qualify for level 3 or 4 were also classified as level 2.

Level 1. Interventions with No Evidence

Level 1 included interventions where there were no Nordic or international (European or North American) effect studies supporting the evidence of the intervention for the target group, or where there were high quality studies with no effects. Interventions that did not fully qualify for level 2 were also classified at level 1.

Rating the Quality of Psychological Tests

In order to rate the quality of psychological tests, criteria were developed based on the method used in *PsykTestBarn* and the EFPA criteria (2013). Tests were rated on four levels from "Level 1. Test with no or a low level of quality" to "Level 4. Tests with a high level of quality". In general, a higher rating required more studies in addition to higher quality studies, as well as information supporting the quality of the psychometric properties (reliability, validity and norms) of the test for its intended use in the Nordic countries. The criteria for the four different levels are described below.

Level 4. Tests with a High Level of Quality

For a test to be included on level 4, its psychometric properties had to be documented in at least one independent Nordic study with good methodological quality (sufficiently large and representative samples, appropriate statistical analyses, and proper translation procedures when applicable) with regards to the

target group. The findings had to indicate good or excellent levels of reliability, validity and norms. Whenever the intended use was screening, documentation about sensitivity and specificity had to be good or excellent.

Level 3. Tests with a Good Level of Quality

For a test to be included on level 3, its psychometric properties had to be documented in one Nordic study with adequate methodological quality, and its findings had to indicate at least adequate reliability, validity and norms with regards to the target group. Whenever the intended use was screening, documentation about sensitivity and specificity had to be at least adequate.

Level 2. Tests with Some but Inadequate Level of Quality

Level 2 includes tests where the only studies that examined the psychometric properties of the test were international ones. The studies had to report at least adequate documentation of the psychometric properties of the test with regards to the target group. Tests were also classified at level 2 when there were only Nordic studies of poorer methodological quality or with inadequate support of the psychometric properties of the test (in other words, there was not sufficient documentation for level 3 or 4).

Level 1. Tests with No or a Low Level of Quality

Level 1 includes tests where there were no Nordic or international (European or North American) studies examining the psychometric properties of the test with regards to the target group, or where there were high quality studies with no support of the test's psychometric properties with regards to the target group.

Procedure

A review was written by two authors for each psychosocial intervention and psychological test. The first author examined the literature search and included or excluded each article identified in the search in accordance with the predefined inclusion and exclusion criteria. In cases where the authors identified a lack of relevant studies, the systematic review was supplemented by a manual search. The first author also wrote a first draft of the review. The second author read the included articles, and edited and contributed to the draft. Any disagreements were resolved through discussion. After both authors approved the draft, it was submitted to one of the editors, who reviewed it and sent it back to the authors who made the necessary changes and resubmitted it. This procedure was repeated until a final version was accepted by the editor.

Evaluating the Psychosocial Interventions

Each intervention was evaluated by two authors. The authors completed a form providing information about the literature search and the documentation that was included, the target group and aim (primary and secondary) of the intervention, a short description of the intervention itself, and finally the evaluation itself, including the rating of the level of evidence (from level 1 to level 4).

Evaluating the Psychological Tests

Each test was evaluated by two authors. The authors completed a form with information about documentation and literature, the test taker/informant, purpose/use, a short description of the test, the copyright and availability of the test, and finally the evaluation itself, taking into account reliability, validity and norms, and the rating of the level of evidence (from level 1 to level 4).

Results

Psychosocial Interventions

The complete review of each psychosocial interventions is presented in alphabetical order in the next section. Of the 63 psychosocial interventions reviewed, 36 (57%) were rated at level 1, 18 (29%) at level 2, 7 (11%) at level 3, and 2 (3%) at level 4. The mean level of evidence was 1.60 (*SD* = 0.81), based on all 63 interventions. The target group for the majority of interventions was parents or caretakers (42 of 63 = 67%). A few interventions were targeted at children and parents together (12 in total or 19%), 7 (11%) were aimed at young children, and two interventions (3%) at adults without specifying parental status. About a third (30%) of the interventions used a group format, 51% were individual and 6% were intended for preschool, with the remainder involving either a combination (group/individual) or optional format, including self-help (13%). See Table 1 for an overview of all reviewed interventions.

Table 1. Overview of interventions reviewed

Intervention name	Purpose/aim	Target group	Type of intervention	Level of evidence
Active Parenting (Aktivt föräldraskap)	To create close and positive relations between parents and children.	Parents	Group	1
Anger Management "The Brøset model"	To reduce violent and aggressive behavior.	Adults	Group	1
Anger Management for Parents (Litt sint)	To reach out with psychological knowledge and provide parents with a method that helps them to create a more secure and predictable daily life for their children.	Parents	Self-help	1
Attachment and Biobehavioral Catch-up (ABC)	To (1) help parents provide nurturing care to children when they are distressed, (2) help parents follow their child's lead in play and exploration, and (3) prevent frightening	Children	Individual	3

	parental behavior.			
Child–Parent Psychotherapy (CPP)	To support normal development by helping the child and parent to develop a strong and loving relationship, and to support the parent in recognizing and contextualizing their child's behavior. Trauma-related aims: Helping the child and parent resolve trauma-related symptomatology, rebuilding trust, normalizing the responses, and joining the dyad in co-constructing a developmentally appropriate trauma narrative to help organize and integrate their experience.	Children	Individual	2
Circle of Security International – Intervention (COS–I)	To promote balanced parenting representations, secure caregiver–child attachment patterns and parent sensitivity.	Parents	Group or individual	1
Circle of Security International –Parenting (COS–P)	To promote more secure caregiver–child attachment patterns. Secondary aims include helping caregivers to better understand children's needs and signals and promoting effective emotion regulation.	Parents	Group or individual	1
Circle of Security Virginia – Family (COS–VF)	The primary aim is to promote more secure caregiver–child attachment patterns. Secondary aims include helping caregivers to better identify and interpret children's needs and signals and to reflect on both the child and one's own actions and feelings in attachment–caregiving interactions.	Parents	Individual	1
Circle of Security Virginia – Group (COS–VG)	The primary aim is to promote more secure caregiver–child attachment patterns. Secondary aims include helping caregivers to better identify and interpret children's needs and signals and to reflect on both the child's and the caregiver's own actions and feelings in attachment–caregiving interactions.	Parents	Group	1
COPEing With Toddler Behavior (CWTB) (Småbarnsliv)	To improve parent–child interaction in order to prevent the development of disruptive behavior disorders	Parents	Group	2
Dandelion Peer Support Method [VOIKUKKIA –Vertaistukimenetelmä]	The aims are (1) to go through the crisis caused by the placement of the child from the point of view of the parent, (2) to support the parent's own life and survival, and (3) to strengthen parenting and thereby increase the well-being of the child.	Parents	Group	1
Early Dialogues – Taking up One's Worries [Huoli puheeksi]	To take up difficult issues in a respectful way and offer the parents appropriate support.	Parents	Individual	1
Extended Postnatal Home Visiting Program	To improve the basis for better health development among children and to counteract social inequality.	Parents	Individual	1

Families First [Vahvuutta Vanhemmuuteen]	To strengthen parents' mentalizing ability and to promote positive interaction between child and both parents.	Parents	Group	1
Family Check-up (FCU)	To reduce children's behavioral problems by strengthening the parent's strategies and leadership in the family.	Children and parents	Group or individual	2
Family Group Conference (FGC) [Läheisneuvonpito]	The primary aim is to evaluate whether the intervention (1) reduces the need for services, (2) decreases the risk for referrals, (3) reduces the likelihood of repeated neglect and abuse, (4) increases reports by the extended family when needed, (5) leads to more frequent out-of-home placement within the extended family, and (6) increases the possibility of closing child protective services (CPS) cases.	Parents and caretakers	Group	1
Family Talk Intervention (FTI) (Beardslee's Family Intervention) [Beardslee's familjeintervention, Lapset puheeksi – perheinterventio]	To prevent mental health problems in children of mentally ill parents by promoting resilience for children.	Parents	Individual	1
Free of Bullying [Fri for mobberi]	To prevent bullying in preschools and primary schools, and to create a safe, positive and healthy environment for children attending preschool or primary school.	Children	Preschool	1
Holding Tight Treatment System [Pidä kiinni® -hoito-ohjelma]	To strengthen maternity and parenthood while treating the mother's substance abuse problem.	Mothers	Individual	1
I Am Me in Kindergarten (Æ e mæ i barnehagen)	To prevent violence and sexual abuse.	Children	Preschool	1
Incredible Years® (IY) – Baby Home Coaching	To help babies feel loved, safe, and secure, and to encourage babies' physical and language development.	Parents	Individual	1
Incredible Years® (IY) – Parents and Babies Program	To promote parent–child attachment and infants' physical, emotional, and language development.	Parents	Group	2
Incredible Years® (IY) – Toddler Basic Program	To prevent and treat young children's behavior problems and promote their emotional, social, cognitive, and language development. It also aims to promote good parenting, parental–toddler attachment and parental health.	Parents	Group	2
Incredible Years® (IY) – Toddler Home Coaching	To promote emotional, social, cognitive, and language development in children. Secondary aims of the program focus on good parenting skills, attachment and parental health. The home coaching version	Parents	Individual	1

	is considered a supplement to the parent groups, and provides additional support to parents with specific challenges in the parent–child relationship.			
In Safe Hands (I trygge hender)	To prevent, detect and avert domestic violence.	Parents	Individual	1
International Child Development Program (ICDP) [Vägledande samspel, Kannustava vuorovaikutus –ohjelma]	To enhance and enrich the relationship between caregivers and their children.	Parents	Group	1
Interpersonal Therapy (IPT)	IPT was developed for the treatment of major depression. It focuses on interpersonal disputes, role transitions, grief, and interpersonal deficits. It believes that if the patient can solve the interpersonal problem or is able to change their relationship to this problem, the depressive symptoms should resolve as well.	Mothers	Individual	3
Interpersonal Therapy Group (IPT-G)	Treatment of major depression. The therapy focuses on interpersonal disputes, role transitions, grief, and interpersonal deficits.	Mothers	Group	3
Kiikku – Baby Family Work® [Kiikku-vauvaperhetyö ®]	To (1) help parents interpret baby's messages, (2) respond to baby's needs sensitively and consistently (mother–baby interaction), (3) enhance parents' ability to provide a calming experience and regulatory assistance (emotion regulation), and (4) to increase parents' ability to help their children navigate their development (cognitive development, e.g. language skills, memory, visual perception, executive functions).	Parents	Individual	1
Lend Me Your Ear (Ljáðu mér eyra)	To help women overcome difficult birth experiences or combat anxiety before childbirth.	Mothers	Individual	1
Let's Talk about Children [Lapset puheeksi – keskustelu]	To help women overcome difficult birth experiences or combat anxiety before childbirth.	Parents	Individual	1
Living Well Together (Godt samliv)	To provide support and inspiration to first-time parents in a time of considerable change and challenge, in everyday life and in their relationship.	Parents	Group	1
Mamma Mia	To prevent the onset or reduce symptoms of depression and to enhance or maintain subjective well-being during pregnancy and in the six months after giving birth.	Mothers	Self-help	3
Marte Meo	To strengthen and develop the interaction between parents and children via parent guidance.	Children and parents	Individual	2
Mellow Bumps (MB)	To encourage nurturing, engagement and attunement between mother and baby by	Mothers	Group	2

	decreasing maternal antenatal stress levels and increasing expectant mothers' understanding of the newborn child's capacity for social interaction.			
Minding the Baby® (MTB)	To promote a good and secure connection between the mother and the baby. A secondary aim is to enhance: (1) protective factors, skills, and strategies, (2) competent and flexible parenting, (3) psychological health in parents, in children, and between parents and children, (4) physical health and development of the child and 5) positive life course outcomes.	Mothers	Individual	3
Modified Mother – Infant Transaction Program (MITP)	To (1) strengthen parents' understanding of and sensitivity towards infants' signals, and their ability to interact with the infant in ways that support child development, and (2) strengthen the probability of healthy development in the child.	Infants and parents	Individual	4
Multi-Agency Risk Assessment Conferences (MARACs)	To enhance information-sharing and take action to reduce harm and the revictimization of high-risk domestic violence victims.	Adults	Individual	1
Neonatal Behavioral Assessment Scale (NBAS)	To (1) sensitize parents to infants' capacities and individuality, and (2) enhance the parent–infant interaction and relationship.	Infants and parents	Individual	2
Newborn Behavioral Observation (NBO)	To (1) sensitize parents to infants' capacities and individuality and (2) enhance the parent–infant relationship by (3) strengthening parents' confidence and practical skills in caring for their children.	Infants and parents	Individual	2
Newborn Individualized Developmental Care and Assessment Program (NIDCAP)	For preterm infants/infants with very low birth weight and their parents admitted to the newborn/neonatal intensive care units (NICU).	Infants and parents	Individual	2
Nurse-Family Partnership [Familie for første gang]	Better pregnancy outcomes, improved child health and development and increased economic self-sufficiency	Children and mothers	Individual	3
Nurture and Play [Hoivaa ja leiki]	To support (1) the mentalizing ability and (2) the emotional availability of pregnant mothers in relation to the newborn baby (e.g. through experiential tasks and playfulness), and (3) to teach cognitive-behavioral methods for managing depressive symptoms. A secondary aim is to reduce depressive syndromes.	Mothers	Group	2
PALS Preschool	To reduce children's challenging behavior, increase their social skills, increase the satisfaction of program staff and families, increase teachers' competence and confidence in the support of children, and change the classroom and program climate.	Children	Preschool	1

Parent-Baby Intervention	To (1)s strengthen social interaction and contact with the baby, and (2) reduce the risk of future socio-emotional problems in the child.	Parents	Individual	2
Parent-Child Interaction Therapy (PCIT)	To increase attachment and positive interaction between parents and children. Secondary aims are to increase the children's attention span and prosocial behavior, reduce parent stress and enhance effective limit-setting.	Children	Individual	4
Parent-Infant Psychotherapy (PIP)	To improve the parent–infant relationship and promote infant attachment and optimal infant development.	Parents	Individual	2
Parenting in Sweden [Föräldraskap i Sverige]	To give parents information about areas that are important for family life in Sweden and provide them with peer support through group discussions in order to increase parents' self-efficacy and knowledge of where to turn for more support.	Parents	Group	1
Parenting That Works: Building Skills that Last a Lifetime	To promote coordinated parenting practices and parenting skills.	Parents	Group	1
Parenting Young Children (PYC)	To develop and strengthen parenting skills in basic care, safety and interaction.	Parents	Individual	1
Prevention and Relationship Education Program (PREP)	To promote positive marital relationships and prevent marital problems.	Parents/ adults	Group	1
Safe Environment for Every Kid (SEEK) [Barnsäkert]	To enhance pediatric primary care and better address major risk factors for child maltreatment.	Parents	Individual	2
Solihull Approach	To (1) increase emotional health and well-being, emphasizing the link between emotions and behavior, and better parent–child relationships, and (2) reduce the impact of adverse childhood experiences.	Parents	Group	1
START – Life Skills for Little Ones [START – Livskunnskap for de minste]	To develop children's social, emotional and linguistic skills.	Children	Preschool	1
Still Parents (Fortsatt foreldre)	To encourage good cooperation and communication between parents after a break-up.	Parents	Group/ course	1
Stine Sofie Foundation Parent Package	To (1) strengthen the parental role, provide support and tools for challenging situations and prevent situations that are unsafe and dangerous for the child, and (2) support and help healthcare professionals when preparing and guiding parents in topics that may arise before and after birth.	Parents	Individual/ self-help	1

Supporting Parent-Child Interaction (Vavu – Varhaisen vuorovaikutuksen tukeminen perustason työssä)	To (1) enhance parent-child interaction, (2) support child's mental development and health, 3) support the family's own resources and problem-solving skills, and (4) give professionals information and tools to work with parents and create positive interaction with them.	Children and parents	Individual	2
TheraPlay	To help parents play with their child in a way that establishes felt safety, increases social engagement, expands arousal regulation, and supports the development of positive self-esteem for both the child and the parent.	Children and parents	Individual	1
Transdiagnostic Cognitive Behavioral Group Treatment (TCBGT) for Pregnant Women	To treat mild to moderate symptoms of depression and anxiety in pregnant women in a primary care setting.	Mothers	Individual	2
Triple P – Positive Parenting Program®	To (1) support parenting and family life, (2) prevent and treat behavioral and emotional problems in children, (3) prevent problems in the family, school and community before they arise, and (4) create family environments that encourage children to realize their potential.	Parents	Group/ individual	3
Tuning in to Toddlers (TOTS)	TIK aims to prevent problems developing in children, promote emotional competence (in parents and children), and reduce and treat problems with children's emotional and behavioral functioning.	Children and parents	Group	1
Video Interaction Guidance (VIG–MLL)®	To increase attuned interaction between parent and a child.	Children and parents	Individual	2
Watch, Wait and Wonder	To enhance maternal sensitivity and responsiveness, the child–parent attachment relationship, the child's sense of self and self-efficacy, and emotion regulation.	Children and parents	Individual	2

Reviews of Psychosocial Interventions

Name of the intervention:	**Level of evidence:**
Active Parenting [Aktivt föreldreskäp]	1

Authors: Lene-Mari P. Rasmussen & Susann D. Pettersen

Documentation and literature: None of the 20 results from the literature search was applicable to the target group.

Target group: Parents of children aged 1 to 18 years old. The childhood version is for ages 1–4 years.

Aims (primary and secondary): The primary aim of Active Parenting is to create close and positive relationships between parents and their children, and for parents to find confidence in their role as parents to overcome everyday challenges.

Description of the intervention: Based on the theories of Alfred Adler and Rudolf Dreikurs known as "Adlerian psychology", the Active Parenting intervention was developed in the early 1980s by Dr. Michael H. Popkin. The model focuses on cognitive-behavioral approaches and personal choice and responsibility, together with mutual respect. Active Parenting also includes communication theory from Carl Rogers, among others, in order to understand the child's development and perspective. Active Parenting emphasizes an "authoritative approach" in which parenting skills are highlighted, such as the importance of encouragement, family meetings, problem-solving skills, and natural and logical consequences. There are different versions of the intervention depending on the age of the child and where it is implemented. The Swedish version (https://www.aktivtforaldraskap.se/) consists of five 2½ hour sessions in which parents engage in Adlerian theory, videos, dialogue, skill training, knowledge exchange and role-play. Topics include the purpose of parenting, leadership, attachment, children's developmental stages, reinforcement, and the prevention of problems. Information about the original version can be found at Active Parenting USA Headquarters at https://activeparenting.com/about-us/

Evaluation of the documentation: The literature search found no Nordic studies into Active Parenting within the specific target group (1–4 years). One Swedish report described results from two pre–post quasi-experimental designs evaluating Active Parenting in elementary-school children (*M* = 6 years) with variable results (Folkhälsomyndigheten, 2010). Another Swedish study was also identified in the search (Alfredsson et al, 2018), but this included parents of older children (10–17 years old), and was therefore excluded.
In general, most of the research documentation is conducted with parents or teachers of children of elementary-school age or adolescents (e.g., Boccella, 1987; Foley et al., 2019; Mullis, 1999), and less on the youngest target group (pilot study or unpublished work). Since there are no Nordic or international effect studies supporting the evidence of of the childhood version (1–4-year-olds), the intervention is rated at level 1.

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Name of the intervention: Anger Management, "The Brøset Model" [Sinnemestring Brøsetmodellen]	**Level of evidence:** 1

Authors: Sabine Kaiser & Helene Eng

Documentation and literature: The literature search did not identify any scientific effect evaluations of the intervention. However, an additional search identified two effect evaluations of the intervention that were based on the same sample (Nesset et al., 2021; Nesset et al., 2020).

Target group: Adults with anger and violence problems in close relationships. The intervention targets adults with and without children.

Aims (primary and secondary): The main aim is to reduce violent and aggressive behavior in close relationships. More precisely, the aim is for participants to identify their patterns of anger, understand the reasons for their reactions, develop healthy coping strategies in order to deal with their feeling of anger, and prevent their aggression from harming other people (Jarwson, Nesset, Berg, & Meisingset, n.d.).

Description of the intervention: "The Brøset Model" was developed in Norway and is based on cognitive therapy. It is usually conducted in groups of six participants who meet once a week over a period of three to four months (Dinutvei.no, 2020, July 1). There are 30 hours of group therapy (St. Olavs Hospital, University Hospital Trondheim, 2020, July 1). Participants work on increasing their awareness of and responsibility for their behavior and learn techniques to control their aggressive behavior (Dinutvei.no, 2020, July 1). Although this intervention does not target children directly, working with adults who have children and who have violence and anger problems supports a safe and secure upbringing for the child. Participation is usually free of charge (Dinutvei.no, 2020, July 1). Anger management, "The Brøset Model" was developed at the Brøset Competence Center for Safety, Prison and Forensic Psychiatry at St. Olavs Hospital, Trondheim University Hospital (Norway) and is supported by the Norwegian Directorate of Health.

Evaluation of the documentation: The two studies from Nesset et al. (2021; 2020) are based on the same sample of 125 men who voluntarily sought help for violence in intimate partnerships. These men were randomly assigned to either the CBT anger management intervention after the Brøset Model (n = 67) or a comparator condition which received mindfulness-based sessions (n = 58). Nesset et al. (2020) examined psychological-, physical-, or sexual violence in addition to physical injury as outcomes and Nesset et al. (2021) examined anxiety and depression symptoms. In both studies, both the intervention- and the comparator group showed a significant improvement in outcome measures over 12 months. However, there were no between-group differences, indicating no advantageous or beneficial effect of CBT compared to mindfulness sessions. The intervention is, therefore, rated at level 1 as an intervention that has no evidence of effect.

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Name of the intervention:	**Level of evidence:**
Anger Management for Parents [Litt sint]	1

Authors: Henriette Kyrrestad & Lene-Mari P. Rasmussen

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The information provided here was taken from the intervention's website (www.littsint.no/en).

Target group: Parents of children aged up to 18 years.

Aims (primary and secondary): The primary aim is to reach out with psychological knowledge and provide parents with a method that helps them to create a more secure and predictable daily life for their children. The secondary aim is to give parents information about where they can seek professional help.

Description of the intervention: Anger Management for Parents [Litt sint] is a self-help tool for parents who want to handle their anger towards their child better. By becoming more aware of negative thoughts about themselves and their child, they can challenge those thoughts, change their feelings and access more desirable choices and actions. It is based on a cognitive model called ABC, in which the connection between thoughts, emotions and behavior is central (Beck, 1995; Ellis, 1962). Anger Management for Parents is provided through a website, an e-book and a mobile/tablet application. The website provides information about why we get angry, some relevant research about anger and violence in the family and information on where to seek help. The e-book, "Guide to Anger Management for Parents" provides extended information about the cognitive model through 10 short movies (Sunde, 2014). Anger Management for Parents is available in Norwegian, English, Polish, Spanish, Arabic, Somali, Urdu and northern Sami. The website, the e-book "Guide to Anger Management for Parents" and the Anger Management app "Littsint" were developed by psychologist Steinar Sunde at the Norwegian Family Counselling Center with support from the Norwegian Directorate for Children, Youth and Family Affairs.

Evaluation of the documentation: There are no Nordic or international effect studies supporting the evidence of Anger Management for Parents. The intervention is rated at evidence level 1 – Intervention with no evidence.

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Name of the intervention:	**Level of evidence:**
Attachment and Biobehavioral Catch-up intervention (ABC)	3

Authors: Charlotte Reedtz & Marte Rye

Documentation and literature: Based on the literature search, 30 empirical articles including 23 RCT studies and two systematic reviews were included (Aparicio et al., 2016; Berlin et al., 2019; Berlin et al., 2018; Berlin et al., 2014; Bernard et al., 2015; Bernard et al., 2012; Bernard et al., 2014; Bernard et al., 2019; Caron et al., 2018; Caron et al., 2016; Dozier et al., 2009; Dozier et al., 2008; Dozier et al., 2006; Garnett et al., 2020; Grube et al., 2018; Hepworth et al., 2020; Hoye et al., 2019; Lewis-Morrarty et al., 2012; Lind, Bernard et al., 2020; Lind, Lee Raby et al., 2020; Mountain, et al., 2017; Perrone et al., 2020; Tabachnick et al., 2019; Valadez et al., 2020; Yarger, Bernard et al., 2020; Yarger, Bronfman et al., 2020; Yarger et al., 2016; Zajac et al., 2020).

Target group: Young children aged 6–24 months with a history of adversity (e.g. neglect, abuse, violence, and where child welfare is involved).

Aims (primary and secondary): The main aims of ABC are: (1) to help parents provide nurturing care to children when they are distressed; (2) to help parents follow their child's lead in play and exploration; and (3) to prevent frightening parental behavior.

Description of the intervention: ABC is a brief, high-intensity, attachment-focused parenting intervention for child protective services involving infants and their biological or foster parents. It was designed to target three parenting behaviors that are key to child regulation of behavior and physiology. It comprises a weekly ten-session manual-based intervention delivered in the home by a certified parent coach. All sessions are videotaped and last 60–90 minutes. Two versions have been developed, one of which is the infant version for children aged 6–24 months. ABC focuses on the parenting targets of nurturance (i.e., providing nurturing care to distressed infants), following the lead (i.e., contingent responding), and non-frightening behavior (i.e., avoiding behavior that may frighten or overstimulate children). A core element in the intervention is in-the-moment (ITM) commenting, which involves the parent coach commenting on the parent's positive behavior. Home visits are video-recorded, and positive parental behavior is presented for the parent in the next session, together with a specific theme for each session.

Evaluation of the documentation: There are no previous or ongoing studies relating to the effects of ABC in the Nordic countries. In the US, ABC has been evaluated in multiple RCTs and shown improvement in child development across multiple domains. Positive effects have been reported on variables such as stress (Dozier, et al., 2009; Dozier, et al., 2008; Dozier, et al., 2006), attachment security, both at 12 months post-intervention and at follow-up at nine years of age (Bernard, et al., 2012; Zajac, et al., 2020), diurnal cortisol levels (Bernard, et al., 2015), emotion regulation (Lind, et al., 2014), DNA methylation, and hence malleability of epigenetic states that are associated with maltreatment (Hoye, et al., 2019), autonomic regulation (Tabachnick, et al., 2019), and social-emotional competence (Lind, Bernard, et al., 2020), as well as neural processing and problem behavior (Valadez, et al., 2020). Most of the included studies also reported strengthened parenting behaviors, such as sensitive caregiving in the intervention parents (Bick, Bernard & Dozier, 2013; Bick & Dozier, 2013), and one study found that parental sensitivity mediates the long-term effects of secure attachment and cortisol levels measured in middle childhood (Garnett, et al., 2020). As there are several independent studies with sufficient methodological quality and positive effects on primary outcome measures, but no Nordic studies on the effects of the intervention, ABC is placed in evidence level 3 – Intervention with a good level of evidence.

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Tabachnick, A. R., Raby, K. L., Goldstein, A., Zajac, L., & Dozier, M. (2019). Effects of an attachment-based intervention in infancy on children's autonomic regulation during middle childhood. *Biological Psychology, 143*, 22–31. https://doi.org/10.1016/j.biopsycho.2019.01.006

Valadez, E. A., Tottenham, N., Tabachnick, A. R., & Dozier, M. (2020). Early parenting intervention effects on brain responses to maternal cues among high-risk children. *The American Journal of Psychiatry, 177*(9), 818–826. https://doi.org/10.1176/appi.ajp.2020.20010011

Yarger, H. A., Bernard, K., Caron, E. B., Wallin, A., & Dozier, M. (2020). Enhancing parenting quality for young children adopted internationally: Results of a randomized controlled trial. *Journal of Clinical Child and Adolescent Psychology, 49*(3), 378–390. https://doi.org/10.1080/15374416.2018.1547972

Yarger, H. A., Bronfman, E., Carlson, E., & Dozier, M. (2020). Intervening with Attachment and Biobehavioral Catch-Up to decrease disrupted parenting behavior and attachment disorganization: The role of parental withdrawal. *Development and Psychopathology, 32*(3), 1139–1148. https://doi.org/10.1017/S0954579419000786

Yarger, H. A., Hoye, J. R., & Dozier, M. (2016). Trajectories of change in Attachment and Biobehavioral Catch-up among high-risk mothers: A randomized clinical trial. *Infant Mental Health Journal, 37*(5), 525–536. https://doi.org/10.1002/imhj.21585

Zajac, L., Raby, K. L., & Dozier, M. (2020). Sustained effects on attachment security in middle childhood: results from a randomized clinical trial of the Attachment and Biobehavioral Catch-up (ABC) intervention. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 61*(4), 417–424. https://doi.org/10.1111/jcpp.13146

Name of the intervention:	**Level of evidence:**
Child–Parent Psychotherapy (CPP)	2

Authors: Kirsi Peltonen & Charlotte Reedtz

Documentation and literature: The evidence assessment was based on a literature search and 13 studies were included.

Target group: Children aged 0–5 years who have experienced or witnessed a traumatic event and are exhibiting attachment, behavioral, or emotional difficulties as a result, and their parents.

Aims (primary and secondary): The general aims are to support normal development by helping the child and parent to develop a strong and loving relationship, and to support the parent in recognizing and contextualizing their children's behavior. Trauma-related aims include helping the child and parent resolve trauma-related symptomatology, rebuilding trust, normalizing the responses, and joining the dyad in co-constructing a developmentally appropriate trauma narrative to help organize and integrate their experience (Willheim, 2013).

Description of the intervention: CPP is a psychodynamic-oriented treatment, and interpretation during play is one of the main techniques. The initial assessments are typically scheduled with the primary caregiver to create the treatment plan, followed by joint child–parent play sessions. The main goal of the interpretation is to show compassion for the parent (many of whom have experienced past abuse or traumatic events) and help them realize, in the presence of their child, that their previous experiences affect their relationship. CPP takes approximately one year to complete and consists of the therapist meeting with the child and parent on a weekly basis. During the course of the treatment, the therapist may schedule individual sessions with the primary caregiver as clinically indicated to review progress (Lieberman et al., 2005).

Evaluation of the documentation: One RCT trial and one prospective cohort design have evaluated CPP's effectiveness. Both studies were conducted in the United States.
A study by Bernstein and colleagues (2019) showed that CPP was effective in reducing children's externalizing and externalizing symptoms among 2–6-year-old children and their mothers who had experienced inter-partner violence (IPV). The study especially focused on maternal interpretive biases in interpreting infant facial expressions and displays of emotion (using The IFEEL Picture System), and whether the change in such biases served as a mechanism of how CPP reduced children's behavioral symptoms. The study revealed that IPV-exposed mothers exhibited a perceptual bias toward fear, but not anger. Bias toward fear was linked to greater internalizing symptoms in the child, while bias toward anger was linked to greater externalizing symptoms in the child. Participation in CPP (n = 42) resulted in decreased bias toward fearful faces compared to case management controls (N = 33), but this decreased bias did not emerge as the mechanism by which CPP reduced children's behavioral symptoms.
A prospective cohort study by Hagan et al. (2017) included mother–child dyads (n = 199) participating in an open treatment study of CPP to investigate whether parent and child symptoms decreased during treatment and whether improvement was moderated by parent, child, and treatment characteristics. Latent difference score analysis showed that symptoms of post-traumatic stress syndrome (PTSS) significantly decreased for parents and children. The improvement in PTSS symptoms in parents was associated with reductions in child avoidance and hyperarousal. Contrary to expectations, parent and child improvement in terms of PTSS was greater for those with fewer parental lifetime stressors and for those who participated in fewer treatment sessions. The extent of improvement in symptoms of PTSS in the parent varied based on clinician expertise.

There is some evidence of the effectiveness of CPP on children's and mothers' traumatic stress symptoms, children's internalizing and externalizing symptoms and mothers' bias toward their children's fearful faces. CPP is often confused and/or combined with other infant–parent or toddler–parent psychotherapies with a slightly different focus and theoretical background, whereas this evaluation only included studies that reported data exclusively from pure CPP trials. There are no Nordic effect studies of CPP, and hence the method is classified at level 2, with some but inadequate level of evidence.

References:

Bernstein, R. E., Timmons, A. C., & Lieberman, A. F. (2019). Interpersonal violence, maternal perception of infant emotion, and child–parent psychotherapy. *Journal of Family Violence, 34*, 309–320. https://doi.org/10.1007/s10896-019-00041-7

Hagan, M. J., Browne, D. T., Sulik, M., Ippen, C. G., Bush, N., & Lieberman, A. F. (2017). Parent and child trauma symptoms during child–parent psychotherapy: A prospective cohort study of dyadic change. *Journal of Traumatic Stress*, *30*, 690–697. https://doi.org/10.1002/jts.22240

Lieberman, A. F, Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: Child–parent psychotherapy with preschoolers exposed to marital violence. *Journal of American Academy of Child and Adolescent Psychiatry*, *44*, 1241–1248. https://doi.org/10.1097/01.chi.0000181047.59702.58

Willheim, E. (2013). Dyadic psychotherapy with infants and young children: Child–parent psychotherapy. *Child and Adolescent Psychiatric Clinics of North America, 22*, 215–39. https://doi.org/10.1016/j.chc.2013.01.003

Name of the intervention:	**Level of evidence:**
Circle of Security International – Intervention (COS-I)	1

Authors: Helene Eng & Marte Rye

Documentation and literature: One effect study relevant to the target group was found in the literature search (Ramsauer et al., 2019). The Circle of Security International – Intervention (COS-I) is very similar to the COS Virginia – Family (COS-VF) intervention, which was recently evaluated by *Ungsinn* (Eng et al., 2020).

Target group: The target group is caregivers of children aged up to 6 years old with mild and moderate to high risk of developing attachment issues.

Aims (primary and secondary): The aims are to promote balanced parenting representations, secure caregiver–child attachment patterns and parent sensitivity.

Description of the intervention: Circle of Security (COS) is a group of attachment-based parental guidance interventions. This review describes the Circle of Security (COS) International – Intervention (COS-I) (Tilknytningspsykologene, 2020), a treatment intervention that can be given in a group format or to families individually. As a group format, the program consists of about 20 sessions. Given individually, the number of sessions can be adapted to the family needs. The treatment starts with observations of the quality of the parent–child interaction, followed by psychoeducation, exercises, home assignments and reflections based on both pre-recorded videos and videos of parent–child interaction in the family receiving the intervention. The visual map "the circle of security" is central throughout the program. It is visualized as a pair of hands and an oval circle, representing the caregiver as a *secure base* and a *safe haven*, offering support for the child's exploration and comfort and security when the child is in distress.

Evaluation of the documentation: One German RCT study examined the effect of COS-I (group-format) compared to treatment as usual on mothers with postpartum depression (*N* = 36 mother–infant dyads, infant age 4–9 months) (Ramsauer et al., 2019). The results did not show any effects on either the attachment patterns of the children or maternal sensitivity. Low statistical power might be a reason for effects not being detected. A sub-analysis indicated that the intervention might be more suitable if the mothers themselves had unresolved/disorganized attachment, but the numbers were too small to reach a conclusion on this. The evaluation of the similar intervention COS-VF in Ungsinn concluded that there was no Scandinavian studies or international systematic reviews supporting the evidence of COS-VF. As there are no Nordic or international effect studies with sufficient quality supporting the evidence of COS-I, the intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Eng, H., Rye, M., & Ulvund, S. E. (2020). *Kunnskapsoppsummering og klassifisering av tiltaket Circle of Security Virginia – Familiemodellen* (COS-VF, 2.utg.) [Systematic review and classification of the intervention Circle of Security Virginia – Family model (COS- VF, 2nd ed.)]. *Ungsinn* 1:2. https://ungsinn.no/post_tiltak_arkiv/circle-of-security-virginia-familiemodellen-cos-vf-2-utg/

Ramsauer, B., Mühlhan, C., Lotzin, A., Achtergarde, S., Mueller, J., Krink, S., Tharner, A., Becker-Stoll, F., Nolte, T., & Romer, G. (2019). Randomized controlled trial of the Circle of Security-Intensive intervention for mothers with postpartum depression: maternal unresolved attachment moderates changes in sensitivity. *Attachment & Human Development*, *22*(6), 705-726. https://doi.org/10.1080/14616734.2019.1689406

Tilknytningspsykologene. (2020). *Implementeringsprotokoll. Implementering av COS I, COS PP, COS HV4 og COS P, COS barnehage og skole og i norske helse- og sosialtjenester* [Implementation protocol. Implementing COS 1, COS PP, COS HV4, COS P, COS kindergarten and school in Norwegian health and social services].

Name of the intervention:	**Level of evidence:**
Circle of Security International – Parenting (COS-P)	1

Authors: Marte Rye & Helene Eng

Documentation and literature: One Nordic RCT study and two international reviews relevant to the target group were found in the literature search. COS-P has been evaluated in *Ungsinn* (Rye & Eng, 2020). An RCT study from the US was not included as the target group was children aged 3–5 years (Cassidy et al., 2017).

Target group: The target group is caregivers of children aged 1–7 years old with no known risk of developing attachment issues.

Aims (primary and secondary): The primary aim is to promote more secure caregiver–child attachment patterns.
Secondary aims include helping caregivers to better understand children's needs and signals and promoting effective emotion regulation.

Description of the intervention: Circle of Security (COS), is a group of attachment-based parental guidance interventions. This review describes COS-P, which is a preventive intervention targeted at groups or individual families (Cooper et al., 2013). The group program consists of eight sessions, lasting between 1½ and 2 hours. When they are provided individually, the number of sessions is more flexible. Each session has its own theme and makes use of videos, psychoeducation, exercises, and reflections. The visual map "the circle of security" is central throughout the program. This is visualized as a pair of hands and an oval circle, representing the caregiver as a *secure base* and a *safe haven*, offering support for the child's exploration and comfort and security when the child is in distress. The caregivers use the circle to analyze children's needs, both from video sessions and from interactions with their own children.

Evaluation of the documentation: One Nordic RCT study has evaluated the effect of COS-P on parents' internal representations and emotional availability, with children aged 0–4 years. Significant improvements over time were found for the clinical group receiving COS-P in addition to TAU (N = 28), but there were no significant differences in improvements between the COS-P group and the control group receiving only TAU (N = 24), meaning that the study cannot document the effect of COS-P (Mothander et al., 2018). One international review (Yaholkoski et al., 2016) reported a moderate effect on secure attachment, but this review has several methodological challenges, including not distinguishing between different COS-interventions, low sample sizes and lack of control groups. Another international review (Wesseltoft-Rao et al., 2017) reported five international studies on COS-P, but none used a control group design. Two Danish RCT studies are planned (Aarestrup et al., 2020; Vaever et al., 2016). The lack of studies for the age group 0–2 years, with minimum requirements of methodological quality documenting the effect of COS-P, places the intervention on evidence level 1 – Intervention with no evidence.

References:

Aarestrup, A. K., Vaever, M. S., Petersen, J., Røhder, K., & Schiøtz, M. (2020). An early intervention to promote maternal sensitivity in the perinatal period for woman with psychosocial vulnerabilities: Study protocol of a randomized controlled trial. *BMC Psychology, 8*:41. https://doi.org/10.1186/s40359-020-00407-3

Cassidy, J., Brett, B. E., Gross, J. T., Stern, J. A., Martin, D. R., Mohr, J. J., & Woodhouse, S. S. (2017). Circle of Security – Parenting: A randomized controlled trial in Head Start. *Development and Psychopathology, 29*(2), 651–673. https://doi.org/10.1017/S0954579417000244

Cooper, G., Hoffman, K., & Powell, B. (2013). *COS-P. Facilitator. DVD Manual 5.0. Circle of security parenting. A relationship-based program (Revised Norwegian Edition)*. COS International.

Mothander, P. R., Furmark, C., & Neander, K. (2018). Adding "Circle of Security – Parenting" to treatment as usual in three Swedish infant mental health clinics. Effects on parents' internal representations and quality of parent–infant interaction. *Scandinavion Journal of Psychology, 59*(3), 262–272. https://doi.org/10.1111/sjop.12419

Rye, M., & Eng, H. (2020). *Kunnskapsoppsummering og klassifisering av tiltaket: Circle of Security (COS) International – Parenting* (COS-P, 2.utg.) [Systematic review and classification of the intervention: Circle of Security (COS) International – Parenting (COS-P, 2nd ed.)]. *Ungsinn,* 1:1. https://ungsinn.no/wp-content/uploads/2021/03/COS-Parenting_2_utg.pdf.

Vaever, M. S., Smith-Nielsen, J., & Lange, T. (2016). Copenhagen infant mental health project: Study protocol for a randomized controlled trial comparing Circle of Security – Parenting and care as usual as interventions targeting infant mental health risks. *BMC Psychology, 4*(1), 57. https://doi.org/10.1186/s40359-016-0166-8

Wesseltoft-Rao, N., Holt, T., & Helland, M. S. (2017). *Gruppetiltak og kurs for foreldre: Norsk praksis, erfaringer og effektevalueringer* [Group-based interventions and courses for parents: Norwegian practice, experiences and effect evaluations]. Norwegian Institute of Public Health Institute. https://www.fhi.no/globalassets/dokumenterfiler/rapporter/2017/gruppetiltak-og-kurs-for-foreldre_050517_web_revidert-forside.pdf

Yaholkoski, A., Hurl, K., & Theule, J. (2016). Efficacy of the Circle of Security intervention: A meta-analysis. *Journal of Infant, Child & Adolescent Psychotherapy, 15*(2), 95–103. https://doi.org/10.1080/15289168.2016.1163161

Name of the intervention:	**Level of evidence:**
Circle of Security Virginia – Family (COS-VF) model	1

Authors: Helene Eng & Marte Rye

Documentation and literature: One *Ungsinn* review of the intervention was identified in the literature search (Eng et al., 2020). The Circle of Security Virginia – Family (COS-VF) model is very similar to the intervention COS International – Intervention (COS-I), for which there was one effect study (Ramsauer et al., 2019).

Target group: The target group is caregivers of children aged 1–6 years who are at risk or who have developed attachment issues.

Aims (primary and secondary): The primary aim is to promote more secure caregiver–child attachment patterns. Secondary aims include helping caregivers to better identify and interpret children's needs and signals and to reflect on both the child and one's own actions and feelings in attachment-caregiving interactions.

Description of the intervention: Circle of Security (COS) is a group of attachment-based parental guidance interventions. This review describes the Circle of Security Virginia – Family (COS-VF) model (Eng et al., 2020). The program consists of about 20 sessions but the format and number of sessions can be adapted to the family's needs. The treatment starts with observation of the quality of the parent–child interaction, followed by psychoeducation, exercises, home assignments and reflections based on both pre-recorded videos and videos of parent–child interaction in the family receiving the intervention. The visual map "the circle of security" is central throughout the program. It is visualized as a pair of hands and an oval circle, representing the caregiver as a *secure base* and a *safe haven*, offering support for the child's exploration and comfort and security when the child is in distress.

Evaluation of the documentation: *Ungsinn* concluded that there is no evidence for COS-VF due to lack of documentation of effect through Scandinavian studies and internationally systematic reviews. One German RCT study examined the effect of a similar intervention, COS-I (group-format) compared to treatment as usual on mothers with post-natal depression (N = 36 mother–infant dyads, infant age 4–9 months) (Ramsauer et al., 2019). The results did not show any effects on the attachment patterns of the children or maternal sensitivity, perhaps due to low statistical power. Since there are no Nordic or international effect studies supporting the evidence of COS-VF, the intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Eng, H., Rye, M., & Ulvund, S. E. (2020). *Kunnskapsoppsummering og klassifisering av tiltaket Circle of Security Virginia – Familiemodellen* (COS-VF, 2.utg.) [Systematic review and classification of the intervention Circle of Security – Family Model (COS-VF, 2nd ed.)]. *Ungsinn* 1:2. https://ungsinn.no/post_tiltak_arkiv/circle-of-security-virginia-familiemodellen-cos-vf-2-utg/

Ramsauer, B., Mühlhan, C., Lotzin, A., Achtergarde, S., Mueller, J., Krink, S., Tharner, A., Becker-Stoll, F., Nolte, T., & Romer, G. (2019). Randomized controlled trial of the Circle of Security – Intensive intervention for mothers with postpartum depression: Maternal unresolved attachment moderates changes in sensitivity. *Attachment & Human Development, 22*(6), 705–726. https://doi.org/10.1080/14616734.2019.1689406

Name of the intervention:	**Level of evidence:**
Circle of Security Virginia – Group (COS-VG) model	1

Authors: Marte Rye & Helene Eng

Documentation and literature: No effect studies were found in the literature search. The Circle of Security Virginia – Group (COS-VG) model has been evaluated in *Ungsinn* (Eng et al., 2020).

Target group: The target group is caregivers of children aged 1–6 years old with mild to moderate risk of developing attachment issues.

Aims (primary and secondary): The primary aim is to promote more secure caregiver–child attachment patterns. Secondary aims include helping caregivers to better identify and interpret children's needs and signals and to reflect on both the child and their own actions and feelings in attachment–caregiving interactions.

Description of the intervention: Circle of Security (COS) is a group of attachment-based parental guidance interventions. This review describes the Circle of Security Virginia – Group (COS-VG) model (Mauseth & Mæhle, 2012), which is a preventive intervention targeting groups of four to ten families. The group program consists of 10 weekly sessions, followed by two follow-up sessions, lasting from 1½ to 2 hours. Each session begins with the group eating a meal together, then working on the theme of the day. The aims of the intervention are achieved through psychoeducation, exercises, videotapes, reflections and home assignments. The visual map "the circle of security" in central throughout the program. "The circle of security" is visualized as a pair of hands and an oval circle. The hands represent the caregivers as being bigger, stronger, wiser and kind. The upper part of the circle represents the caregiver as a *secure base* for the child, offering support for the child's exploration. The lower part of the circle represents the caregiver as a safe haven, offering comfort and security when the child is in distress and needs help to organize their feelings. Throughout the program, the caregivers also practice telling *circle stories*, where they use the symbolism in the *circle of security* to explain observations from interactions with their own children. The *circle stories* are intended to make it easier for the caregivers to understand their children's needs and to respond to these needs in an appropriate way.

Evaluation of the documentation: There are no Nordic or international effect studies supporting the evidence of the Circle of Security Virginia – Group (COS-VG) model. The intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Eng, H., Rye, M., & Ulvund, S. E. (2020). *Kunnskapsoppsummering og klassifisering av tiltaket: Circle of Security Vrginia - Familiemodellen* (2.utg.) [Systematic review and classification of the intervention: Circle of Security Virginia Family Model (2nd ed.)]. *Ungsinn, 1*(2). https://ungsinn.no/post_tiltak_arkiv/circle-of-security-virginia-familiemodellen-cos-vf-2-utg/

Mauseth, T., & Mæhle, M. (2012). *Trygghetssirkelen Circle of Security: Manual for gruppemodellen*. [The Circle of Security: Manual for the Group Model]. Oslo: RBUP øst sør, Nasjonalt kompetansenettverk for spe- og småbarns psykiske helse.

Name of the intervention:	**Level of evidence:**
COPEing with Toddler Behavior (CWTB) [Småbarnsliv]	2

Authors: Lene-Mari P. Rasmussen & Henriette Kyrrestad

Documentation and literature: The literature search found one pilot study and one RCT study relevant for inclusion. No Nordic studies were identified.

Target group: Parents of toddlers (aged 12 to 36 months)

Aims (primary and secondary): The primary goal is to improve parent–child interaction in order to prevent the development of disruptive behavior disorders.

Description of the intervention: COPEing With Toddler Behavior is an eight-session parent training program focusing on effective parenting styles and strategies for toddlers, using an active learning model (Niccols, 2004). During the eight weekly group sessions, up to 25 parents in small groups of four to six watch videos of other parents in everyday situations with their children. The videos display common errors (somewhat exaggerated to exemplify), which the groups then discuss and summarize. Parents also practice parent skills at home between the sessions, and discuss their experiences. Each session lasts for two hours, is held at a convenient location and is led by two trained and experienced group facilitators (e.g., infant development specialists). The sessions include topics such as authoritative parenting styles, positive parent–child relationships, preventing challenging behaviors, and ignoring inappropriate behavior (Niccols, 2009). The CWTB program has been translated to Swedish. CWTB was developed by Alison Niccols, McMaster Children's Hospital – Chedoke Site, Hamilton Health Sciences, Ontario, Canada.

Evaluation of the documentation: Two studies evaluating the COPEing with Toddler Behavior were found (Niccols, 2004, 2009). The first was a pilot study evaluating a three-session version of the intervention. Although the results were promising, the study had a small sample size (N = 48), no control group and used parent self-report measures only. The second study was an RCT, investigating the effectiveness of CWTB in a general population in an urban area in Canada. In this study, 79 mothers of children aged 12–36 months were randomly assigned to the CWTB (eight sessions), or a waiting list control group. Parent-reported child behavior problems, observed parent–child interactions, and self-reported parent behavior and functioning were investigated using well-established measures. Results from the study showed significant effects on several primary and secondary outcomes in the CWTB group compared to the control group (e.g., child behavior problems, positive parent–child interaction, and parental over-reactivity). The effects sizes (ES) within groups were small to medium for the intervention group and small to no effect in the control group, present both post-test and at one-month follow-up. The ES between groups were not reported. As such, based on the present documentation, the intervention is rated level 2 – Intervention with some level of evidence.

References:

Niccols, A. (2004). An ounce of prevention: "COPEing with Toddler Behaviour". *The Canadian Journal of Psychiatry*, *49*(12), 871–871. https://doi.org/10.1177/070674370404901224

Niccols, A. (2009). Immediate and short-term outcomes of the "COPEing with Toddler Behaviour" parent group. *Journal of Child Psychology and Psychiatry*, *50*(5), 617–626. https://doi.org/10.1111/j.1469-7610.2008.02007.x

Name of the intervention: Dandelion Peer Support Method [VOIKUKKIA – Vertaistukimenetelmä]	**Level of evidence:** 1
Authors: Piia Karjalainen & Marko Merikukka	
Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The intervention was evaluated by Kasvun tuki.	
Target group: Parents of children of different ages in institutional care and placement.	
Aims (primary and secondary): The aims of the intervention are: (1) to examine the crisis caused by the placement of the child from the point of view of the parent; (2) to support the parent's own life and survival; and (3) to strengthen parenting and thereby increase the well-being of the children.	
Description of the intervention: The VOIKUKKIA peer support group method was developed in Finland and is delivered by two trained peer group leaders (either parents or professionals). The groups of 4–6 people meet about 10 times for 2–2½ hours, with a maximum of eight participants in each. The content is based on a structured model, but there is also a lot of space for topics that arise from the needs of the participants. The role of the group leaders is to fulfil the wishes of the parents, while at the same time ensuring that the group process progresses and that issues that are important for empowerment are addressed (Kujala et al., 2012). Topics include the different stages of the care crisis, the feelings and reactions of the child, and how to deal with the child.	
Evaluation of the documentation: There are no Nordic or international effect studies supporting the evidence for the VOIKUKKIA. The intervention is therefore rated evidence level 1 – Intervention with no evidence.	

References:

Kujala, V., Heinonen, M., & Koivunen, M. (2012). *VOIKUKKIA-vertaistukiryhmät. Ohjaajan opas* [VOIKUKKIA peer support groups, instructor's guide]. Kasper – Kasvatus- ja perheneuvonta ry [Finnish Association for Education and Family Counseling] and Sininauhaliitto [The Blue Ribbon].

Name of the intervention:	**Level of evidence:**
Early Dialogues – Taking up One's Worries [Huoli puheeksi]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The results of implementation were found in the Taking up One's Worries handbook (Eriksson & Arnkil, 2006, 2009, 2012).

Target group: Professionals working with parents/guardians, when there is a concern about their child.

Aims (primary and secondary): The aim is to take up difficult issues in a respectful way and offer the parents appropriate support.

Description of the intervention: Taking up One's Worries is used where a concern regarding a child/adolescent needs to be discussed with the child's parents or guardians, and the professional is uncertain about how to bring it up. The method is based on a handbook (Eriksson & Arnkil, 2009) that outlines the steps of the early intervention. It is conducted in a supportive atmosphere, and aims for genuine dialogue. In practice, taking up one's own worry means that instead of focusing on the child's or the family's problems, the professional raises his or her subjective concern for the child, and asks the parents to help him or her help the child. Concerns are raised in respectful discussions where the main objective is to build an alliance to help the child. There is a form that can be used as a supportive tool to approach the difficult subject. It includes questions to help professionals prepare for the discussion, and serves as reference material for evaluating the discussion afterwards.
The method was developed in Finland at the National Institute for Health and Welfare. It is designed to support professionals in dealing with difficult issues with parents.

Evaluation of the documentation: The literature search did not uncover any effect study. There was one descriptive study (Eriksson & Arnkil, 2006, 2009, 2012), in which the material comprised 349 cases where a concern was taken up in client contact in a day-care center, school or child health clinic. Here, in a majority of the cases (72%), the concern was linked with the child's behavior, development or emotional status, and in one in every five cases the concern was around parents or parenting. In two-thirds of the cases, it was anticipated that raising a concern would have a negative impact on the contact and the long-term professional relationship, but despite this, in a majority of the cases it led to fruitful discussion, opened up new operational possibilities and improved the relationship. In less than one third of the cases, the initial reaction involved feelings of confusion or anger, after which fruitful discussion took place. None of the cases involved serious impairment or a complete breakdown of the relationship with parents. Over half of the professionals mentioned feeling relieved, and one in every four felt satisfied, optimistic and brave after the discussion. One in ten was left feeling hesitant or disappointed, doubting the discussion made any difference.
There are no Nordic or international effect studies supporting the evidence of the Taking up One's Worries method. The intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Eriksson, E., & Arnkil, T. E. (2006). *Ta upp oron. En handbok i tidiga dialoger* [Addressing the concern. Handbook on early dialogues]. Guide 64. Helsinki: Sosiaali- ja terveysalan tutkimus- ja kehittämiskeskus (Stakes).

Eriksson, E., & Arnkil, T. E. (2009). *Taking up one's worries. A handbook on early dialogues. Guide 1.* Helsinki: The National Institute for Health and Welfare. Terveyden ja hyvinvoinnin laitos (THL).

Eriksson, E., & Arnkil, T. E. (2012). *Huoli puheeksi. Opas varhaisista dialogeista.* [Taking up one's worries. A handbook on early dialogues.] Guide 60. (8th ed.). Helsinki: Sosiaali- ja terveysalan tutkimus- ja kehittämiskeskus (Stakes).

Name of the intervention:	**Level of evidence:**
Extended Postnatal Home Visiting Program (EPHVP)	1

Authors: Helene Eng & Charlotte Reedtz

Documentation and literature: One effect study was obtained through the literature search (Burström et al., 2020).

Target group: The target group of the program is first-time parents with newborn children living in disadvantaged municipal areas.

Aims (primary and secondary): To improve the basis for better health development among children (Mekhail, et al., 2019) and to counteract social inequality (Mellblom et al., 2018).

Description of the intervention: The EPHVP provides parents and their newborn babies with extra support. The program was developed and implemented by Swedish Child Health Care and Social Services in a disadvantaged area, Rinkeby-Kista, in Sweden. In this multicultural city district outside Stockholm, more than 90% of the population has a migrant background. The population generally has poorer health than the average in Sweden, including children's health. Where parents normally receive one support visit by a child health nurse after a child is born, EPHVP includes six home visits during the child's first 15 months. The parents are visited by a child health nurse and a parental advisor.
A manual gives suggestions on how to talk to parents and describes the topics the health nurse and parental advisor can address during the sessions, including interpretation of the baby´s signals, parent–child interaction, sleep, food, dental health, child safety, applying for kindergarten, playing with children, setting limits and language development. Topics that parents bring to the sessions are also valuable and are integrated in the sessions.

Evaluation of the documentation: One longitudinal study (Burström et al., 2020), based on electronic child health records for children aged 0–36 months receiving the home visiting program, was identified. There were two control groups. One was from a neighboring district and the other from the same district but with families who were receiving ordinary support before implementing the program. The study was based on outpatient visits, inpatient episodes and MMR vaccination. Results showed that children in the intervention group had a significantly higher MMR vaccination rate than children in the Rinkeby comparison group, but not compared to the control group in the neighboring district. Healthcare utilization was similar in the intervention group and the control groups. Due to a lack of results on psychosocial development and risk factors, the intervention is rated at level 1.

References:

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Mekhail, K. T., Lindberg, L., Burström, B., & Marttila, A. (2019). Strengthening resilience through an extended postnatal home visiting program in a multicultural suburb in Sweden: Fathers striving for stability. *BMC Public Health, 19*, 102. https://doi.org/10.1186/s12889-019-6440-y

Mellblom, J., Arvidsson, H., Fredriksson, T., & Tordai, M. (2018). *Rinkeby hembesöksprogram – ett utökat hembesöksprogram i samarbete mellan barnhälsovården och socialtjänsten* [The Rinkeby home visit program – an extended home visit program in collaboration with the child health care and social services]. Karolinska Institutet. https://ki.se/media/77454/download

Name of the intervention:	**Level of evidence:**
Families First [Vahvuutta vanhemmuuteen]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. An evaluation of parents' experiences was found (Sourander et al., 2016). The intervention was evaluated by Kasvun tuki.

Target group: Babies, families, parents.

Aims (primary and secondary): The aims of the intervention are: (1) to strengthen parents' mentalizing ability; and (2) to promote positive interaction between the child and both parents.

Description of the intervention: Families with first-born children can join Families First groups when their child is about 3–4 months old. Both the mother and father from each family are encouraged to participate as well as the baby, and single parents are also welcome to participate alone or with a support person. Groups are led by two trained group leaders. A maximum of four to six families can participate, and each gathering lasts about two hours. During the group meetings, families are offered a free light meal and an opportunity for open discussion. The more formal group meeting includes discussing homework activities, talking about the theme of the day and assigning homework (e.g., to observe their baby's reactions in relation to their own actions and mental states). The session ends with some informal time for feeding, changing nappies, and preparing to leave. The overarching goal of the intervention is to enhance parental mentalizing capacity, emphasizing reflections from the baby's perspective (baby's feelings, intentions, and needs). Parents are encouraged to reflect on how their baby's behavior influences them and how they might influence their baby in a mutual ongoing interaction, for example, during nursing and bathing or when soothing a crying baby (Kalland et al., 2015).
The intervention has been developed in Finland in cooperation with Folkhälsan Foundation for Health Promotion and the Folkhälsan Research Center. The intervention is based on a format called Parents First, which was originally developed at the Yale Child Study Center (Yale University, CT, USA).

Evaluation of the documentation: The literature search and further search efforts did not uncover any effect studies. Only one study of parents' experiences of the intervention (Sourander et al., 2016) has been carried out. There are a couple of ongoing studies into the intervention at the University of Helsinki, but no results have been published. According to parents' feedback (Sourander et al., 2016), both mothers and fathers felt that their self-confidence had grown as parents, and 89% of mothers and 79% of fathers said they thought more about the impact of their own activities on the child.
There are no Nordic or international effect studies supporting the evidence of the Families First intervention. The intervention is rated as evidence level 1 – Intervention with no evidence.

References:

Kalland, M., Fagerlund, Å., von Koskull, M., & Pajulo, M. (2015). Families First: The development of a new mentalization-based group intervention for first-time parents to promote child development and family health. *Primary Health Care Research & Development, 17*, 3–17.

Sourander, J., Oksanen, E., & Viinikka, A. (2016). Mentalisaatioteoriaan perustuva Vahvuutta vanhemmuuteen -perheryhmämalli ja vanhempien kokemuksia perheryhmästä [The mentalization-based Families First group model and parents' experiences of the family group]. *Oppimisen ja oppimisvaikeuksien erityislehti, 26*, 52–64.

Name of the intervention:	**Level of evidence:**
Family Check-up (FCU)	2

Authors: Kirsi Peltonen & Charlotte Reedtz

Documentation and literature: The evidence assessment was based on a literature search, and 21 studies were included.

Target group: FCU is targeted at children aged 2–17 years old with behavioral problems, and their parents.

Aims (primary and secondary): The aim is to reduce children's behavioral problems by strengthening the parent's strategies and leadership in the family.

Description of the intervention: FCU is a short-term intervention (about six meetings) with a possible follow-up. First, the family's strengths and challenges are assessed via conversations, videotaped family observation and questionnaires for parents, children, and educators. The assessment result is presented to the family as a child and family profile that includes influencing factors on the family, the child's adaptation and parenting strategies and relationships. Finally, the therapist and the parents create a selection of possible tailored interventions based on the family's needs and the best options for the family. The interventions may involve group programs for parental support, interventions focusing on the parent's situation, or referral or self-referral to another care provider. Within the framework of FCU, the therapist can offer the model's own individual parental support program, Parenting in Everyday Life (FiV).

Evaluation of the documentation: Smedler et al. (2015) conducted a systematic review and meta-analysis for the prevention of externalizing problems. They found three large randomized controlled trials of FCU, which were included in the review. Two of them were among 2-year-old American toddlers (*N* = 120 and *N* = 731) recruited from the Women, Infant and Children Nutritional Supplement Program (WIC) sites among low-income mothers (Dishion et al., 2008 and Gardner et al., 2007 including only mother–son dyads). Both studies showed reduced symptoms of externalizing behavior in children for at least 12 months compared to a control group (WIC as usual). Bayer et al. (2009), detected the same two trials of FCU and concluded that FCU was effective in child disruptive behavior and that proactive and positive parenting skills correlated with changes in child behavior.
A total of 17 follow-up/sub-sample studies have been conducted based on the original study of Dishion et al. (2008). First, concerning the early-stage child outcomes, FCU was effective in decreasing aggression from ages 2–3 to 4–5 (Brennan et al., 2012), and promoting children's inhibitory control and language development from ages 2 to 3 (Lunkenheimer et al., 2008). FCU significantly increased positive dyadic interaction (Shelleby et al., 2018). Proactive parenting mediated the increase of child behavioral control at age 3 in the FCU group (Shelleby et al., 2012). Child problem behaviors at age 5 were mediated by reductions in parent–child coercion at age 4 (Sitnick et al., 2015). At a clinical level, participation in the FCU increased the likelihood of transitioning from the comorbid internalizing and externalizing class or from the internalizing class of children into the normative class of children from age 2 to 4 (Connell et al., 2008). Concerning the moderator effects, children with high baseline conduct problems (CP) had the highest decrease in CP in FCU group until middle childhood (Shelleby et al., 2018). Deceitful-callous behaviors of a child did not reduce the effectiveness of FCU on problem behavior (Hyde et al., 2013).
Second, the long-term follow-ups showed that FCU was associated with higher levels of children's academic achievement at age 5 and 7½ indirectly, through greater increases in parents' use of positive behavior support (Brennan et al., 2013). Also, at the age of 7½, children in the FCU demonstrated higher levels of inhibitory control reported by parents compared to the control condition, as well as higher levels of self-control and oppositional

defiant behavior reported by the teacher (Chang et al., 2014), and exhibited increased service use (Lejten et al., 2015). FCU was effective in reducing child irritability at age 4, which predicted lower externalizing and internalizing symptoms at age 10½ (Smith et al., 2019). In a subsample of 515 children who were genetically sensitive and were randomly assigned to the FCU, fewer had symptoms of psychopathology at age 10 than genetically sensitive children assigned to the control condition (Lemery-Chalfant et al., 2018). FCU attenuated the harmful relations between paternal depressive symptoms and children's internalizing problems at school age (Feldman et al., 2020). Finally, FCU increased inhibitory control across childhood, predicting reductions in suicide-related risk both at age 10½ and at age 14 (Connell et al., 2019).

Third, concerning parental outcomes, the studies showed that FCU was effective in reducing maternal depression with children aged 2 to 3 (Shaw et al., 2009). Perceived caregiving stress was also reduced (Smith et al., 2018), and there was positive change in caregiver-rated social support and relationship satisfaction over a three-year period (McEachern et al., 2013).

There are multiple findings in terms of the effectiveness of FCU but nearly all of them are based on the same American data set, which hinders the generalizability of the results. The method is classified as level 2, with some but inadequate level of evidence.

References:

Bayer, J., Hiscock, H., Scalzo, K., Mathers, M., McDonald, M., Morris, A., Birdseye, J., & Wake, M. (2009). Systematic review of preventive interventions for children's mental health: What would work in Australian contexts? *The Australian and New Zealand Journal of Psychiatry*, *43*(8), 695–710. https://doi.org/10.1080/00048670903001893

Brennan, L. M., Shaw, D. S., Dishion, T. J., & Wilson, M. (2012). Longitudinal predictors of school-age academic achievement: Unique contributions of toddler-age aggression, oppositionality, inattention, and hyperactivity. *Journal of Abnormal Child Psychology*, *40*(8), 1289–1300. https://doi.org/10.1007/s10802-012-9639-2

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Chang, H., Shaw, D. S., Dishion, T. J., Gardner, F., & Wilson, M. N. (2014). Direct and indirect effects of the family check-up on self-regulation from toddlerhood to early school-age. *Journal of Abnormal Child Psychology*, *42*(7), 1117–1128. https://doi.org/10.1007/s10802-014-9859-8

Connell, A., Bullock, B. M., Dishion, T. J., Shaw, D., Wilson, M., & Gardner, F. (2008). Family intervention effects on co-occurring early childhood behavioral and emotional problems: A latent transition analysis approach. *Journal of Abnormal Child Psychology, 36*(8), 1211–1225. https://doi.org/10.1007/s10802-008-9244-6

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Feldman, J. S., Wilson, M. N., & Shaw, D. S. (2020): Relations between early childhood paternal depression and preschool- and school-age psychosocial functioning. *Journal of Clinical Child & Adolescent Psychology*. https://doi.org/10.1080/15374416.2020.1723600

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Name of the intervention:	**Level of evidence:**
Family Group Conference (FGC) [Läheisneuvonpito]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. One Swedish prospective, quasi-experimental study was included (Sundell & Vinnerljung, 2004). The intervention was evaluated by Kasvun tuki.

Target group: Children under 18 years.

Aims (primary and secondary): The primary aim of the study is to evaluate whether the intervention (1) reduces the need for services and also (2) decreases the risk for referrals, (3) reduces the likelihood of repeated neglect and abuse, (4) increases reports by the extended family when needed, (5) leads to more frequent out-of-home placement within the extended family, and (6) increases the possibility of closing child protective services (CPS) cases.

Description of the intervention: The Family Group Conference promotes clients' influence in terms of child protection and enables the extended family to be involved in the lives of children and young people. During the FGC, the child's family and those close to them come together to discuss and plan how to ensure the child's growth as part of the normal daily life of the family. The aim is to draw up an agreed plan for the protection and care of the child or young person, taking into account the needs and resources of the family and extended family. The starting point is the child's own thoughts and wishes, with the family given the opportunity to present their own opinions. The authorities' task is to provide relevant information about the possibilities open to them to support the child and their relatives in the implementation of the plan. An external mediator, the convener, organizes the face-to-face consultation. The Family Group Conference was developed in New Zealand in the late 1980s and is widely used around the world.

Evaluation of the documentation: In a concurrent Swedish prospective study with nonequivalent comparison groups, the 99 children in the FGC group were compared with a random sample of 149 children (the comparison group) from 106 families who were not referred to a FGC during the same period, but were assessed in normal Swedish CPS procedures in the same local authorities. All families were followed for three years. Since more FGC children than comparison children were re-reported for abuse, the findings do not support the alleged effectiveness of the FGC model compared to traditional investigations in preventing future maltreatment cases. Furthermore, physical and sexual abuse was less frequent among the children receiving new services than among FGC children. One study was included but did not indicate a positive effect of the intervention, the intervention is therefore rated on level 1 – intervention with no evidence.

References:

Sundell, K., & Vinnerljung, B. (2004). Outcomes of family group conferencing in Sweden: A 3-year follow-up. *Child Abuse Neglect*, *28*, 267–287. https://doi.org/10.1016/j.chiabu.2003.09.018

Name of the intervention:	**Level of evidence:**
Family Talk Intervention (FTI) (Beardslee's Family Intervention) [Beardslee's familjeintervention, Lapset puheeksi – perheinterventio]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The intervention was evaluated by Kasvun tuki.

Target group: Toddlers, school-age children, adolescents and their parents with mental illness.

Aims (primary and secondary): The aim is to prevent mental health problems for children of mentally ill parents by promoting resilience for children.

Description of the intervention: The Family Talk Intervention is a manualized intervention that has been developed in the USA for families where one parent is suffering from depression. It initiates communication about parental illness in the family, promotes protective factors for the children and strengthens the parents in their role as caretakers (Beardslee, 2002). The intervention consists of 6–8 weekly or biweekly meetings (or phone calls) and includes two sessions with parents, individual sessions with children, a planning session with parents, a family session with the whole family and a feedback session, which includes planning for the future. During the sessions parents are helped to reflect on the ways their illness has affected family life and the everyday life of the child, and how to support the well-being of the child. Parents are given information about other protective factors for the child, such as school, friends and interests, and are encouraged to support these and are supported in telling their children about their illness. Follow-up sessions with parents, one and six months after the intervention, provide an overview of the course of the intervention and strengthen the family's joint discussion and problem-solving abilities.

Evaluation of the documentation: An RCT study has been conducted with parent(s) with mood disorder (*N* = 83) and with children aged 8–16 years (Solantaus et al., 2010; Punamäki et al., 2013). The study evaluated intervention effects on children's psychosocial symptoms and prosocial behavior at baseline, and at 1, 10 and 18 months post-intervention. The study compared preventive Family Talk Intervention (*N* = 43) with a brief psychoeducational discussion with parents (Let's Talk about the Children, *N* = 40). Both interventions decreased children's emotional symptoms and anxiety, and improved children's prosocial behavior. Family Talk Intervention was more effective in decreasing children's emotional symptoms immediately after the intervention, while the effect of the Let's Talk about Children emerged after a longer interval.
There are no effect studies supporting the evidence for using this intervention for the target group; children aged 0–2 years. The intervention is rated on evidence level 1 – Intervention with no evidence.

References:

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Solantaus, T., Paavonen, E. J., Toikka, S., & Punamäki, R-L. (2010). Preventive interventions in families with parental depression: Children's psychosocial symptoms and prosocial behaviour. *European Child and Adolescent Psychiatry*, *19*, 883–92. doi: 10.1007/s00787-010-0135-3

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Name of the intervention:	**Level of evidence:**
Free of Bullying [Fri for mobberi]	1

Authors: Henriette Kyrrestad & Marte Rye

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention for children aged under 2 years old. The information provided here was found on the projects' website (www.freeofbullying.com).

Target group: Children aged 0–9 years, teachers and parents.

Aims (primary and secondary): The aims of Free of Bullying are: (1) to prevent bullying in preschools and primary schools; and (2) to create a safe, positive and healthy environment for children attending preschool or primary school.

Description of the intervention: Free of Bullying is a preventive program against bullying that promotes a safe and inclusive community for children. It was launched in Denmark in 2007, inspired by the Australian program "Better Buddies" developed by the Alannah and Madeline Foundation (www.betterbuddies.org.au/). The aims of the program are achieved by teaching children how to be a good friend, giving them the courage to say no if they experience bullying, supporting them to act based on the values of tolerance, respect, care and courage, and strengthening group spirit among children and thus preventing bullying. The program consists of materials and activities related to pedagogical work with children's social competencies and well-being in daycare and kindergarten. Free of Bullying is organized in three parts according to the age of the children (0–3 years, 3–6 years and 6–9 years) and is ordered around three suitcases, one for each age group; for example, the suitcase for ages 0–3 years includes pedagogical tools such as a hand puppet Buddy Bear, mini versions of Buddy Bear for each child, conversation boards, books, posters and a CD of music. These tools enable teachers to talk to the children about bullying. Free of Bullying was developed on an initiative by Crown Princess Mary of Denmark in cooperation with Save the Children Denmark.

Evaluation of the documentation: There are no Nordic or international effect studies supporting the evidence for Free of Bullying for children aged 0–2 years. The intervention is rated on evidence level 1 – Intervention with no evidence.

References:

Alannah & Madeline Foundation. (2020, August 7). *What is Better Buddies?* www.betterbuddies.org.au/

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Name of the intervention:	**Level of evidence:**
Holding Tight Treatment System [Pidä kiinni® -hoito-ohjelma]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search identified two studies from the same research sample (Pajulo et al., 2011, Pajulo et al., 2012). The intervention was evaluated by Kasvun tuki.

Target group: Expectant mothers and families with small babies where the mother has a substance abuse problem.

Aims (primary and secondary): The aim is to strengthen maternity and parenthood while treating the mother's substance abuse problem.

Description of the intervention: This is a residential treatment program for substance abuse problems in pregnant women and mothers of infants, tailored to the individual situation of the client, which utilizes several different working methods and equipment. It is based on combining early interaction, parenting support and substance abuse rehabilitation. The theoretical background is attachment and mentalization. The key is to strengthen the mother–child relationship from pregnancy (Pajulo et al., 2006). The method was developed in Finland.

Evaluation of the documentation: The study was conducted with 34 mother–baby pairs attending Hold on Tight. There was no control group. The data was collected using self-report questionnaires on background, substance abuse and trauma history (pregnancy and perinatal period), maternal psychiatric symptoms (pregnancy and 3 months), difficulties experienced with the baby (1 month postnatally), videotaped mother–child interactions and child development, and semi-structured interviews for maternal reflective functioning (4 months postnatally). A questionnaire was also employed to gather follow-up information when the child was 2 years old (Pajulo et al., 2011; Pajulo et al., 2012). The results showed that the mothers who used the treatment experienced high levels of psychiatric symptomatology. More than half of the mothers were within the high-risk range regarding sensitivity of different types. A high level of difficulty in mothers' early caregiving of the baby was associated with higher levels of postnatal psychiatric symptomatology (Pajulo et al., 2011). Children's development was within normal limits at 4 months of age. The level of maternal reflective functioning (RF) increased statistically significantly during the intervention, the level being on average very weak during pregnancy and weak in the postnatal phase. Children of mothers who showed lower pre- and postnatal RF levels were more likely to be placed in temporary or permanent foster care during the follow-up at 2 years, and these mothers also more often relapsed to substance use after completing a residential treatment period (Pajulo et al., 2012). Specific psychiatric symptoms were also associated with a later need for child substitution care (Pajulo et al., 2011).
There are no Nordic or international effect studies supporting the evidence for the Holding Tight Treatment System. The intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Pajulo, M., Suchman, N., Kalland, M., & Mayes, L. (2006). Enhancing the effectiveness of residential treatment for substance abusing pregnant and parenting women: Focus on maternal reflective functioning and mother-child relationship. *Infant Mental Health Journal, 27*(5), 448–465. https://doi.org/10.1002/imhj.20100

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Name of the intervention:	**Level of evidence:**
I Am Me in Kindergarten [Æ e mæ i barnehage]	1

Authors: Sabine Kaiser & Henriette Kyrrestad

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The information provided here was found on the project's website (https://æemæ.no/barnehage/).

Target group: Children aged 2 to 5 years.

Aims (primary and secondary): I Am Me consists of different interventions for the prevention of violence and sexual abuse of children and adolescents. I Am Me in Kindergarten aims at providing children with the language for talking about their own and others' bodies and learning about sexuality and their own and others' boundaries. The aims for children aged 2 and 3 years old are: (1) to establish language and concepts related to the body; (2) to get to know the body and the different body parts; (3) to be happy in one's own body; (4) to have respect for others' bodies; (5) to get to know the similarities and differences in children and adults; (6) to get to know feelings; and (7) to get to know ones' own belonging and family.

Description of the intervention: I Am Me Kindergarten is organized in four parts according to the age of the child (2 years, 3 years, 4 years, and 5 years). Each part is further split into between four (for 2-year-olds) and six (for 5-year-olds) themes. For 2-year-olds, the themes are "Get to know your body", "Be happy in the body", "Get to know feelings", and "Myself and my family". For each theme, the preschool teacher receives suggestions for activities to increase the child's competence about the body, boundaries, and sexuality, such as role-playing, songs and rhymes, or resources such as literature and movies. In addition to using everyday situations and different activities to target the children directly, the intervention aims to increase awareness and competence among staff in cooperation with the parents. I Am Me Kindergarten was developed by Sortland Municipality in Norway (2020).

Evaluation of the documentation: No Nordic or international effect studies were found; therefore the intervention is rated evidence level 1 – Intervention with no evidence.

References:

Sortland municipality (2020, June 30). *Æ E MÆ i barnehage* [I Am Me in Kindergarten]. https://æemæ.no/barnehage/

Name of the intervention:	**Level of evidence:**
Incredible Years® (IY) – Baby Home Coaching	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention.

Target group: Parents with children aged up to 12 months

Aims (primary and secondary): The intervention aims to help babies feel loved, safe, and secure, and to encourage babies' physical and language development.

Description of the intervention: The IY – Baby Home Coaching program can be used as additional support or catch-up sessions for parents attending IY parenting groups, or as a separate home-based model for parents who are unable to attend IY groups. If home coaching is used in addition to group sessions, it is recommended that a minimum of three or four visits are made at intervals of two-to-three weeks depending on the family's need. In the home-based model, therapists meet with parents weekly for 1–1½ hours, at least nine times. The core methods of delivering the content are the same as in the group model: video vignettes, coaching practices with their children, home activities assignments and weekly individual goal-setting. The topics are: getting to know your baby; babies as intelligent learners; providing physical, tactile and visual stimulation; parents learning to read their babies' minds; gaining support; and babies' emerging sense of self. The intervention was developed by Carolyn Webster-Stratton (2011) in the US, and it is part of the Incredible Years® series of interlocking, evidence-based programs for parents, children, and teachers.

Evaluation of the documentation: The IY – Baby Home Coaching program has the same content and teaching methods as the group-based IY – Parents and Babies program, which is rated at evidence level 2 – Intervention with some level of evidence. However, since there are no Nordic or international effect studies supporting the evidence of individually delivered IY – Baby Home Coaching program for children aged 0–3 years, the intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Webster-Stratton, C. (2011). *The Incredible Years parents, teachers, and children's training series: Program content, methods, research and dissemination 1980–2011.* Incredible Years Inc, Seattle.

Name of the intervention:	**Level of evidence:**
Incredible Years® (IY) – Parents and Babies Program	2

Authors: Kyrre Breivik & Sabine Kaiser

Documentation and literature: Based on the literature search, two effect studies were included (three peer-reviewed articles were included, two of which were about the same RCT).

Target group: Parents with babies aged up to 12 months.

Aims (primary and secondary): The primary aim of the IY – Parents and Babies program (Webster- Stratton & Reid, 2010) is to promote parent–child attachment and infants' physical, emotional, and language development.

Description of the intervention: This is a group-based parenting program that can be used as a universal preventive program or as a selective intervention for parents with known risk factors or difficulties. The program consists of eight weekly two-hour sessions. The group format is intended to facilitate peer support and shared learning. Trained Incredible Years® facilitators use real-life video vignettes to support training and to stimulate group discussions and problem solving. The intervention was developed by Carolyn Webster-Stratton (2010) in the US, and it is part of the Incredible Years® series of interlocking, evidence-based programs for parents, children, and teachers.

Evaluation of the documentation: The effect of the IY – Parents and Babies Program, when used as a universal intervention, was evaluated in an RCT in Denmark (Pontoppidan et al., 2016, 2020). A total of 112 mothers (intervention = 76, waiting list control = 36) with newborns (0–4 months) were recruited from two Danish municipalities. No positive program effects were found at both post-test and one-year follow-up on any of the outcomes, including parenting confidence, parental stress, infant's socio-emotional development and the quality of parent–child interaction (only measured at post-test). There is some evidence that the program might lead to some negative effect for the parents with lowest functioning at baseline, while it might have some positive effects for the highest functioning parents. This somewhat counterintuitive finding should be treated with caution, however, due to the small sample size of the study. The program has also been evaluated in a Welsh quasi-experimental study (Jones et al., 2016). Eighty mother–infant dyads (intervention = 54, control = 26) were recruited from nine areas. The recruited mothers, whose infants were 0–4 months old, reported above average levels of mental well-being and confidence. Six months post-baseline, the program had a statistically significant effect on mother sensitivity, but not encouragement and verbal engagement, towards their baby. In sum, the available evidence of the effectiveness of the IY – Parents and Babies is limited. There is a strong need for larger effect studies as the lack of effects might well be due to low statistical power in the available studies. It would also be of interest to explore the effect of the program on a targeted group of parents with more room for improvements in the parent–infant relationship. The intervention is considered to be at level 2, with some level of evidence.

References:

Jones, C. H., Erjavec, M., Viktor, S., & Hutchings, J. (2016). Outcomes of a comparison study into a group-based infant parenting programme. *Journal of Child and Family Studies, 25*(11), 3309–3321. https://doi.org/10.1007/s10826-016-0489-3

Pontoppidan, M., Klest, S. K., & Sandoy, T. M. (2016). The Incredible Years Parents and Babies program: A pilot randomized controlled trial. *PloS One, 11*(12), e0167592.

Pontoppidan, M., Sandoy, T. M., & Klest, S. K. (2020). One-year follow-up of The Incredible Years Parents and Babies program: A pilot randomized controlled trial. *Scandinavian Journal of Child and Adolescent Psychiatry and Psychology, 8,* 123–134. https://doi.org/10.21307/sjcapp-2020-012

Webster-Stratton, C. H., & Reid, M. J. (2010). The incredible years program for children from infancy to pre-adolescence: Prevention and treatment of behavior problems. In R. C. Murrihy, A. D. Kidman, & T. H. Ollendick (Eds.), *Clinical handbook of assessing and treating conduct problems in youth* (p. 117–138). Springer Science + Business Media. https://doi.org/10.1007/978-1-4419-6297-3_5

Starke, M., Wade, C., Feldman, M. A., & Mildon, R. (2013). Parenting with disabilities: Experiences from implementing a parenting support programme in Sweden. *Journal of Intellectual Disabilities, 17*(2), 145–156.

Name of the intervention:	**Level of evidence:**
Incredible Years® (IY) – Toddler Basic Program	2

Authors: Kyrre Breivik & Lene-Mari P. Rasmussen

Documentation and literature: Based on the literature search, one RCT study was included. It should be noted that a small RCT study conducted on "difficult" two-year-olds (Gross et al., 1995; Tucker et al., 1998) was excluded because it was conducted prior to the launch of the IY – Toddler Basic Program (Webster-Stratton, 2008), which is evaluated here.

Target group: Parents with toddlers aged 1–3 years.

Aims (primary and secondary): The aims of the program are to prevent and treat young children's behavior problems and promote their emotional, social, cognitive, and language development. It also aims to promote good parenting, parent–toddler attachment and parental health.

Description of the intervention: This is a group-based parenting program, which often targets parents in need of support to manage their child's misbehavior and/or to form a secure attachment with them. The program can also be used be used as a universal prevention intervention. It consists of 12 or 13 two-hour weekly sessions, which aim to teach parents how to help their toddlers feel loved and secure, encourage their toddler's language, social, and emotional development, establish clear and predictable routines, handle separations and reunions, and use positive discipline to manage misbehavior. The group format is intended to facilitate peer support and shared learning. Trained IY® facilitators use real-life video vignettes to support training and to stimulate group discussions and problem solving. The intervention was developed by Carolyn Webster-Stratton (2008) in the US, and it is part of the Incredible Years® series of interlocking, evidence-based programs for parents, children, and teachers.

Evaluation of the documentation: The IY Toddler Basic Program was evaluated in an RCT in which 89 parent–child dyads (intervention = 60, wait list control = 29) were recruited from disadvantaged areas across Wales (Gridley et al., 2014; Hutchings et al., 2016). The children were aged 12–36 months at baseline. After six months, post-tests showed significant effects on parental mental well-being) and parental praise and less child-led language (regarded as positive). No significant effect was found on several outcomes including challenging child behavior, parental stress, parental depression, critical parental language, and home environment. The intervention group had significant improvements in home environment, child development and parental depression from follow-up at 6–12 months, but the waiting list control group design makes it impossible to relate the results to program effects. This well conducted but low-strength Welsh study supports the positive short-term effects of the program on parental well-being and some parenting measures. Larger studies, especially from the Nordic countries, preferably with more convincing effects, are needed to obtain a higher rating.
The intervention is considered to be at level 2 – Intervention with some level of evidence.

References:

Gridley, N., Hutchings, J., & Baker-Henningham, H. (2014). The Incredible Years Parent–Toddler Programme and parental language: A randomised controlled trial. *Child: Care, Health and Development, 41*, 103–111. https://doi.org/10.1111/cch.12153

Gross, D., Fogg, L., & Tucker, S. (1995). The efficacy of parent training for promoting positive parent–toddler relationships. *Research in Nursing & Health, 18*(6), 489–499. https://doi.org/10.1002/nur.4770180605

Hutchings, J., Griffith, N., Bywater, T., & Williams, M. E. (2016). Evaluating the Incredible Years Toddler Parenting Programme with parents of toddlers in disadvantaged (Flying Start) areas of Wales. *Child: Care, Health and Development, 43*(1), 104–113. https://doi.org/10.1111/cch.12415

Tucker, S., Gross, D., Fogg, L., Delaney, K., & Lapporte, R. (1998). The long-term efficacy of a behavioral parent training intervention for families with 2-year-olds. *Research in Nursing & Health, 21*(3), 199. https://doi.org/10.1002/(SICI)1098-240X(199806)21:3%3C199::AID-NUR3%3E3.0.CO;2-C

Webster-Stratton, C. (2008). *The Incredible Years parents and toddlers series.* Author, Seattle, Washington.

Name of the intervention:	**Level of evidence:**
Incredible Years® (IY) – Toddler Home Coaching	1

Authors: Lene-Mari P. Rasmussen & Kyrre Breivik

Documentation and literature: No documentation for the home coaching version of the IY Toddler Program was identified in the literature search.

Target group: Parents with toddlers aged 1–3 years.

Aims (primary and secondary): The primary aims of the program are to promote emotional, social, cognitive and language development in children. Secondary aims focus on good parenting skills, attachment and parental health. The home coaching version is considered a supplement to the parent groups, and provides additional support to parents' with specific challenges in the parent–child relationship.

Description of the intervention: This home coaching model has been developed to supplement the IY – Toddler Basic program, (Webster-Stratton, 2015, 2017). It provides one-on-one contact between parents and the IY group leader. Home coaching can be used to introduce or begin parents' learning prior to the start of the group, or provide catch-up sessions (due to sickness, work or other issues). Home coaching can also enhance learning in high-risk families and/or families referred to child welfare services. The program can also be delivered solely at home. There are three manuals/workbooks for the home coaching model of the program, and delivery requires a group leader who has undertaken the three-day training in the BASIC parenting program. A supplemental one-day training in the home coaching version in addition to ongoing supervision from an authorized IY mentor is strongly preferred.
During the one-hour home sessions, the group leader helps the parents with specific problems through modelling, supervision, feedback, encouragement, and support. The delivery of the program is flexible depending on the parents' needs, but a minimum of four sessions is recommended. If the whole program is delivered at home, 10 sessions are required. The content follows the IY – Toddler Basic program, including building positive relationships, increasing language skills and emotional regulation, increasing social skills, trust and security, and reducing unwanted behavior. In the home sessions, the vignettes and parent assignments are directed and adapted towards the specific issues within the family. The intervention was developed by Carolyn Webster-Stratton (2015) in the US, and it is part of the Incredible Years® series of interlocking, evidence-based programs for parents, children, and teachers.

Evaluation of the documentation: Currently, there is no documentation of the IY – Toddler Home Coaching program, placing the intervention at level 1.

References:

Webster-Stratton, C. (2015). *The Incredible Years: The parent and children series. Home coaching version. Supplemental handbook for group leaders.* The Incredible Years®.

Webster-Stratton, C. (2017). *De utrolige årenes foreldreprogram småbarn (1-3 år). Hjemmebasert foreldreveiledning. Supplerende handbok for hjemmeveiledere. Norsk oversettelse* [The Incredible Years – Program for Toddlers (1–3 years) Home-based parenting guide. Supplementary handbook for home tutors]. The Incredible Years®.

Name of the intervention:	**Level of evidence:**
In Safe Hands [I trygge hender]	1

Authors: Susann Dahl Pettersen & Monica Martinussen

Documentation and literature: No effect studies were obtained through the literature search or further search efforts. A small pilot study (user study) was located (NSF, 2018a).

Target group: Parents with children under 12 months of age.

Aims (primary and secondary): The aim is to prevent, detect and avert domestic violence (NSF, 2018b).

Description of the intervention: In Safe Hands is a universal program for all parents. The material consists of an animated seven-minute film and an instruction booklet, to be used by public health nurses (NSF, 2018a). The film has five chapters/themes: the brain's development; anger and negative emotions; violence against children; how violence affects children; and how parents can handle challenging situations with their child. The film can be paused after each chapter for reflection and questions. The instruction booklet contains information and questions linked to each chapter, to aid the public health nurse in conversation with the parents during or after the video. The film is intended to be shown as early as possible, during home visits, in maternity groups and/or after the six-week health check.

Evaluation of the documentation: The pilot project was carried out over a period of one month in 2018 (NSF, 2018a), with six public health nurses conducting 10 test consultations. The material was used with a total of 37 participants in both group and individual consultations, with mothers and fathers, ethnic Norwegian and minority families. After testing, the material was evaluated by healthcare nurses and parents, either online or on paper. The parents reported that the film was informative and thought-provoking, and they experienced the conversations and discussions as useful. Healthcare nurses said they found the material very useful as a framework for conversations and reflections. As the evaluation was mainly positive, the material was not revised before implementation. The material is listed in the guidelines for health centers providing healthcare for children aged 0–5 years old (Helsedirektoratet, 2020). Based on the available documentation, with no Nordic or International effect studies, the intervention is considered to be at level 1.

References:

Helsedirektoratet. (2020). *Helsestasjon 0–5 år* [Health care center 0–5 years]. Retrieved from: https://www.helsedirektoratet.no/retningslinjer/helsestasjons-og-skolehelsetjenesten/helsestasjon-05-ar#vold-overgrep-og-omsorgssvikt-helsestasjonen-skal-bidra-til-a-avverge-og-avdekke-vold-overgrep-og-omsorgssvikt-praktisk

Landsgruppen av helsesykepleiere (NSF). (2018a). *Kompetansebroen* [The competence bridge]. https://www.kompetansebroen.no/article/i-trygge-hender/

Landsgruppen av helsesøstre (NSF). (2018b). *Prosjektrapport - I trygge hender* [Project report – In safe hands]. Landsgruppen av helsesøstre NSF.

Name of the intervention:	**Level of evidence:**
International Child Development Program (ICDP) [Vägledande samspel, Kannustava Programme vuorovaikutus – ohjelma]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The intervention was evaluated by Ungsinn and Kasvun tuki.

Target group: Babies, toddlers, school-age children, adolescents, and their parents, as well as professionals.

Aims (primary and secondary): The aim of the intervention is to enhance and enrich the relationship between caregivers and their children.

Description of the intervention: The ICDP intervention is based on development and cultural psychology and aims to strengthen children by providing guidance to caregivers of children and adolescents from birth to the age of 18 years. It also combines knowledge of attachment relationship theory, neuropsychology, affect and motivation theory, and learning. The ICDP groups are usually conducted in groups of 5–10 parents, with 6–8 weekly two-hour meetings led by one or two group leaders. The groups support parents' ability to be more sensitive to hearing and receiving the child's thoughts, with the key being the child's right to respect. The intervention is built around three dialogues (emotion-based, meaning-creating, and regulatory). These three dialogues can be further divided into eight themes, four of which focus on the child's emotional development, three on the child's cognitive development, and the last on the child's ability to self-regulate. The ICDP principles can also be applied, for example, in early childhood education, school and special education, by analyzing everyday situations and the child's expression through ICDP principles and empathic identification. In this context the intervention can be considered as more of an approach, based on the humanist tradition, than an actual method. The intervention was developed in the University of Oslo and is currently used in 45 countries.

Evaluation of the documentation: The intervention has been evaluated in several pre–post designs (e.g. Clucas et al., 2014; Skar 2014a; Skar et al., 2014b) and some with a control group (e.g. Sherr et al., 2014; Skar et al., 2015) in Norway. In a quasi-experimental study by Sherr et al. (2014) caregivers in the ICDP group (n = 141) showed more positive attitudes towards child management, improved parenting strategies and less social impairment resulting from child difficulties compared to the comparison group (n = 79). Children in the study were aged 3.7 years on average (range 23–60 months). The ICDP group (n =79) showed significantly improved scores on parenting measures and less loneliness 6–12 months after the program completion compared to the comparison group (n = 62) (Skar et al., 2015). The ICDP group also reported that children spent less time watching television and playing computer games. There were no significant improvements in the child's difficulties or parent's self-efficacy. The positive effects were sustained over time, but at a somewhat lower level (Skar et al., 2015).
There are no Nordic or international effect studies supporting the evidence of ICDP for 0–2-year-old children. The intervention is rated on evidence level 1 – Intervention with no evidence.

References:

Clucas, C., Skar, A-M., Sherr, L., & von Tetzchner, S. (2014). Mothers and fathers attending the International Child Development Programme in Norway. *The Family Journal, 22*, 409–418.

Sherr, L., Skar, A-M., Clucas, C., von Tetzchner, S., & Hundeide, K. (2014). Evaluation of the International Child Development Programme (ICDP) as a community-wide parenting programme. *European Journal of Developmental Psychology, 1*, 1–17.

Skar A-M., von Tetzchner, S., Clucas, C., & Sherr, L. (2014a). Paradoxical correlates of a facilitative parenting programme in prison – counter-productive intervention or first signs of responsible parenthood? *Journal of Scandinavian Studies in Criminology and Crime Prevention, 15*, 35–54.

Skar, A-M., von Tetzchner, S. Clucas, C., & Sherr, A-M. (2014b). The impact of a parenting guidance programme for mothers with an ethnic minority background. *Nordic Journal of Migration Research, 4*, 108–117.

Skar, A-M. S., von Tetzchner, S., Clucas, C., & Sherr, L. (2015). The long-term effectiveness of the International Child Development Programme (ICDP) implemented as a community-wide parenting programme. *European Journal of Developmental Psychology, 12*, 54–68.

Name of the intervention:	**Level of evidence:**
Interpersonal Therapy (IPT)	3

Authors: Kirsi Peltonen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. Nine RCT studies were used (Beeber et al., 2010, 2013; Grote et al., 2009; Handely et al., 2017; O'Hara et al., 2000; Phipps et al., 2013; Spinelli & Endicott, 2003; Toth et al., 2013; Zlotnick et al., 2011).

Target group: Mothers with depressive symptoms (pre-, peri- and postnatally).

Aims (primary and secondary): IPT was developed for the treatment of major depression. It focuses on interpersonal disputes, role transitions, grief, and interpersonal deficits. It is based on the belief that if the patient can solve the interpersonal problem or change the relationship to this problem, the depressive symptoms should resolve as well.

Description of the intervention: IPT is a time-limited (12–16 weeks), symptom-targeted, structured intervention. In the initial phase, the therapist identifies the target diagnosis, Major Depressive Disorder (MDD), and the interpersonal context in which it presents. In the middle phase, the therapist uses specific strategies to deal with whichever of the four potential problem areas is the focus: *complicated bereavement*, resolving an interpersonal struggle in a *role dispute*, helping a patient in a role transition, or decreasing social isolation for *interpersonal deficits*. In the last phase, the therapist helps the patient to feel more capable by reviewing the accomplishments during the treatment. IPT was developed in the United States by Weissman et al. (2000).

Evaluation of the documentation: A total of nine RCT studies have evaluated IPT's effectiveness on parental mental health, parenting skills and child well-being (Beeber et al., 2010, 2013; Grote et al., 2009; Handely et al., 2017; O'Hara et al., 2000; Phipps et al., 2013; Spinelli & Endicott, 2003; Toth et al., 2013; Zlotnick et al., 2011). All studies were conducted in the United States.
Antepartum: Grote et al. (2009) found that IPT among pregnant women (*N* = 53) resulted in significantly greater decrease in depressive symptoms antepartum (three months postbaseline) and at six months postpartum and increase in social functioning at six months postpartum compared to usual care. Differences in decrease of diagnostic depression cases between groups had large effect sizes. Spinelli & Endicott (2003) found that IPT among pregnant women (*N* = 50) resulted in in depressive symptoms compared to a Parenting Education group right after intervention. Toth et al. (2013) found that IPT among low-income women (*N* = 128) resulted in significantly greater decrease depressive symptoms compared to the enhanced community standard group right after and eight months after the intervention. The results were gained using Complier Average Causal Effect (CACE) analysis (taking into account the engagement with treatment). Two trials evidenced that IPT-based interventions could also work for preventive purposes. In a study by Zlotnick et al. (2011) among low-income pregnant women with intimate partner violence (*N* = 54) and a study by Phipps et al. (2013) among primiparous pregnant adolescents (*N* = 106), IPT resulted in fewer cases of depression three and six months postpartum compared to usual care and a dose-matched control program. Postpartum: O'Hara et al. (2000) found that IPT among mothers (*N* = 120) resulted in a significantly greater decrease in depressive symptoms, postpartum adjustment and social adjustment compared to waiting list controls right after the intervention. Beeber et al. (2013) found that IPT with parenting enhancement (*N* = 225) among low-income mothers resulted in a significantly greater increase in positive involvement with the child compared to usual care right after and four weeks after the intervention. The groups did not differ in terms of mothers' depressive symptoms or negative control of the child. Handley et al. (2017) found that IPT (*N* = 125) among low-

income mothers resulted in a significantly greater decrease in depressive symptoms with a medium effect size, but only when using CACE analysis. Fewer maternal depressive symptoms post-treatment predicted greater maternal self-efficacy and fewer disorganized attachment characteristics among toddlers at follow-up with small/medium size effects. Beeber et al. (2010) found that culturally tailored, in-home IPT among newly immigrant Latina mothers (*N* = 80) resulted in a significantly greater decrease in mothers' depressive symptoms and child's aggression (*N* = 18) compared to usual care immediately after and one month after the intervention. IPT is considered to be at level 3 – Intervention with a good level of evidence.

References:

Beeber, L. S., Holditch-Davis, D., Perreira, K., Schwartz, T. A., Blanchard, H., Canuso, R., & Goldman, B. D. (2010). Short-term in-home intervention reduces depressive symptoms in Early Head Start Latina mothers of infants and toddlers. *Research in Nursing Health, 33*(1), 60–76. https://doi.org/10.1002/nur.20363

Beeber, L. S., Schwartz, T. A., Holditch-Davis, D., Canuso, R., Lewis, V., & Hall, H. W. (2013). Parenting enhancement, interpersonal psychotherapy to reduce depression in low-income mothers of infants and toddlers: a randomized trial. *Nursing Research, 62*(2), 82–90. https://doi.org/10.1097/NNR.0b013e31828324c2

Grote, N. K., Swartz, H. A., Geibel, S. L., Zuckoff, A., Houck, P. R., & Frank, E. (2009). A randomized controlled trial of culturally relevant, brief interpersonal psychotherapy for perinatal depression. *Psychiatric Services, 60*(3), 313–321. https://doi.org/10.1176/ps.2009.60.3.313

Handley, E. D., Michl-Petzing, L.C., Rogosch, F. A., Cicchetti, D., & Toth, S. L. (2017). Developmental cascade effects of interpersonal psychotherapy for depressed mothers: Longitudinal associations with toddler attachment, temperament, and maternal parenting efficacy. *Development and Psychopathology, 29*(2), 601–615. https://doi.org/10.1017/S0954579417000219

O'Hara, M. W., Stuart, S., Gorman, L. L., &, Wenzel, A. (2000). Efficacy of interpersonal psychotherapy for postpartum depression. *Archives of General Psychiatry, 57*(11), 1039–1045. https://doi.org/10.1001/archpsyc.57.11.1039

Phipps, M. G., Raker, C. A., Ware, C. F., & Zlotnick, C. (2013). Randomized controlled trial to prevent postpartum depression in adolescent mothers. *American Journal of Obstetrics & Gynecology, 208*(3), 192.e1–192.e1926. https://doi.org/10.1016/j.ajog.2012.12.036

Spinelli, M. G., & Endicott, J. (2003). Controlled clinical trial of interpersonal psychotherapy versus parenting education program for depressed pregnant women. *American Journal of Psychiatry, 160*(3), 555–562. https://doi.org/10.1176/appi.ajp.160.3.555

Toth, S. L., Rogosch, F. A., Oshri, A., Gravener-Davis, J., Sturm, R., & Morgan-López, A. A. (2013). The efficacy of interpersonal psychotherapy for depression among economically disadvantaged mothers. *Development and Psychopathology, 25*(4 Pt 1), 1065–1078. https://doi.org/10.1017/S0954579413000370

Weissman, M. M., Markowitz, J. C., & Klerman, L. (2000). *Comprehensive guide to Interpersonal Psychotherapy*. Basic Books.

Zlotnick, C., Capezza, N. M., & Parker, D. (2011). An interpersonally based intervention for low-income pregnant women with intimate partner violence: A pilot study. *Archives of Women's Mental Health, 14*(1), 55–65. https://doi.org/10.1007/s00737-010-0195-x

Name of the intervention:	**Level of evidence:**
Interpersonal Therapy Group (IPT-G)	3

Authors: Kirsi Peltonen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. Four RCT studies were included (Crocket et al., 2008; Zlotnick et al., 2001, 2006, 2016).

Target group: Pregnant women with depressive symptoms.

Aims (primary and secondary): IPT was developed for the treatment of major depression. The therapy focuses on interpersonal disputes, role transitions, grief, and interpersonal deficits.

Description of the intervention: IPT is a time-limited (acutely, 12–16 weeks), symptom-targeted and structured intervention. In its original form it has three phases: (1) identifying the target diagnosis (Major Depressive Disorder, MDD) and the interpersonal context; (2) dealing with potential problems of complicated bereavement, role dispute, role transition, or interpersonal deficits; and (3) reviewing patients' accomplishments during the treatment. The group adaptations have been created in both preventive and treatment purposes. Only the preventive group adaptation known as the ROSE Program, which has four sessions, is evaluated here.

Evaluation of the documentation: The aim of all four studies was to prevent postpartum MDD in pregnant women who were at risk of developing it. The interventions, known as the ROSE Program, were based on IPT principles. All studies were conducted in United States, partly by the same researchers.
First, a study by Crockett et al. (2008) found that an IPT group among rural low-income African-American women (N = 36) resulted in a significantly greater decrease in depressive symptoms and better postpartum adjustment at three months postpartum, compared to treatment as usual (TAU). Second, three studies by Zlotnick et al. (2001, N = 35; 2006, N = 99; and 2016, n = 205) found that the IPT group + TAU among women receiving public assistance resulted in a significantly greater decrease in depressive symptoms at three months (Zlotnick et al., 2001, 2006) and six months (Zlotnick et al., 2016) postpartum compared to TAU only.
IPT is considered to be at level 3 – Intervention with a good level of evidence.

References:

Crockett, K., Zlotnick, C., Davis, M., Payne, N., & Washington, R. (2008). A depression preventive intervention for rural low-income African-American pregnant women at risk for postpartum depression. *Archives of Women's Mental Health, 11*(5-6), 319–325. https://doi.org/10.1007/s00737-008-0036-3

Zlotnick, C., Johnson, S. L., Miller, I. W., Pearlstein, T., & Howard, M. (2001). Postpartum depression in women receiving public assistance: pilot study of an interpersonal-therapy-oriented group intervention. *American Journal of Psychiatry*, *158*(4), 638–640. https://pubmed.ncbi.nlm.nih.gov/11282702/

Zlotnick, C., Miller, I. W., Perlstein, T., Howard, M., & Sweeney, P. (2006). A preventive intervention for pregnant women on public assistance at risk for postpartum depression. *American Journal of Psychiatry*, *163*(8), 1443–1445. https://doi.org/10.1176/ajp.2006.163.8.1443

Zlotnick, C., Tzilos, G., Miller, I., Seifer, R., & Stout, R. (2016). Randomized controlled trial to prevent postpartum depression in mothers on public assistance. *Journal of Affective Disorders, 189*, 263–268. https://doi.org/10.1016/j.jad.2015.09.059

Name of the intervention:	**Level of evidence:**
Kiikku – Baby Family Work® [Kiikku-vauvaperhetyö ®]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The intervention was evaluated by Kasvun tuki.

Target group: Families with a child up to the age of one with multiple disabilities, a neurologically ill child with comorbidities, a child in convalescent care, a child in intensive care for newborns, or a child in premature care.

Aims (primary and secondary): The aims of the intervention are: (1) to help parents interpret baby's messages; (2) to respond to the baby's needs sensitively and consistently (mother–baby interaction); (3) to enhance parents' ability to provide a calming experience and regulatory assistance (emotion regulation); and (4) to increase parents' ability to help their children navigate their development (cognitive development, e.g. language skills, memory, visual perception, executive functions).

Description of the intervention: The Kiikku – Baby Family Work® intervention was developed in Finland. Home visits are done as often as the family needs, initially on a weekly basis on average, during baby's first year of life. At the first home visits, the baby family worker observes the interaction between the baby and the parent, and gathers information about the pregnancy, childbirth and hospital stay, as well as the parents' feelings about the baby's injury or risk. Parents' perceptions of the baby and their own parenting are discussed, as well as the support received and desired by the family. The interaction is supported through videoing and developmental guidance. Parents may also be given written material. Kiikku – Baby Family Work® also includes everyday support and the arrangement of practical matters. The intervention is delivered in co-operation with other support services.

Evaluation of the documentation: In a qualitative interview study (Kalland, 1998), families (*n* = 32) felt that Kiikku – Baby Family Work® increased their general sense of security, and they considered the mental support they received important. In a quasi-experimental study (Sajaniemi & Mitts, 2004), parents who participated in Kiikku – Baby Family Work® (*n* = 39) received significantly higher scores than the control group (*n* = 19) in positive child–mother interaction and in the child's level of cognitive development at five years of age. Children in the intervention group showed more positive linguistic development and performed almost significantly better than the control group. The emotional expression of the intervention group did not differ from the children of the control group. The reliability of the study results is weakened by the small sample size and the lack of standardization of the control group. The results are not published in any peer-evaluated international paper.
There are no Nordic or international effect studies supporting the evidence of Kiikku – Baby Family Work®. The intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Kalland, M. (1998). Turvallinen Kiikku. Vanhempien kokemukset Kiikku-projektissa [Safe Kiikku: Parent's experiences in the Kiikku project]. Vammaisten lasten ja nuorten tukisäätiö.

Sajaniemi, N., & Mitts, T. (2004). Kiikku-vauvaperhetyön vaikutukset vanhemmuuteen ja lapsen kehitykseen [The effects of Kiikku baby family work on parenting and child development]. Erityispedagogiikan laitos, Helsingin yliopisto [Thesis, Department of Special Education, University of Helsinki].

Name of the intervention:	**Level of evidence:**
Lend Me Your Ear [Ljáðu mér eyra]	1

Authors: Susann Dahl Pettersen & Monica Martinussen

Documentation and literature: No effect studies were obtained through the literature search. Two retrospective descriptive studies were located through the literature search and further search efforts (Sigurðardóttir et al., 2017, 2019).

Target group: Women with negative birth experiences or fear of childbirth.

Aims (primary and secondary): The aim is to help women overcome difficult birth experiences or combat anxiety before childbirth.

Description of the intervention: Ljáðu mér eyra is an interview-based intervention offered at a special counselling clinic at the Landspitali University Hospital in Reykjavik. It is aimed at women with negative birth experiences or women suffering from fear of childbirth (Sigurðardóttir et al., 2017). Midwives trained in communication and counselling skills conduct interviews with women who want to discuss their experiences of birth. The interview components are a mix of debriefing, counselling, support, and information, and women primarily receive one appointment, usually lasting one hour. The intervention uses components from cognitive behavioral therapy, in addition to active listening techniques. The midwives are not required to hold a formal counselling qualification, but they have regular peer-guidance meetings for professional development (Sigurðardóttir et al., 2019).

Evaluation of the documentation: Based on the available documentation, with no Nordic or International effect studies, the intervention is considered to be at level 1 – Intervention with no evidence.

References:

Sigurðardóttir, V. L., Gamble, J., Guðmundsdóttir, B., Sveinsdóttir, H., & Gottfreðsdóttir, H. (2019). Processing birth experiences: A content analysis of women's preferences. Midwifery, 69, 29–38. https://doi.org/10.1016/j.midw.2018.10.016

Sigurðardóttir, V. L., Ólafsdóttir, Ó. Á., Steingrímsdóttir, Þ., & Helga Gottfreðsdóttir. (2017). Hvað einkennir þann hóp kvenna sem leita til Ljáðu mér eyra. Characteristics of women attending Listen to me; interview intervention offered at the women's department at Landspitali University Hospital. http://hdl.handle.net/2336/620623

Name of the intervention:	**Level of evidence:**
Let's Talk About Children [Lapset puheeksi - keskustelu]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. No studies met the inclusion criteria (age). The intervention was evaluated by Kasvun tuki (in Finnish).

Target group: Families in which parenting resources are challenged by a major factor (parent's serious physical illness, mental or substance abuse problem, incarceration, or difficulties with the child's behavior or emotional life), during pregnancy or whose children are babies, toddlers, in early education, primary school or are adolescents.

Aims (primary and secondary): The aims of the intervention are to foster parenting and a positive child–parent relationship, and the child's safe and smooth daily life at home, kindergarten, school, and during free time.

Description of the intervention: The Let's Talk About Children intervention was developed in Finland. It is a low-threshold method consisting of between one and three meetings between a social and healthcare worker and a parent(s). Children's participation in the discussion is assessed on a case-by-case basis. Each discussion session consists of certain themes (evaluation of the situation, mapping children's development and life situation, the importance of a parental mental disorder for the family and children). A logbook, guidebook for parents and handbook for children and young children are used.

Provider/available from: The intervention is being used widely in many different services (e.g. daycare, school, child health clinics) in Finland. MIELI Mental Health Finland (www.mieli.fi) is in charge of implementation and training.

Evaluation of the documentation: Evaluations on the intervention have been conducted with parent(s) who have mental health problems and have children between 8 and16 years of age (Punamäki et al., 2013; Solantaus et al., 2010). There were no international studies for our target group; children aged 0-2 years, the intervention is therefore rated on level 1- Intervention with no evidence.

References:

Punamäki, R-L, Paavonen, J., Toikka, S., & Solantaus, T. (2013). Effectiveness of preventive intervention in improving cognitive attributions among children of depressed parents: A randomized study. *Journal of Family Psychology, 27*, 683–690.

Solantaus, T., Paavonen, E. J., Toikka, S. Punamäki R-L. (2010). Preventive interventions in families with parental depression: Children's psychosocial symptoms and prosocial behaviour. *European Child and Adolescent Psychiatry, 19*, 883–892.

Name of the intervention:	**Level of evidence:**
Living Well Together [Godt Samliv]	1

Authors: Susann Dahl Pettersen & Monica Martinussen

Documentation and literature: No effect studies were located through the literature search or further search efforts. A descriptive study was located (Knatten, 2007).

Target group: First-time parents.

Aims (primary and secondary): The aim is to provide support and inspiration to first-time parents in a time of considerable change and challenge, in everyday life and in their relationship (Knatten, 2007).

Description of the intervention: Living Well Together is a group-based program aimed at first-time parents, developed in 2005 by the Norwegian Directorate for Children, Youth and Family Affairs (Danielsen et. al., 2012). The program aims to strengthen couples' relationships, by providing various tools to improve communication and solve problems. The program is conducted as a course that is publicly funded, free of charge and offered through municipal healthcare centers (Bufdir, 2017).
The course is completed over eight hours, usually over two days/evenings (Knatten, 2007). Four themes are covered in the handbook distributed to the couples: The big change: from couple to family; Communication: maintaining the relationship; Argument and conflict: how to handle them? and The ABC of love: reason and emotions. The couples are given the opportunity to discuss the different themes and share thoughts with the group. The handbook is based on principles from the US Prevention and Enhancement Program (PREP) (Danielsen et. al., 2005), but some adaptations were made before the implementation in Norway. The intervention was developed by the Norwegian Directorate for Children, Youth and Family Affairs (Bufdir, 2017; Danielsen, Ludvigsen, & Mühleisen, 2012; Knatten, 2007).

Evaluation of the documentation: The literature search and further search efforts uncovered no effect studies and only one descriptive study (Danielsen et. al., 2005). According to Knatten (2007), the pilot project was evaluated by organizers, course leaders and 189 of the 196 participants. A total of 71% of the participants rated the course with a score of 5 or 6 (1 = very unsatisfied to 6 = very satisfied). There were no statistically significant differences between genders, age groups or educational levels. Based on the documentation, with no Nordic or International effect studies, the program is considered to be at level 1– Intervention with no evidence.

References:

Bufdir (Barne-, ungdoms- og familiedirektoratet) [The Norwegian Directorate for Children, Youth and Family Affairs]. (2017). *Godt Samliv - kurs for førstegangsforeldre* [Happy living together- course for first time parents]. Retrieved from https://bufdir.no/globalassets/familievern/kurslederkursgodtsamliv/godtsamliv_parhefte.pdf

Danielsen, H., Ludvigsen, K., & Mühleisen, W. (2012). Governing couple-sexuality: publically funded couples' courses in Norway. *Culture, Health and Sexuality*, *14*(6), 645-658. https://doi.org/10.1080/13691058.2012.676671

Knatten, A. (2007). Forebyggende familiearbeid i småbarnsfamilien: utviklingen av et landsdekkende politisk initiert forebyggingstiltak. *Tidsskrift for Norsk Psykologforening*, *44*(12), 1485-1491.

Name of the intervention:	**Level of evidence:**
Mamma Mia	3

Authors: Marte Rye & Lene-Mari P. Rasmussen

Documentation and literature: Based on the literature search, two articles based on the same RCT study were included (Haga et al., 2018, 2020)

Target group: Parents expecting a child, from gestational weeks 18–24 to six months after birth.

Aims (primary and secondary): The aims are: (1) to prevent the onset or reduce symptoms of depression; and (2) to enhance or maintain subjective well-being during pregnancy and during the six months after birth.

Description of the intervention: Mamma Mia is a web-based self-help intervention. The intervention consists of three phases, with 44 sessions over a period of 11 months. The pregnancy phase includes 16 weekly sessions in gestational weeks 18–40. The high-intensity maternity phase consists of 18 sessions delivered three times per week when the infant is aged 1–6 weeks. Finally, the low-intensity maternity phase consists of 10 sessions spread over 18 weeks. Each session takes about 10 minutes. The content of the intervention covers topics such as coping with the transition to parenthood, signs of sadness and depression, engaging with the baby and one's partner, and self-care (Drozd et al., 2015). A version combining the self-help intervention with up to five contact points with midwives and public health nurses has also been developed (Drozd et al., 2018). Mamma Mia is developed by Changetech AS in collaboration with RBUP Øst og Sør, with support from Norske Kvinners Sanitetsforening.

Evaluation of the documentation: RBUP Øst og Sør conducted an RCT study in a population sample (*N* =1342 mothers recruited during regular prenatal care), investigating whether Mamma Mia had an effect on maternal depression during pregnancy and after childbirth (Haga et al., 2018), and whether the program enhanced subjective well-being (Haga et al., 2020). Depressive symptoms decreased more for participants in the Mamma-Mia group compared to the control group following only usual perinatal care at health clinics. Group differences were significant in gestational weeks 37 and six weeks after birth, but not significant three-months and six-months after the child's birth. A higher depression score at baseline acted as moderator, indicating that a higher initial level of depressive symptoms yielded a greater effect of Mamma Mia. There were no significant differences in reported life satisfaction and positive affect between the groups, but the intervention group reported significantly less negative affect than the control group at gestational week 37, six weeks and six months after birth. Although the significant effects were small and the results were not significant for all measurements, positive results at the end of the pregnancy period and early infant period are considered to be of significance for becoming parents during a vulnerable period. Thus, Mamma Mia is considered to be at level 3 – Intervention with a good level of evidence.

References:

Drozd, F., Haga, S. M., Brendryen, H., & Slinning, K. (2015). An internet-based intervention (Mamma Mia) for postpartum depression: Mapping the development from theory to practice. *JMIR Research Protocols, 4*, 1–7. https://doi.org/10.2196/resprot.4858

Drozd, F., Haga, S. M., Lisøy, C., & Slinning, K. (2018). Evaluation of the implementation of an internet intervention in well-baby clinics: A pilot study. *Internet Interventions, 13*, 1–7. https://doi.org/10.1016/j.invent.2018.04.003

Haga, S. M., Drozd, F., Lisøy, C., Wentzel-Larsen, T., & Slinning, K. (2018). Mamma Mia – A randomized controlled trial of an internet-based intervention for perinatal depression. *Psychological Medicine, 49*(11), 1850–1858. https://doi.org/10.1017/S0033291718002544

Haga, S. M., Kinser, P., Wentzel-Larsen, T., Lisøy, C., Garthaus-Niegel, S., Slinning, K., & Drozd, F. (2020). Mamma Mia – A randomized controlled trial of an internet intervention to enhance subjective well-being in perinatal women. *The Journal of Positive Psychology* (ahead of print). https://doi.org/10.1080/17439760.2020.1738535

Changetech AS (n.d.). Velkommen til Mamma Mia [Welcome to Mamma Mia]. Retrieved September 30, 2020, from https://program.changetech.no/ChangeTech5r.html?Mode=Trial&P=6X8LNT

Name of the intervention:	**Level of evidence:**
Marte Meo	2

Authors: Helene Eng & Kirsi Peltonen

Documentation and literature: Two effect studies were located through the literature search (Høivik et al., 2015; Kristensen et al., 2017).

Target group: There are currently 29 different Marte Meo programs. All are based on the idea of identifying, activating, and developing skills to enable and enhance constructive interaction and development. They are developed for different target groups, from premature infants to elderly people with dementia. Many of the programs are directed at parents and families. This review is limited to the Marte Meo program used in the guidance for parents of the youngest children.

Aims (primary and secondary): To strengthen and develop the interaction between parents and children via parent guidance.

Description of the intervention: Marte Meo is a video-based intervention for promoting child development. The videos are used by the therapist to observe what happens in the interaction between the parents and their children, for mapping the children's needs and in parent supervision.

Evaluation of the documentation: One Norwegian RCT study examined the effect of a manualized version, developed in Norway, called Marte Meo Video Feedback of Infant–Parent Interaction (Marte Meo VIPI). It consists of at least six sessions (Høivik et. al, 2015) and the participants were parents of children aged 0–2 years with interaction problems. A Marte Meo VIPI intervention group (n = 74) was compared to TAU (n = 57) at pre- and post-test and six months follow-up. There was a significantly greater increase in emotional availability in the intervention group compared to TAU immediately after the intervention. The increase was more pronounced among parents with lower levels of emotional availability at baseline. However, there were no differences between the intervention group and TAU at six months follow-up, regardless of baseline levels of emotional availability. There was no effect on the child's capacity for self-regulation, compliance, adaptive functioning, autonomy, affect, and interaction with others right after the intervention, or at the follow up. In a quasi-experimental Danish study (Kristensen et.al., 2017), the effectiveness of Marte Meo among vulnerable first-time mothers was examined. The intervention group (n = 69) was compared to a matched comparison group (n = 63). The program consisted of between four and seven home visits between two and six months postpartum. The study showed significantly larger changes in dyadic synchrony (mother–infant interaction), maternal sensitivity, maternal confidence and maternal stress, in the intervention group compared to the control group. No effects were found for the mothers' levels of depression or for the child's social/emotional development.
The studies have some methodological weaknesses due to a lack of randomization in the Danish study, and no effects were reported for most of the outcome measures in the Norwegian study. The studies were also conducted on different versions of the program, but may indicate some positive effects, at least for some groups. The program is classified as level 2, as a program with some level of evidence

References:

Høivik, M. S., Lydersen, S., Drugli, M. B., Onsøien, R., Hansen, M. B., & Berg-Nielsen, T. S. (2015). Video feedback compared to treatment as usual in families with parent–child interactions problems: A randomized controlled trial. *Child Adolescent Psychiatry and Mental Health, 9*, 3. https://doi.org/10.1186/s13034-015-0036-9

Kristensen, I. H., Simonsen. M., Trillingsgaard, T., & Kronborg, H. (2017). Video feedback promotes relations between infants and vulnerable first-time mothers: A quasi-experimental study. *BMC Pregnancy and Childbirth, 17*, 379. https://doi.org/10.1186/s12884-017-1568-1

Name of the intervention:	**Level of evidence:**
Mellow Bumps (MB)	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search found one RCT study (White et al., 2015) and a qualitative study of women's experiences of the Mellow Bumps intervention (Breustedt & Puckering, 2013).

Target group: High-risk pregnant women.

Aims (primary and secondary): The intervention aims to encourage nurturing, engagement, and attunement between mother and baby by decreasing maternal antenatal stress levels and increasing expectant mothers' understanding of the neonate's capacity for social interaction.

Description of the intervention: Mellow Bumps (MB) is a group-based parenting intervention designed to support pregnant women with additional health and social care needs. It is underpinned by attachment and self-regulatory theories. MB is offered between 20–30 weeks' gestation, to capture the period when the risk of miscarriage is low and fetal movement is felt, but before mother's attention is taken up with delivery. Six sessions are offered weekly pre-birth and there is a reunion session at around three months post-birth. Each week there are activities to support emotional containment and stress reduction, and activities to raise awareness of the social capabilities of babies and the value of early intervention. It also emphasizes the importance of early interaction for brain development. The program is delivered by, for example, midwives, health visitors, family support workers. Mellow Bumps was developed by Scotland-based charity Mellow Parenting (Breustedt & Puckering, 2013).

Evaluation of the documentation: Pregnant women meeting high-risk criteria participated in the study conducted in Scotland (White et al., 2015). Participants (n = 35) were randomly allocated in clusters of six to one of Mellow Bumps, Chill-out in Pregnancy (a six-week stress reduction program) or care-as-usual (CAU). Participants completed questionnaires concerning their well-being and depression at three points: pre-intervention (baseline); post-intervention; and at 8–12 weeks post-birth. There seemed to be a trend towards improvement in all outcome measures in all groups over time. However, participants in the intervention groups showed more improvements in depression and some of the well-being outcomes than the mothers in the CAU group, although the differences between the groups were not statistically significant. Qualitative feedback suggested that the interventions' format was acceptable to this population (Breustedt & Puckerin, 2013).
There is no sufficient Nordic or international effect studies supporting the evidence of Mellow Bumps. The intervention is rated at evidence level 2 – Intervention with some level of evidence.

References:

Breustedt, S., & Puckering, C. (2013). A qualitative evaluation of women's experiences of the Mellow Bumps antenatal intervention. *British Journal of Midwifery, 21*(3), 187–194. https://doi.org/10.12968/bjom.2013.21.3.187

White, J., Thompson, L., Puckering, C. Waugh, H., Henderson, M., MacBeth, A., & Wilson, P. (2015). Antenatal parenting support for vulnerable women. *British Journal of Midwifery, 23*(10), 724–732. https://doi.org/10.12968/bjom.2015.23.10.724

Name of the intervention:	**Level of evidence:**
Minding the Baby® (MTB)	3

Authors: Henriette Kyrrestad & Susann D. Pettersen

Documentation and literature: The literature search identified four articles from two effect evaluations of the MTB (Ordway et al., 2014, 2018; Sadler et al., 2013; Slade et al., 2020), and two reviews in international databases (Mariager & Dam, 2017; CEBC, 2019).

Target group: The primary target group for MTB is first-time pregnant women aged 14 to 25 years who are in a socially disadvantaged position or have experienced physical or mental violence, sexual abuse, neglect, or placement outside the home during their own upbringing. The second target group is the baby's father or the family closest to the child.

Aims (primary and secondary): The primary aim of MTB is to promote a good and secure connection between the mother and the baby. Secondary aims are to enhance: (1) protective factors, skills, and strategies; (2) competent and flexible parenting; (3) psychological health in parents, children, and between parents and children; (4) the physical health and development of the child; and (5) positive life course outcomes.

Description of the intervention: MTB is a preventive home-visiting program with a focus on the child–parent relationship by promoting parental reflective functioning (Slade et al., 2005). The core elements of the intervention are maternal reflective functioning and affective communication between mother and child (Slade et al., 2020). The intervention begins before the child is born and ends when the child is 2 years old. The practitioners of MTB are usually a nurse and a social worker, who visit the family weekly through pregnancy, labor and delivery during the child's first year and fortnightly in the second year (Slade et al., 2020). The practitioners focus on health promotion and provide development guidance, scaffolding parenting, support for mother–infant attachment, physical safety, and basic necessities including food and diapers (Slade et al., 2020). The visits are need-adjusted and the program is designed to be flexible. A manual describes the delivering of the MTB and the practitioners receive training. MTB is developed in collaboration between the Yale Child Study Center and the Yale University of Nursing.

Evaluation of the documentation: No evaluation studies have been conducted within the Nordic countries. The Danish database Vidensportalen reviewed the effect of MTB with scores ranging from A (highest score) to D (lowest score) at score C (Mariager & Dam, 2017). The US database CEBC reviewed the effect of MTB at level 3 – Promising research evidence (CEBC, 2019). MTB has been evaluated in two randomized controlled trials (RCT). The first RCT (N = 105) showed that families receiving MTB were less likely to be referred to child protective services, intervention infants were 3.4 times more likely to be securely attached, and mothers had significantly improved capacity of maternal reflective functioning (Sadler et al., 2013). There was no significant difference between the families receiving MTB and the control group on maternal depression or psychological distress (Sadler et al., 2013). A follow-up study (N = 25) showed that after one to three years, mothers in the intervention group reported fewer externalizing behaviors as compared with the control group (Ordway et al., 2014). Further, after the children were 2 years old the intervention mothers increased their reflective functioning while mothers in the control group did not (Ordway et al., 2014). Another follow-up study (N = 158) showed that children in the intervention group had significantly lower BMI at age 2 as compared to children in the control group (Ordway et al., 2018). The second RCT (N = 156) showed that mothers receiving MTB increased maternal reflective functioning and infants in the intervention group were more securely attached and 2.69 times more likely to be less disorganized (Slade et al., 2020). As there are international studies with good methodological quality with effects on the primary and secondary outcome measures, in addition to a positive

evaluation in the databases Vidensportalen and the CEBC, MTB is rated at level 3 – Intervention with a good level of evidence.

References:

CEBC. (2019). *Minding the Baby (MTB)*. The California Evidence-Based Clearinghouse for Child Welfare (CEBC). https://www.cebc4cw.org/program/minding-the-baby/

Child Study Center. (2020). *Minding the Baby®*. Yale School of Medicine. https://medicine.yale.edu/childstudy/communitypartnerships/mtb/

Mariager, L. B., & Dam, S. P. (2017). *MTB: Minding the Baby*. Socialstyrelsen. https://vidensportal.dk/temaer/unge-foraeldre/indsatser/mtb-minding-the-baby

Metodecentret - Center for Innovation and Methodology. (2018). *Familiebehandling: Minding the Baby*. https://metodecentret.dk/minding-the-baby/

Ordway, M. R., Sadler, L. S., Dixon, J., Close, N., Mayes, L., & Slade, A. (2014). Lasting effects of an interdisciplinary home visiting program on child behavior: Preliminary follow-up results of a randomized trial. *Journal of Pediatric Nursing*, *29*(1), 3–13. https://doi.org/10.1016/j.pedn.2013.04.006

Ordway, M. R., Sadler, L. S., Holland, M. L, Slade, A., Close, N., & Mayes, L. C. (2018). A home visiting parenting program and child obesity: A randomized trial. *Pediatrics*, *141*(2), 1–11. https://doi.org/10.1542/peds.2017-1076

Sadler, L. S., Slade, A., Close, N., Webb, D. L., Simpson, T., Fennie, K., & Mayes, L. C. (2013). Minding the Baby: Enhancing reflectiveness to improve early health and relationship outcomes in an interdisciplinary home visiting program. *Infant Mental Health Journal*, *34*(5), 391–405. https://doi.org/10.1002/imhj.21406

Slade, A., Bernbach, E., Grienenberger, J., Levy, D., & Locker, A. (2005). *Manual for scoring reflective functioning on the Parent Development Interview.* Unpublished manuscript, The City University of New York.

Slade, A., Holland, M. L., Ordway, M. R., Carlson, E. A., Jeon, S., Close, N., Mayes, L. C., & Sadler, L. S. (2020). Minding the Baby®: Enhancing parental reflective functioning and infant attachment in an attachment-based, interdisciplinary home visiting program. *Development and Psychopathology*, *32*(1), 123–137. https://doi.org/10.1017/s0954579418001463

Slade, A., Sadler, L., De Dios-Kenn, C., Webb, D., Currier-Ezepchick, J., & Mayes, L. (2005). Minding the Baby – A Reflective Parenting Program. *The Psychoanalytic Study of the Child*, *60*(1), 74-100. https://doi.org/10.1080/00797308.2005.11800747

Name of the intervention:	**Level of evidence:**
Modified Mother–Infant Transaction Program (MITP)	4

Authors: Charlotte Reedtz & Henriette Kyrrestad

Documentation and literature: Based on the literature search and extended search efforts, 18 articles based on two RCT studies were included.

Target group: Premature infants (0–3 months) and their parents.

Aims (primary and secondary): The aims are: (1) to strengthen parents' understanding of and sensitivity towards the infants' signals, and their ability to interact with the infant in ways that support child development; and (2) to strengthen the probability of healthy development in the child.

Description of the intervention: The modified MITP program is a method of supervising parents to reach a better understanding of their premature infant. The intervention is developed for healthcare personnel in infant care to stimulate infant responses, and to describe the competencies and individuality of the newborn baby together with the parents. The intervention consists of daily one-hour in-hospital sessions with both parents and their infant on eight consecutive days, starting one week before planned discharge. This is followed by four home visits (Nordhov, Rønning, et al., 2010). Each session addresses the infant's reflexes, self-regulation and interactions, signs of distress, and predominant states, as well as how parents support the infant into a quiet, alert state for mutual social interaction (Nordhov et al., 2012). The four home visits are carried out by the same intervention nurse, 1, 2, 4, and 12 weeks after discharge. The program was developed by Virginia A. Rauh (www.publichealth.columbia.edu/people/our-faculty/var1).

Evaluation of the documentation: Two independent RCTs have evaluated the MITP program in Norway. The first one was conducted on preterm infants with BW<2000 g, randomized to a preterm intervention (*n* = 72) or a preterm control (*n* = 74) group, with measures when the children were 6 months, 1, 2, 3, 5, 7 and 9 years old. The results are published in 12 empirical publications, and show significant differences between the groups. They favor the intervention group on several outcomes including: the level of sensitivity in parents at 12 and 24 months (ES ranging from 0.17–0.49) (Nordhov, Kaaresen, et al., 2010; Olafsen et al., 2008, 2012); parental stress at 1, 2, 3, 5, 7 and 9 years (Kaaresen et al., 2006; Landsem et al., 2019, 2014); child negative emotionality at 2, 3, 5, and 7 years (Landsem et al., 2020); child behavior problems and IQ scores at 5 years (Nordhov, Rønning, et al., 2010); attention problems and school adaptation at 7 and 9 years (Landsem, Handegard, Ulvund, Tunby, et al., 2015); school performance at 9 years (Landsem, Handegard, Ulvund, Tunby, et al., 2015); and parental quality of life (Landsem, Handegard, Ulvund, Kaaresen, et al., 2015). There were no differences between the groups on overall cognitive outcomes at 7 and 9 years (Hauglann et al., 2015). In another RCTs including premature children (*N* = 118), the results revealed significant differences between the intervention group (IG) and two control groups (CG) in favor of the IG on outcomes related to sensitivity and responsiveness in mothers (Ravn et al., 2011), positive mood in infants, postpartum depression (Ravn, Smith, et al., 2012) and confidence, competence and secure caring for the infants (Kynø et al., 2013). The results revealed that there were no differences in stress among fathers in the IG and CG (Ravn, Lindemann, et al., 2012), and no effects on cognitive, motor or behavioral development in moderate and late preterm infants at 36 months corrected age (Kynø et al., 2012). There are two independent studies with sufficient methodological quality and positive effects on primary and secondary outcome measures and thus MITP is considered to be at level 4 – Intervention with a high level of evidence.

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Name of the intervention:	**Level of evidence:**
Multi-Agency Risk Assessment Conferences (MARACs)	1

Authors: Taina Laajasalo & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search.

Target group: Adults, with or without children, experiencing domestic violence or threat of violence.

Aims (primary and secondary): The aim of Multi-Agency Risk Assessment Conferences (MARACs) is to enhance information sharing and take actions to reduce harm and the revictimization of high-risk domestic violence victims.

Description of the intervention: MARAC intervention is based on the premise that no single agency or individual alone can form a complete picture of the life of a domestic abuse victim in order to identify and manage the risks. MARACs gather authorities and provide a forum for sharing information across criminal justice, the voluntary/non-governmental organization sector, and other agencies. In MARAC meetings, representatives formulate action plans to reduce harm and the revictimization of high-risk domestic violence victims and their children. The violence experienced can be physical, sexual or emotional.
MARAC work starts after the victim informs a professional or authority of the violence or threat of violence she or he has experienced. The victim discusses the situation in confidence with a professional or authority. During the discussion, a risk assessment form (DASH) is completed. If there is found to be a threat of a high risk of violence, the case is referred to the local MARAC group with the consent of the victim. The working group draws up a security plan for the victim. The victim receives a support person for the duration of the process.
Even though MARAC is developed for risk assessment of intimate partner violence, MARAC interventions and the related risk assessment form (DASH) can be used for child protection purposes. MARACs include considering the situation and risk concerning the children involved. However, there is little published research and sparse theoretical reflections on MARAC's direct effects on children. MARACs were developed in Cardiff, UK, and are now used around Europe.

Evaluation of the documentation: Thus far, research regarding MARACs is mainly qualitative and evaluations of outcomes regarding victim safety are scarce. Two studies have assessed the post-MARAC revictimization rate of victims with long histories of domestic abuse. In the first study (Robinson, 2006), up to 60% of victims (n = 146) experienced no further violence in the six months after MARAC intervention, based on police incident data, police call out data and interviews with a subset of victims. The second study utilizing the same data set showed that around 40% of victims (n = 102) experienced no violence one year after the MARAC intervention (Robinson & Tregidga, 2007). However, these studies are limited by not using a comparison group. The only study containing a control group is a non-peer-reviewed master's thesis by Whinney (2015).
Based on the above findings the intervention is rated at evidence level 1 – Intervention with no evidence.

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Name of the intervention:	**Level of evidence:**
Neonatal Behavioral Assessment Scale (NBAS)	2

Authors: Charlotte Reedtz & Piia Karjalainen

Documentation and literature: Based on the literature search and extended search efforts, two studies including one Cochrane review were included (Barlow et al., 2018; Cooper et al., 2015).

Target group: Infants (0–2 months) and their parents.

Aims (primary and secondary): The primary goals of the NBAS is (a) to sensitize parents to infants' capacities and individuality, and (b) to enhance the parent–infant interaction and relationship.

Description of the intervention: The NBAS is assumed to be the first intervention that was developed to improve caregiver–infant interaction at the behavioral level through a specific focus on caregiver responsiveness during the earliest days and months of the infant's life (Barlow et al., 2018). Dr. Brazelton developed the NBAS in the 1970s as a way of assessing a newborn's neurological functioning. There is also a shorter clinical variation, the Newborn Behavioral Observations (NBO) system, which is derived from the NBAS. The intervention aims to improve parents' awareness of their baby's competencies and thereby promote better interaction. The NBAS is a brief intervention developed as a standardized tool to assess full born infants, based on the observation of the spontaneous behavior of the baby and his/her interaction with the caretaker. During an NBAS session, a qualified clinician (e.g. a pediatrician, midwife, or psychologist) administers 28 behavioral and reflex items, recording the infant's responses. These items are designed to reveal the infant's unique social-interactive and neurodevelopmental capabilities and difficulties. The information gathered in a 20–30-minute assessment enables parents and professionals to observe the baby's strategies for coping with changes in state (sleep and awake states), crying, stimulation and social interaction. The intervention enables health personnel to demonstrate to parents the child's strengths and abilities, as well as its need for adapted care-giving. The developers recommend that families participate in sessions once to three or more times. More sessions, spread over the first two to three months, are believed to provide a more detailed picture of the infant and its development.

Evaluation of the documentation: The NBAS was used in an RCT study (Cooper et al., 2015) where researchers evaluated its effects on maternal depression/mood and in sensitizing mothers to their infants' characteristics (N = 190) in a high-risk sample. The NBAS intervention involved 11 home visits. No effects of the intervention for the mother–child relationship were found, and hence, no treatment effect was shown for the level of maternal sensitivity in interaction with the infant, or the levels of infant engagement. In a resent Cochrane review (Barlow et al., 2018) on NBAS and NBO, thirteen RCT studies related to NBAS were identified. All studies (N = 20 - 125) were mostly old studies from the US, conducted between 1980 -1995. Overall, results revealed evidence that the intervention resulted in a strengthened interaction between the caregiver and baby (medium effect), compared to the control group. One study included in the review, researchers found a difference between intervention and control related to caregiver knowledge of infant behavior, favoring the NBAS group, but no effect on this was found in another later study. However, the quality of evidence was rated as low to very low for all results due to methodological limitations in terms of blinding and allocation as well as follow-up and dropout. There were no effects related to caregivers' perception of their baby, caregivers stress, caregiver confidence, self-efficacy or self-esteem in the caregiving role. The conclusion from the review was that there is only studies of low quality available to inform about the effects of NBAS used with low-risk populations.

There is one European study of sufficient quality, and a systematic review, but evidence from these studies is based on different target groups, and the results are contradicting. Since the results from primary studies are not conclusive in the same direction on the effects on primary and secondary goals, and the methodological quality is not viewed as satisfactory, the conclusion is that NBAS is classified at Level 2 – Intervention with some level of evidence.

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Name of the intervention:	**Level of evidence:**
Newborn Behavioral Observation (NBO)	2

Authors: Charlotte Reedtz & Helene Eng

Documentation and literature: Based on the literature search and extended search efforts, two studies including one Cochrane review were included (Barlow et al., 2018; Cooper et al., 2015)

Target group: Infants (0–3 months) and their parents.

Aims (primary and secondary): The primary goals of the NBO are (a) to sensitize parents to infants' capacities and individuality and (b) to enhance the parent–infant relationship by (c) strengthening parents' confidence and practical skills in caring for their children.

Description of the intervention: NBO is an individualized and flexible intervention offered to promote a positive parent–infant relationship by sensitizing parents to the baby's signals (Hoifodt et al., 2020). The intervention is designed to be used by healthcare workers in infant care to elicit, describe and interpret the competencies and individuality of the newborn baby together with the parents. The core basis for the intervention is that newborn babies adapt to their environments individually, and that there are large variations in how they do so and how parents respond to their newborns. NBO is an 18-item intervention that includes both observation and elicited behaviors with the purpose of identifying infant neurobehaviors and interpreting these behaviors in the context of the parent–infant interaction (McManus & Nugent, 2014). The NBO includes two main components: (1) assessment of infant habituation, including sound and light; and (2) 11 behavioral tests, including assessments of infant rooting, sucking, grasp, crawl, and sit reflexes, orienting to the sounds of voice and rattle, and visual responses to a red ball, a face, and a voice. These elements are summarized as autonomous regulation, motorical regulation, organization of behavior, and responsivity (AMOR). The intervention is based around the child, with parents focusing on how the child is communicating with them, and how parents understand their child. Parents are guided to get their baby's attention, to establish contact, to cope with the baby's different states and moods, and to respond adequately to the baby's signals.

Evaluation of the documentation: In a recent Cochrane review (Barlow et al., 2018) on NBAS and NBO, only three RCT studies relating to NBO were identified (McManus & Nugent, 2014; Nugent et al., 2017, 2014). Combined results for both interventions showed a medium effect related to change in interaction between the caregiver and baby, compared with control groups. There were no effects related to maternal depression. The Cochrane review conclusion was that very few studies, and only studies with low scientific quality, are currently available about NBO's effects on parent–child interaction for universal, low- and high-risk groups of parents. In a recent Norwegian study, Høyfødt and her colleagues evaluated NBO as a universal preventive intervention among women (N = 220) and their partners (N = 130) within the regular well-baby clinic service. The results showed no significant effects of NBO between the intervention and comparison group on mother–infant relationship, maternal depression or parental stress (Hoifodt, et al., 2020), for both first-time mothers and those who were already parents. The study was a quasi-experimental trial where the intervention group was compared to a comparison group receiving treatment as usual. When evaluating user satisfaction of the services, results revealed that parents in the intervention group experienced more learning about the baby's signals and needs compared with the comparison group. In another study (Guimaraes, et al., 2018), researchers revealed that utilizing NBO increased the level of knowledge about the behavior of their newborns in mothers of preterm babies. Since the results in three international studies support some effects on primary goals, but only one Nordic study found effects on one secondary goal, the conclusion is that NBO has evidence at level 2 –

Intervention with some level of evidence.

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Name of the intervention:	**Level of evidence:**
Newborn Individualized Developmental Care and Assessment Program (NIDCAP)	2

Authors: Charlotte Reedtz & Monica Martinussen

Documentation and literature: Based on the literature search, 31 studies including several RCTs, one Cochrane review, and several other systematic reviews of RCT studies were included (Als et al., 2012, 2011, 2004; Blauw-Hospers & Hadders-Algra, 2005; Bonnier, 2008; Gabis et al., 2015; Jacobs et al., 2002; Kleberg et al., 2007, 2008, 2000, 2002; Legendre et al., 2011; Maguire et al., 2009a, 2009b; McAnulty et al., 2009, 2013, 2012, 2010; Ohlsson & Jacobs, 2013; Peters et al., 2009; Sannino et al., 2016; Symington & Pinelli, 2006; Ullenhag et al., 2009; van der Pal et al., 2008a, 2008b, 2007; Wallin & Eriksson, 2009; Westrup et al., 2004, 2002, 2000; Wielenga et al., 2007).

Target group: Preterm infants/infants with very low birth weight admitted to a newborn/ neonatal intensive care unit (NICU), and their parents.

Aims (primary and secondary): To stimulate the infant in ways that (a) enhance child brain development, (b) improve child motor skills, (c) improve child cognitive outcomes, and (d) improve parent–child interaction.

Description of the intervention: The NIDCAP is designed for specialized nurses in NICUs to support their work with newborn babies and their parents. The main approach in the program involves sequential, formalized, naturalistic observations of the infant prior to, during, and after caregiving procedures. During NIDCAP observations, NICU personnel and parents assess the baby´s strengths and sensitivity through the infant's reactions to the environment, medical and parental care, and child–caregiver interactions. Based on these observations, care recommendations are extracted and provided for caregivers. NIDCAP observations seek to improve the understanding of the infant and its parents, and thereby support infant development and parental care. More specifically, systematic observations in the following areas lay the foundation for individualized and adaptive care, nursing and interaction: (a) the family; (b) care, interventions, and rhythm/routines; (c) nesting/ environment; (d) feeding/meals; and (e) physical surroundings, including sound/noise, light and activity. NICU staff supervise the parents in how to interpret the infant's signals and how to interact with the infant. Parents' need for support and supervision is assessed individually and continuously, and all staff in the NICU should be trained in the NIDCAP principles.

Evaluation of the documentation: Numerous high methodological quality primary studies have evaluated the effects of the NIDCAP, including several Swedish studies (N = 11 – 58). However, the studies included in the present evaluation investigated a large variety of different outcome variables (death, respiratory support, lung disease, neurodevelopment, growth, sleep/wake states, age at discharge from NICU, stress, mother–child closeness, child life quality, IQ, cognitive, emotional and behavioral functioning), and hence, results are diverse. In addition, the results on NIDCAP's effects on child motor and cognitive development are conflicting (Blauw-Hospers & Hadders-Algra, 2005; Wallin & Eriksson, 2009). This was also the finding in the first Cochrane Review (Symington & Pinelli, 2006), where the conclusion was that the single trials that did show a significant effect on major clinical outcomes, were based on small sample sizes and the findings were often not supported in other small trials. Furthermore, the evidence supporting the long-term positive effect of NIDCAP on behavior and movement in 5-year-old children was considered very limited. There is no evidence of effects on cognitive functioning beyond the age of 5 years. In a more recent meta-analysis from 2013, where researchers evaluated the effectiveness of NIDCAP (N = 627, sampled from 11 primary and 7 secondary studies) on medical and

neurodevelopmental outcomes (Ohlsson & Jacobs, 2013), results gave no evidence to support that NIDCAP improves long-term neurodevelopmental or short-term medical outcomes. Regardless of a relatively consistent trend of significant positive effects on cognitive and motor development, in international and Swedish research, it seems evident that the effects of NIDCAP is limited (Wallin & Eriksson, 2009). The limitations and large diversities in methodologies in primary studies still hinders far-reaching claims about the effectiveness of the method. Since the results from primary studies are not conclusive in the same direction on the effects on primary and secondary goals, the conclusion is that NIDCAP is classified at Level 2 – Intervention with some level of evidence.

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Name of the intervention:	**Level of evidence:**
Nurse–Family Partnership (NFP) [Familie for første gang]	3

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search found five randomized controlled trials (RCTs) (Jungmann et al., 2009; Kitzman et al., 1997; Olds et al., 1986, 2002; Sierau et al., 2016), and eight follow-up studies (Eckenrode et al., 2010; Kitzman et al., 2019; Olds et al., 1994, 1997, 1998, 2004, 2007, 2014).

Target group: Young, first-time, socially and economically disadvantaged mothers and their children.

Aims (primary and secondary): Better pregnancy outcomes, improved child health and development, and increased economic self-sufficiency.

Description of the intervention: The Nurse-Family Partnership (NFP) is a home-visit program for young and first-time, socially and economically disadvantaged mothers during their first pregnancy until their child is 2 years old. Mothers are visited by a registered nurse in their home at least once every other week, sometimes more often. The nurses work with the expectant mothers to reduce behaviors such as smoking, drinking, and drug use during pregnancy that may lead to poor birth outcomes. They also help the expectant mothers to identify potential signs of pregnancy complications. After the birth of the child, nurses work with mothers to recognize developmental or health problems and create safe environments for their children as well as teaching them how to positively interact with their children in a way that promotes social and emotional competence (e.g. through play, reinforcements), and how to develop strategies for dealing with difficult behaviors. The nurses also support the mothers in going back to school or finding a good job. The intervention was developed by Dr. David Olds at the University of Colorado.

Evaluation of the documentation: The RCTs in the USA were conducted among poor, first-time, socially and economically disadvantaged mothers. Poor, unmarried teens who had received nurse visits reported their 6-month-old children being less irritable and fussy than in the comparison group (Olds et al., 1986), and were less likely to exhibit emotional vulnerability in response to fear stimuli (Olds et al., 2002). Mothers punished and restricted their children less often and had fewer instances of verified child abuse and neglect than mothers in the control group when the child was 10 and 22 months old (Olds et al., 1986). Mothers provided more appropriate play materials (Olds et al., 1986), and provided safer and more conducive home environments to their children's emotional and cognitive development over ages 1 to 4 years (Kitzman et al., 1997; Olds et al., 2002, 1994). Children of nurse-visited women were less likely to exhibit language delays at 21 months (Olds et al., 2002), held fewer beliefs about child-rearing associated with child abuse and neglect (Kitzman et al., 1997), and interacted more responsively than did mothers in the control group (Olds et al., 2002). The effects on behavior problems and dysfunctional attention were sustained at age 9 (Olds et al., 2014). Positive outcomes on child abuse and neglect were still seen at a 15-year follow-up (Olds et al., 1997), on language and math skills at an 18-year follow-up (Kitzman et al., 2019), and on the number of arrests and convictions among girls at a 19-year follow-up (Eckenrode et al., 2010). Children born to mothers with low psychological resources were less likely to display low emotional vitality in response to joy and anger stimuli at 6 months (Olds et al., 2002). They also had better receptive language averaged at age 6, and sustained attention averaged, as well as reading and math skills, at age 9 (Olds et al., 2007, 2014). The German NFP program "Pro Kind" was studied among low-income first-time mothers (n = 76, n = 38 intervention), who were underage, had poor education, had substance abuse problems, or experienced of violence or neglect. The results showed a significant decrease in self-reported level of stress during pregnancy as

well as in the child's birth weight, body height, or head circumference in both groups. At 6 months of age, children in the intervention group had higher scores on neurodevelopmental outcomes, and mothers rated their infants' temperament less often as difficult (e.g., crying less or being less irritable). The differences between groups over time were not significant on any of the studied domains. Preliminary results from 25 mothers showed positive treatment effects for the cognitive outcomes at the age of 12 months (Jungmann et al., 2009). A total of 755 socially and financially disadvantaged first-time mothers attended another German study (*N* = 394 intervention) from pregnancy until the children's second birthday (Sierau et al., 2016). The results showed small but significant positive treatment effects on parental self-efficacy, and marginally significant effects on knowledge on child rearing and on social support. Maternal stress, self-efficacy, and feelings of attachment in the intervention group showed more positive development over time. High-risk mothers in the intervention group reported more social support over time and had children with higher developmental scores compared to their mothers in the control group. Glavin and colleagues compared the original NFP model with the model used universally in Norway. The conclusion is that the Norwegian model works as a universal model and should be used as such. There are international effect studies supporting the evidence of the NFP. However, there is a lack of Nordic studies. Thus, the intervention is rated on evidence level 3 – Intervention with a good level of evidence.

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Name of the intervention:	**Level of evidence:**
Nurture and Play [Hoivaa ja leiki]	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. One Finnish randomized controlled trial (RCT) was included (Salo et al., 2019). The intervention was evaluated by Kasvun tuki.

Target group: Pregnant women with depressive and anxiety symptoms and/or at risk of depression and/or mothers with conflicting, distant attitudes towards parenting and the need to strengthen mentalization and emotional availability.

Aims (primary and secondary): The primary aims of the intervention are: (1) to support the mentalizing ability; (2) to encourage the emotional availability of pregnant mothers in relation to the newborn baby (e.g., through experiential tasks and playfulness); and (3) to teach cognitive-behavioral methods for managing depressive symptoms. The secondary aim is to reduce depressive syndromes.

Description of the intervention: The group-based Nurture and Play intervention was developed in Finland and is based on mentalization and attachment theories. The intervention consists of four group sessions during pregnancy, seven group sessions during the infant phase and home visit(s) after childbirth. Each session includes mentalization-enhancing discussion and exercises, psychoeducation, cognitive and physical exercises (e.g., relaxation, massage), and early, experiential interaction activities (play and singing) that support sensitivity. Homework is given each time. Mothers are also asked to keep a maternity diary. Each group consists of three or four mothers/mother–baby pairs. The semi-structured group (1½ hours) is led by two employees trained in Nurture and Play.

Evaluation of the documentation: The impact of the program has been evaluated by an RCT study in Finland (Salo et al., 2019). A total of 45 pregnant woman (*n*(intervention group) = 24, *n*(control group) = 21) participated in the study, which investigated whether Nurture and Play had an effect on mentalizing and emotional availability as well as maternal depression during pregnancy and after childbirth. Emotional and maternal availability increased, and depressive symptoms decreased more in the intervention group than in the control group when the child was 1 year old. Group differences were statistically significant. However, the depressive symptoms of the women in the control group also decreased. Even though there were some methodological shortcomings (small number of participants, lack of power calculation), the measures used were reliable and widely used in this type of study, and the study itself was well executed. Thus, the intervention is considered to be at level 2 – Intervention with some level of evidence.

References:

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Name of the intervention:	**Level of evidence:**
PALS Preschool	1

Authors: Helene Eng & Lene-Mari P. Rasmussen

Documentation and literature: The literature search did not result in any studies for either PALS or School-Wide Positive Behavioral Interventions and Support (SW-PBIS) used in preschool or for Early Childhood Positive Behavioral Interventions and Support (EC-PBIS).

Target group: Children in preschool.

Aims (primary and secondary): A description of the PALS preschool programs as used in the Nordic countries was not located, nor was a description of the aims available. PALS is based on the program SW-PBIS. An adaption of SW-PBIS to younger children, EC-PBIS (Center on PBIS, n.d.), aims to reduce child's challenging behavior, increase children's social skills, increase the satisfaction levels of program staff and families, increase teachers' competence and confidence in the support of children, and change the classroom and program climate.

Description of the intervention: Positiv atferd, støttende læringsmiljø (PALS) [Positive behavior, supporting learning environment] is a Norwegian adaption of the US program School-Wide Positive Behavioral Interventions and Support program (SW-PBIS; Aashem et al., 2018). In the *Ungsinn* review, the school version was rated at level 5 (strong documented effect) (Aasheim et al., 2018). As the name of the intervention indicates, this is a school program. In Norway a pilot version for pre-schools has been tested in between five and seven kindergartens, but the program is not currently in use in Norway. In the US, there is a description of an adapted version of SW-PBIS called the Early Childhood PBIS, which is directed towards younger children. As for schools, the program is a holistic and systematic approach to work universally, selectively and indicated towards the aims of the program. Central to the model are its continuous monitoring of implementation, outcomes and interventions. Most of the interventions are aimed at all children, while some are aimed at smaller groups or individuals who need more support. Information regarding the similarity between the Nordic versions of PALS Preschool and the Early Childhood PBIS was not obtainable.

Evaluation of the documentation: Since no Nordic or international effect studies were found, the intervention is classified at level 1–Intervention with no evidence.

References:

Aasheim, M., Patras, J., Eng, H., & Natvig, H. (2018). Kunnskapsoppsummering og klassifisering av tiltaket PALS – Positiv atferd, støttende læringsmiljø og samhandling (2.utg.) [A systematic review and classification of the intervention PALS–Positive behavior, supporting school environment and cooperation]. *Ungsinn*, 2:1. https://ungsinn.no/post_tiltak_arkiv/pals-positiv-atferd-stottende-laeringsmiljo-2-utg/

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Name of the intervention:	**Level of evidence:**
Parent–Baby Intervention	2

Authors: Charlotte Reedtz & Piia Karjalainen

Documentation and literature: Based on the literature search and extended search efforts, two articles based on one RCT study were included (Kersten-Alvarez et al., 2010; Van Doesum, et al., 2008).

Target group: Parents with depression and other mental disorders, and their babies (0–1 years).

Aims (primary and secondary): The aims of the intervention are: (1) to strengthen social interaction and contact with the baby; and (2) to reduce the risk of future socio-emotional problems in the child.

Description of the intervention: The Parent–Baby Intervention is a method of supervising parents to strengthened social interaction and communication with their child. The intervention comprises of 8–10 home visits every 1–2 weeks. During each home visit, the home visitor monitors and videotapes parents and child during everyday activities, such as bathing or feeding the baby. Subsequently, while watching the tapes together, the home visitor discusses the interactions with the parents. Parents are encouraged to expand their range of appropriate communicative behaviors to respond to the baby's eye contact, movements, or sounds by means of modelling by the home visitor, instructions, baby massage, and other sources of support. At the end of each session, the parents familiarize themselves with their newly acquired skills in positive interactions with the child. Three months after the intervention is completed, the home visitor returns for a follow-up session. It is a prerequisite that the parent(s) with depression or mentally illness receives treatment in addition to and in parallel with the delivery of the Parent–Baby Intervention. The key principles are that the intervention should be offered as early as possible, and that it should be offered in the home environment. The intervention was developed in the Netherlands by von Doesum and Brok (2015) and the owner is Mindfit, Netherlands.

Evaluation of the documentation: Van Doesum and colleagues (2008) conducted an RCT in 2000–2007 to evaluate the effect of the Parent–Baby Intervention for depressed mothers and their babies in the Netherlands (N = 71). The intervention group (N = 35) had a positive effect on the quality of the mother–baby interaction (maternal sensitivity, maternal structuring, child responsiveness, child involvement), as measured post-intervention and at the six-month follow-up, when the children were 19 months old. The intervention group had significantly higher scores for infant attachment security and social competence than the control group at the six-month follow-up. In a follow-up study (N = 58) when the children were 5–6 years old, results revealed no effects on the mother–baby interaction. However, in families with a higher number of stressful life events, children in the intervention group (N = 29) showed fewer externalizing behavior problems compared to the control group (Kersten-Alvarez et al., 2010).
There is one European study of sufficient quality, but no Nordic effect studies supporting the evidence of the Parent–Baby Intervention. The intervention is rated at evidence level 2 – Intervention with some level of evidence.

References:

Kersten-Alvarez, L. E., Hosman, C. M. H., Riksen-Walraven, J. M., Van Doesum, K. T. M., & Hoefnagels, C. (2010). Long-term effects of a home-visiting intervention for depressed mothers and their infants. *Journal of Child Psychology and Psychiatry, 51*(10), 1160–1170. https://doi.org/10.1111/j.1469-7610.2010.02268.x

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Name of the intervention:	**Level of evidence:**
Parent–Child Interaction Therapy (PCIT)	4

Authors: Helene Eng & Henriette Kyrrestad

Documentation and literature: Four effect studies (Bagner et al., 2016a, 2016b, Bjørseth & Wichstrøm, 2016; Falkus et al., 2016; Graziano et al., 2020), one systematic review (SBU, 2018) and two evaluations of evidence in databases (California Evidence-Based Clearinghouse for Child Welfare (CEBC), 2017; Blueprints, nd) were obtained through the literature search.

Target group: PCIT was originally developed for children with behavioral problems in the age group 2–7 years old (pcit.org). In recent years the intervention has been adapted to other target groups such as specific cultural groups, children outside of the typical PCIT age range, clients with comorbid disorders, trauma victims, and individuals with disabilities (Lieneman et al., 2017).

Aims (primary and secondary): The primary aims of PCIT are to increase attachment and positive interaction between parents and children. Secondary aims are to increase the children's attention span and prosocial behavior, reduce parent stress and enhance effective limit-setting.

Description of the intervention: PCIT is a treatment for young children with behavioral problems (pcit.org) where the parents are coached by a therapist while they are interacting with their child. The intervention is based on social learning theory, play theory and attachment theory. Normally the parents are in a playroom with the child, while the therapist is in an observation room watching through a one-way mirror and/or live video feed. The therapist gives the parent in-the-moment coaching through a "bug-in-the-ear" device. PCIT was developed by the American psychologist Sheila Eyberg.

Evaluation of the documentation: The effect of PCIT is evaluated in one systematic review (SBU, 2018) and two databases (CEBC, 2017; Blueprints, nd). SBU (2018) found that there was some evidence that PCIT reduced violence in the family and disruptive behavior among the children, and improved interaction with parents. CEBC (2018) classified PCIT at their highest level, level 1, as well-supported by research evidence. In the Blueprints database (nd) the program is rated as promising. However, nearly all the studies underlying these conclusions were conducted in the US and were based on children in the age group 3 years and older. Of the single studies, two were RCT studies performed with children aged 2–7 years with behavioral problems (Bjørseth & Wichstrøm, 2016; Graziano et al., 2020). The Norwegian study (Bjørseth & Wichstrøm, 2016) found a long-term effect in reducing children's behavioral problems compared to the group who received treatment as usual. Graziano et al. (2020) compared an intensive I-PCIT treatment with an ordinary PCIT treatment and found that both PCIT interventions resulted in better parenting strategies and less behavioral problems, but that I-PCIT had better results in reducing parenting stress. The other two RCT studies were conducted with younger children with a mean age of 13.47 months (Bagner, 2016a, 2016b) and 29.9 months old (Falkus et al., 2016). The results showed positive effects of PCIT on parenting strategies, children's behavior (Bagner, 2016a, 2016b) and language development (Bagner 2016b; Falkus et al., 2016). The PCIT intervention has its main target group and strongest evidence in the age groups 3 years and older. At the same time, evidence of effect has been found through two studies of good quality in younger children and in one Nordic study including children aged 2 years. The intervention is therefore classified at level 4 – Intervention with a high level of evidence.

References:

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Lieneman, C. C., Brabson, L. A., Highlander, A., Wallace, N. M., & McNeil, C.B. (2017). Parent–Child Interaction Therapy: Current perspectives. *Psychology Research and Behavior Management*, *10*, 239–256. https://doi.org/10.2147/PRBM.S91200

Salus Care. (n.d.). *Parent–Child Interaction Therapy*. Salus Care. Retrieved January 22, 2021, from https://www.saluscare.se/17/8/pcit-metoden/

Statens beredning för medicinsk och social utvärdering (SBU). (2018) *Öppenvårdsinsatser för familjer där barn utsätts för våld och försummelse. En systematisk översikt och utvärdering inklusive ekonomiska och etiska aspekter* (SBU utvärderar. Rapport 280/2018). https://www.sbu.se/contentassets/7d3b278a3b8041f7b7e46f10fe5a4346/oppenvardsinsatser_familjer_barn_utsatts_vald_forsummelse.pdf

Name of the intervention:	**Level of evidence:**
Parent–Infant Psychotherapy (PIP)	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search identified several scientific evaluations (RCT and quasi-RCT studies) of the intervention as well as a meta-analysis (Barlow et al., 2015). This evaluation included the results of the meta-analysis by Barlow and colleagues (2015) and an RCT study by Fonagy and colleagues (2016) conducted after the publication of the meta-analysis.

Target group: Parents of infants aged 24 months or younger.

Aims (primary and secondary): The aim of the intervention is to improve the parent–infant relationship and promote infant attachment and optimal infant development.

Description of the intervention: Parent–Infant Psychotherapy (PIP) is a dyadic intervention in which a parent–infant psychotherapist works directly with the parent(s) and infant. The intervention is intended to address problems in the parent–infant relationship, and problems such as excessive crying and sleeping/eating difficulties. The psychotherapist identifies unconscious patterns of relating and behaving, and influences from the past that are impeding the parent–infant relationship by observing the parent–infant interaction, listens to and identifies concerns and worries, and supports the parent to develop different ways to relate to their infant. Emphasis is placed on parents' internal working models or representations of the infant in the context of their own caregiving history. The intervention is usually delivered to individual dyads at home or at a clinic, but can also be delivered to small groups of parents and infants. The duration of the intervention depends on the presenting problems but typically ranges from 5 to 20 weeks, usually involving weekly sessions. The intervention was originally developed in the US by Selma Fraiberg (Fraiberg, 1987) and is based on psychoanalysis.

Evaluation of the documentation: Barlow and colleagues included eight RCT and quasi-RCT studies (846 participants) in their meta-analysis (2015). Four studies compared PIP with control groups only, and four compared PIP with another treatment. All eight studies provided post-intervention data. Three studies provided follow-up data at 6 and 12 months and one study provided long-term (five-year) follow-up data. The quality of the included studies was low. The evidence favored PIP over control for secure attachment at post-intervention, with fewer infants with an avoidant attachment style, fewer infants with disorganized attachment and a higher proportion of infants moving from insecure to secure attachment. The evidence did not favor PIP or control for the incidence of parental depression or parent-reported levels of depression, maternal sensitivity, child involvement, or maternal positive engagement. The meta-analyses showed no significant differences in the outcomes between PIP and alternative treatment interventions at post-intervention or follow-up, either.
More recently, Fonagy and colleagues (2016) investigated the outcomes of PIP for parents with mental health problems experiencing high levels of social adversity, and their children under 12 months (n = 38 in each group). Outcomes were assessed at baseline and at 6-month and 12-month follow-ups. There were no differential effects over time between the groups on measures of infant development, parent–infant interaction, or maternal reflective functioning. Infant attachment classifications, measured only at the 12-month follow-up, did not differ between the groups. However, there were favorable outcomes over time for the PIP-treated dyads relative to the control group on several measures of maternal mental health, parenting stress, and parental representations of the baby and their relationship. Although there is some evidence that PIP improves infant attachment security, the evidence is overall of low quality and PIP has not been found to be more effective than treatment as

usual or other interventions. Furthermore, there are no Nordic studies to support the evidence. Thus, the intervention is considered to be at level 2 – Intervention with some level of evidence.

References:

Barlow, J., Bennett, C., Midgley, N., Larkin, S. K., & Wei, Y. (2015). Parent–infant psychotherapy for improving parental and infant mental health. *Cochrane Database of Systematic Reviews*, *1*. https://doi.org/10.1002/14651858.CD010534.pub2

Fonagy, P., Sleed, M., & Baradon, T. (2016). Randomized controlled trial of parent–infant psychotherapy for parents with mental health problems and young infants. *Infant Mental Health Journal, 37*(2), 97–114. https://doi.org/10.1002/imhj.21553

Fraiberg, S., Adelson, E., & Shapiro, V. (1987). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant–mother relationships. In S. Fraiberg (Ed.), *Selected Writings of Selma Fraiberg* (pp. 100–136). Ohio State University Press.

Name of the intervention:	**Level of evidence:**
Parenting in Sweden [Föraldrarskap i Sverige]	1

Authors: Taina Laajasalo & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. The literature search did not identify any scientific evaluations of the intervention.

Target group: Foreign-born parents of children aged 0–18 years.

Aims (primary and secondary): The aim of the intervention is to give parents information about areas that are important for family life in Sweden and provide parents with peer support through group discussions in order to increase their self-efficacy and knowledge of where to turn for more support. More info about the program can be found: https://www.foraldraskapisverige.se/om

Description of the intervention: Parenting in Sweden is a community-oriented group program that consists of five group meetings (2½ hours). The content is based on the UN Convention on the Rights of the Child, research, and legislation, as well as mapped needs of newly arrived parents. Group meetings cover themes relevant to immigrant families, including what it is like to be a family in a new country, parents' rights and obligations, gender equality, and being a parent to a teenager, as well as the functioning of Swedish society (i.e. how preschool, school, healthcare, and child and family services work). Parenting in Sweden groups have 10–15 participants and are led by two trained group leaders.
During 2019–2020, Parenting in Sweden was to be evaluated by researchers at the Center for Epidemiology and Community Medicine in Stockholm. The program was developed and is owned by the City of Stockholm and the County Administrative Board of Stockholm County.

Evaluation of the documentation: There are no Nordic or international effect studies of Parenting in Sweden. The intervention is rated at evidence level 1 – Intervention with no evidence.

Name of the intervention:	**Level of evidence:**
Parenting That Works: Building Skills that Last a Lifetime	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search found one pre–post study (Haraldsdóttir et al., 2014).

Target group: Parents of children 0–6 years old.

Aims (primary and secondary): Promoting coordinated parenting practices and parenting skills.

Description of the intervention: Parenting That Works is a universal parenting skills program developed by Icelandic Primary Health Care. It is based on a handbook on effective parenting practices titled "Parenting That Works: Building Skills that Last a Lifetime" (Christophersen and Mortweet, 2003) and the research synthesis "Treatments that Work with Children" (Christophersen and VanScoyoc, 2013). The program consists of four two-hour sessions aimed at promoting coordinated parenting practices and parenting skills using behavioral approaches (e.g. giving clear instructions, praising desirable behavior and ignoring undesirable behavior, scheduling daily parent–child interaction/play time), led by nurses. The intervention was developed in Iceland and is provided by the Primary Healthcare of the Capital Area (www.heilsugaeslan.is/um-hh/frettasafn/stok-frett/2018/08/21/Uppeldi-sem-virkar-faerni-til-framtidar-skraning-hafin-a-haustonn-2018/).

Evaluation of the documentation: The course was evaluated in an Icelandic pre–post study published in the peer-reviewed *Journal of the Icelandic Psychological Association* (Haraldsóttir et al., 2014). Participants attending the course over a two-year period were asked to complete a questionnaire about their use of effective/ineffective parenting practices before and after the course (e.g. how often they praise their children for desirable behavior, how often they scold or nag their children for undesirable behavior). Of approximately 400 parents attending the program, 110 (*N* = 91 mothers) completed the pre- and post-measure. The results showed a change in how parents reacted to their children after the course (e.g. ignoring whining, giving more attention for positive behaviors and independent playing), and they felt more confident in setting boundaries.
There are no Nordic or international effect studies supporting the evidence of the Parenting That Works: Building Skills that Last a Lifetime program. The intervention is rated on evidence level 1 – Intervention with no evidence.

References:

Christophersen, E. R., & Mortweet, S. L. (2003). *Parenting that works: Building skills that last a lifetime.* American Psychological Association.

Christophersen, E. R., & VanScoyoc, S. L. (2013). *Treatments that work with children: Empirically supported strategies for managing childhood problems.* American Psychological Association (2nd ed.).

Haraldsdóttir, G., Hannesdóttir, D. Kr., Brynjarsdóttir, B. L., & Jensen, L. (2014). Árangur af foreldrafærninámskeiðinu –
Uppeldi sem virkar færni til framtíðar. *Sálfræðiritið. Tímarit Sálfræðingafélags Íslands*, 57–69. [Success of parenting skills course – Parenting that works skills for the future. *Sálfræðiritið – Journal of the Icelandic Psychological Association*, 77–69].

Name of the intervention:	**Level of evidence:**
Parenting Young Children (PYC)	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search found one Australian exploratory study (Mildon et al., 2008) and a qualitative study of experiences in implementation (Starke et al., 2013). The intervention has been evaluated by the California Evidence-Based Clearinghouse for Child Welfare (CEBC).

Target group: Parents with learning difficulties, who have children aged 0–6.

Aims (primary and secondary): The aim of the intervention is to develop and strengthen parenting skills in basic care, safety and interaction.

Description of the intervention: Parenting Young Children (PYC) is a comprehensive, home-based parent training and support program that builds on social pedagogical principles. It is mainly used by family therapists, home therapists, family educators and so on, who meet with each family for approximately 90 minutes every week for a period of six months. Practitioners identify relevant skills from the program to teach the family, to reflect family goals and values, build on the families' strengths and use family resources and social supports. These skills can be embedded into the daily routines and activities of family life in ways that are acceptable and feasible for the family. Practitioners are encouraged to engage other people in the program who are relevant to the family (e.g., other relatives), as agreed by the parent, who can actively participate in sessions or may be engaged to reinforce parent learning in between sessions. The program consists of three modules: Child Care and Home Environment; Parent–Child Interaction; and non-corporal strategies for misbehavior (PBS).
PYC was developed in Australia in 2003, and it has been evaluated and widely disseminated across Australia as a part of its national "Healthy Start" strategy, which aims to improve health and well-being outcomes for children whose parents have learning difficulties.

Evaluation of the documentation: In the Australian exploratory study (Mildon et al., 2008) parents (N = 24) reported a reduction in the frequency and intensity of potentially troublesome events and reported more satisfaction and confidence with their role as a parent. Parents also reported a reduction in the frequency of child disruptive behavior and a decrease in the number of disruptive behaviors that parents viewed as being a problem. Improvements were observed in the quality of the home environment for all families. Assessments of contextual fit showed that the program fitted very well with the parents' own goals and values, and the families' lifestyles. All measures were administered post-intervention and at a three-month follow-up. A qualitative study of experiences in implementing the program in Sweden (Starke et al., 2013) found that PYC is well-suited for use in participant's working environment. Most reported that the program had strengthened their work with parents and had also benefited the parents. The structure and content of the program were found to be helpful in several ways.
There are no Nordic or international effect studies supporting the evidence of Parenting Young Children program. The intervention is rated on evidence level 1 – Intervention with no evidence.

References:

Mildon, R., Wade, C., & Matthews, J. (2008). Considering the contextual fit of an intervention for families headed by parents with an intellectual disability: An exploratory study. *Journal of Applied Research in Intellectual Disabilities, 21*(4), 377–387.

Starke, M., Wade, C., Feldman, M. A., & Mildon, R. (2013). Parenting with disabilities: Experiences from implementing a parenting support programme in Sweden. *Journal of Intellectual Disabilities, 17*(2), 145–156.

Name of the intervention:	**Level of evidence:**
Prevention and Relationship Education Program (PREP)	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search identified 17 RCTs and two follow-up studies, as well as several pre–post studies. Only two pre–post studies were eligible for the purposes of this evaluation (Barden et al., 2015; Carlson et al., 2014).

Target group: Parents/adults.

Aims (primary and secondary): The aims of the intervention are to promote positive marital relationships and prevent marital problems.

Description of the intervention: The Prevention and Relationship Enhancement Program (PREP) is a marriage and relationship education intervention that teaches couples (premarital and marital) how to communicate effectively, work as a team to solve problems, manage conflicts without damaging closeness, and preserve and enhance commitment and friendship. The program can be delivered in a variety of formats. Six two-hour session are typical; other formats include a weekday session followed by a weekend retreat. Homework assignments are completed between sessions that require couples to practice skills, read chapters, and complete exercises. PREP is usually conducted with groups of three to eight couples and can also be delivered with larger groups. A trained consultant (or coach) ideally works with each couple throughout the program. When delivered in a group workshop format, PREP uses cognitive-behavioral therapy techniques and addresses topics such as communication, affect management, conflict management, commitment, fun and friendship, sensuality and sexuality, problem-solving, forgiveness, and emotional supportiveness. ePREP, a digital version of the program, has also been developed (www.prepinc.com). The program was created in the US by Dr. Markman and his associates at the University of Denver's Center for Marital and Family Studies.

Evaluation of the documentation: PREP has demonstrated benefits in communication quality, conflict management, confidence in couples' relationships and positive connection in several RCT studies (https://prepinc.com/pages/effectiveness-research-abstracts). There are only two pre–post studies that have investigated the influence of the relationship education on parental attitudes (Barden et al., 2015) and parental alliance (Carlson et al., 2014). However, the intervention has not been studied exclusively among pregnant mothers or parents with 0–2-year-old children. Barden and colleagues (2015) examined the Becoming Parents Program (BPP) curriculum, a combination of the PREP curriculum and the Nursing Child Assessment Satellite Training Keys to Caregiving curriculum. They examined the changes in parental attitudes for couples (N = 70) and compared differences in parental attitudes (empathy and family roles) at pre- and post-assessment. The results showed significant differences between pre- and post-scores on family roles, but no significant differences on empathy.

Carlson and colleagues (2014) studied an adaptation of the PREP intervention, Couples and Relationship Education (CRE), which is conducted three hours a week for four consecutive weeks. They examined changes in the parental alliance of participants who attended the intervention individually (N = 182) or with their partner (N = 190). Participants who attended the intervention with a partner reported significant parental alliance improvements at post-assessments, while those who attended independently did not

In general, the PREP intervention has evidence on effectiveness in enhancing couples' relationships and reducing couples' conflict. However, there is no evidence on the effectiveness on pregnant mothers or parents with 0–2-year-old children. Therefore the rating here is lower than if evaluated in other contexts. Also, the included studies, which were more suitable for the purpose of this report, evaluated adaptations of PREP.

Furthermore, there are no Nordic effectiveness studies supporting the evidence of PREP. Thus, the intervention is rated at evidence level 1 – Intervention with no evidence.

References:

Barden, S. M., Carlson, R. G., Daire, A. P., Finnell, L. R., Christopher, K., & Young, E. (2015). Investigating the influence of relationship education on parental attitudes. *Marriage & Family Review, 51(3)*, 246–263. https://doi.org/10.1080/01494929.2015.1031422

Carlson, R. G., Barden, S. M., Daire, A. P., & Swartz, M. (2014). Examining parental alliance for low-income participants who attended relationship education with or without a partner. *Journal of Couple & Relationship Therapy, 13(2)*, 153–170. https://doi.org/10.1080/15332691.2013.871615

Name of the intervention:	**Level of evidence:**
Safe Environment for Every Kid (SEEK) [Barnsäkert]	2

Authors: Susann Dahl Pettersen & Monica Martinussen

Documentation and literature: Two RCT studies located in the literature search were included (Dubowitz et al., 2009, 2012).

Target group: Families with children aged 0–5 years.

Aims (primary and secondary): The aims of the intervention are to enhance pediatric primary care and better address major risk factors for child maltreatment.

Description of the intervention: The Safe Environment for Every Kid (SEEK) model was developed to help practitioners identify and address targeted risk factors for child maltreatment in families with young children (Dubowitz, 2014). The model consists of training for child healthcare professionals on addressing targeted psychosocial risk factors, the SEEK Parent Questionnaire (PQ) for screening of psychosocial risk factors, parent handouts, and mental health or social worker support (Eismann et. al., 2019). The online training for health practitioners consists of seven modules (SEEK, 2020). SEEK was developed by the Division of Child Protection, Department of Pediatrics at the University of Maryland, led by Dr. Howard Dubowitz.

Evaluation of the documentation: Two studies have evaluated the effect of the SEEK model. The first, an RCT study conducted in a low-income urban community in the US (N = 558), compared the intervention group to standard care. Outcome measures were child protective services (CPS) records, the child's medical chart and responses to the Parent–Child Conflict Tactics Scale (CTSPC). The intervention group had fewer CPS reports and fewer problems related to possible neglect, and the intervention-group parents reported fewer instances of severe or very severe physical assault compared to the intervention group (small effect size), but not for minor forms of aggression and discipline. The second study, also an RCT, was conducted in a low-risk population in the US (N = 1119). The control group received standard primary care. Outcome measures were CTSPC, children's medical records and CPS reports, measured at baseline, after six months and 12 months. Intervention mothers reported less frequent psychological aggression and fewer minor physical assaults initially and 12 months after, with small effect sizes. Findings at six months indicated similar results, although these were not statistically significant. There was no statistically significant difference in CPS reports or children's medical records.
With two international studies of acceptable quality, albeit small effect sizes, this intervention is classified at level 2 – Intervention with some level of evidence.

References:

Dubowitz, H. (2014). The Safe Environment for Every Kid (SEEK) model: Helping promote children's health, development, and safety: SEEK offers a practical model for enhancing pediatric primary care. *Child Abuse & Neglect, 38*(11), 1725–1733. https://doi.org/10.1016/j.chiabu.2014.07.011

Dubowitz, H., Feigelman, S., Lane, W., & Kim, J. (2009). Pediatric primary care to help prevent child maltreatment: The Safe Environment for Every Kid (SEEK) model. *Pediatrics, 123*(3), 858–864. https://doi.org/10.1542/peds.2008-1376

Dubowitz, H., Lane, W. G., Semiatin, J. N., & Magder, L. S. (2012). The SEEK model of pediatric primary care: Can child maltreatment be prevented in a low-risk population? *Academic Pediatrics, 12*(4), 259–268. https://doi.org/10.1016/j.acap.2012.03.005

Eismann, E. A., Theuerling, J., Maguire, S., Hente, E. A., & Shapiro, R. A. (2019). Integration of the Safe Environment for Every Kid (SEEK) model across primary care settings. *Clinical Pediatrics, 58*(2), 166–176.

SEEK. (2020). About the training. https://seekwellbeing.org/about-the-training/

Name of the intervention:	**Level of evidence:**
Solihull Approach	1

Authors: Marte Rye & Monica Martinussen

Documentation and literature: Based on the literature search, one RCT study (Douglas & Johnson, 2019) was included.

Target group: Parents of children aged 0–18 years.

Aims (primary and secondary): The Solihull Approach aims to increase emotional health and well-being, emphasizing the link between emotions and behavior, and better parent–child relationships, as well as the reduction and decreased impact of adverse childhood experiences (Douglas & Johnson, 2019). Parents learn strategies for containing both their own emotions and the emotions of their children.

Description of the intervention: The Solihull Approach was developed in UK in the 1999s as a model integrating psychoanalytic theory (containment), child development research (reciprocity), and learning theory (behavior management) (Douglas & Johnson, 2019). The approach includes various resources and training for both parents and professionals working with families and children to address common difficulties during childhood (The Solihull Approach, n.d.). The Solihull Approach offers training for practitioners to be facilitators of four types of face-to-face parent group: a parent group, Understanding your Child's Behavior (parents of children aged 6 months to 19 years); a postnatal group, Understanding your Baby (parents of children aged 0 to 6 months); a postnatal plus group including relationship difficulties and postnatal depression; and an antenatal group, Understanding Pregnancy, Labor, Birth and Your Baby. Issues explored include "tuning in" to children, exploring feelings, temperament, sleep and behavioral difficulties (Douglas & Johnson, 2019).

Evaluation of the documentation: There are no Nordic studies related to the effect of the Solihull Approach. An RCT study by Douglas and Johnson (2019) evaluated the parent group Understanding your Child's Behavior, a two-hour weekly group lasting 10 weeks with a maximum of 12 parents with similar aged children in each group (e.g., 0–4 years, 5–11 years, 11–18 years). A total of 249 participants were allocated to either an intervention group (*N* = 223) or a waiting list control group (*N* = 26). Three self-report measurers were administered pre- and post intervention, with results showing significant differences between groups regarding some aspects of child's behavior (prosocial behavior and conduct problems), parental anxiety and stress and the parent–child relationship. Results were not separated for the different age groups. Due to the lack of Nordic effect studies and international effect studies with adequate methodological quality reporting on the 0–2 years age group, the Solihull Approach is placed at evidence level 1.

References:

Douglas, H., & Johnson, R. (2019). The Solihull Approach 10-week programme: A randomized controlled trial. *Community Practitioner*, *9* (7), 45–47.

The Solihull Approach (n.d.). *Welcome to the Solihull Approach*. Retrieved November 23, 2020, from https://solihullapproachparenting.com/

Name of the intervention: START – Life Skills for Little Ones [START – Livskunnskap for de minste]	**Level of evidence:** 1
Authors: Susann Dahl Pettersen & Helene Eng	
Documentation and literature: No effect studies were obtained through the literature search or further search efforts.	
Target group: Children between the ages of 1–3 years old.	
Aims (primary and secondary): The aim is to develop children's social, emotional and linguistic skills (Prososial, 2020).	
Description of the intervention: START is a package of learning materials that can be used in kindergartens. The aim is to help develop children's social and emotional competence (Sosemplan, 2020), and thereby promote the children's well-being and social and linguistic competence. The program is also a preparation for the more established program, "Steg for Steg" (Second Step), which is given to children aged 4–5 years old. The material for the START program consists of a booklet with 18 themes (emotions, individual differences, asking for help etc.), which is used in conversation with the children, and a booklet for staff containing the theoretical foundation, log forms and suggestions for collaboration with parents. The material was developed by Lars Lövenborg and Björn Gislason in Sweden and translated into Norwegian by Kari Ruud and Jan Erik Ruud.	
Evaluation of the documentation: Based on the available documentation, with no Nordic or International effect studies, the intervention is considered to be at level 1 – Intervention with no evidence.	

References:

Prososial. (2020). *START - 18 temaer til samlingsstund i barnehagen* [START – 18 themes for gatherings in kindergarten]. https://www.prososial.no/index.php/start-livskunnskap-for-de-minste

Sosemplan. (2020). *Verktøy for arbeid med sosial og emosjonell kompetanse* [Tools for working with social and emotional skills]. https://sosemplan.no/modeller-og-verktoy/verktoykasse/treningsprogrammer-pa-sosial-og-emosjonell-kompetanse/#start-0-3-r

Name of the intervention:	**Level of evidence:**
Still Parents [Fortsatt foreldre]	1

Authors: Susann Dahl Pettersen & Helene Eng

Documentation and literature: No effect studies were identified through the literature search or further search efforts. A user evaluation study among course leaders was located (Wesseltoft-Rao & Aase, 2018).

Target group: Divorced or separated parents.

Aims (primary and secondary): The aim is for children to experience good cooperation and communication between parents after a break-up.

Description of the intervention: Still Parents is a guidance program for parents who have experienced a break-up (Bufetat, n.d.). The intervention focuses on teaching parents how to cooperate *well enough* in regard to the shared responsibility for their children. The aim is to make parents conscious of how children's everyday life is affected by the quality of the parents' collaboration, how parents handle their own situation and how to reduce negative consequences for the children (Wesseltoft-Rao & Aase, 2018). The course consists of five different themed sessions: the break-up process; communication, conflict and interaction; acknowledging the child's life situation; parent cooperation; and the road ahead. Parents receive a pamphlet describing the different themes, in addition to related tasks and discussion questions. There is no prescriptive manual, and course leaders themselves decide how they want to organize the course content and which therapeutic approach (solution-focused brief therapy or narrative therapy) to use. The intervention was originally developed by the clinic Modum Bad (Modum Bad, n.d.).

Evaluation of the documentation: Based on the available documentation, with no Nordic or International effect studies, the intervention is considered to be at level 1 – Intervention with no evidence.

References:

Bufetat. (n.d.). *Fortsatt Foreldre* [Still Parents]. The Norwegian Directorate for Children, Youth and Family Affairs (Bufdir). Retrieved August 5, 2020, from https://bestill.bufdir.no/userfiles/products/155/Brosjyre_FortsattForeldre_6s.pdf

Modum Bad. (n.d.). *Fortsatt foreldre – få hjelp til å håndtere prosessene voksne og barn må igjennom etter samlivsbrudd* [Still Parents – Getting help to handle the processes adults and children go through after a breakup]. Retrieved August 5, 2020, from https://www.modum-bad.no/fortsatt-foreldre/

Wesseltoft-Rao, N., & Aase, H. (2018). *Fortsatt foreldre – et kurs for foreldre etter samlivsbrudd. Brukerevaluering blant kursledere* [Still Parents – A course for parents after break-up. A user evaluation among course leaders]. The Norwegian Institute of Public Health. https://www.fhi.no/publ/2018/fortsatt-foreldre/

Name of the intervention:	**Level of evidence:**
Stine Sofie Foundation Parent Package	1

Authors: Henriette Kyrrestad & Lene-Mari P. Rasmussen

Documentation and literature: The literature search did not identify any scientific evaluations of the program. The information provided here was found on the Stine Sofie Foundation website (https://www.stinesofiesstiftelse.no/foreldrepakke).

Target group: Expectant and new parents.

Aims (primary and secondary): The primary aim is to strengthen the parental role, provide support and tools for challenging situations, and prevent situations that are unsafe and dangerous for the child. A secondary aim is to support and help healthcare professionals when preparing and guiding parents in topics that may arise both before and after birth.

Description of the intervention: The Stine Sofie Foundation has developed a parent package that is a free universal information program provided in pregnancy care, maternity and neonatal intensive care, and in healthcare centers after the birth of a child. Parents receive a parental package consisting of a mobile app titled "10 Smart Tips for Parents of Young Children" (Stine Sofie Foundation, 2019a) and a book that is a short version of the app (Stine Sofie Foundation, 2019b). The app is split into three sections: Before Birth; At the Hospital; and Home after Birth. Before Birth includes a movie called "Think and Talk" and offers tips such as "Speak out if you are unhappy" and "Talk about your expectations". The second section, At the Hospital, includes a movie called "Crying and Comforting" and tips with information such as "Infants cry to get help" and "Frustration and powerlessness are normal". Home after Birth includes a movie called "Brain-building and relationships" and gives tips such as "Build your infant's brain", "Sleep when you can", and "Be a good and trusted caregiver". The mobile app also contains guidance called "Eight Steps of Comforting", an "Oh, Shit Plan" for stressful situations and an overview of where parents can seek help if needed. The parent package program provides healthcare professionals with specific tools that they can use in conversations with parents about violence and its severity when imposed on children. The healthcare workers receive a guide to how they can use the parental package in conversations with expectant and new parents in addition to movies, posters and invitation cards. Hospitals receive a doll that can be used to demonstrate how not to treat an infant. As a part of the parent package, there is a 24-hour telephone and chat service offering support for parents who need help or guidance and so they can share thoughts in order to prevent violence against young children.

Evaluation of the documentation: There are no Nordic or international effect studies supporting the evidence of the Stine Sofies Parent package. The intervention is therefore rated at evidence level 1 – Intervention with no evidence.

References:

Stine Sofie Foundation. (2019a). *10 Smart Tips for Parents of Young Children* (1.1) [Mobile app]. App store. https://apps.apple.com/no/app/10-smarte-tips/id1481365840?l=nb

Stine Sofie Foundation. (2019b). *10 smarte tips til alle småbarnsforeldre* [*10 smart tips for parents of young children*]. Stine Sofie Foundation. https://issuu.com/stinesofiesstiftelse0/docs/10_smarte_tips_til_alle_sma_barnsforeldre_issuu

Stine Sofie Foundation. (2020, September 23). *Stine Sofie Foreldrepakke* [Stine Sofie Parental package]. www.stinesofiesstiftelse.no/foreldrepakke

Name of the intervention:	**Level of evidence:**
Supporting Parent–Child Interaction (Vavu – Varhaisen vuorovaikutuksen tukeminen perustason työssä)	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. Two quasi-experimental studies from the same research sample were included (Davis et al., 2005; Puura et al., 2005). The intervention was evaluated by Kasvun tuki.

Target group: 0–18-month-old children and their parents.

Aims (primary and secondary): The aim of the intervention is primarily: (1) to enhance parent–child interaction; (2) to support the child's mental development and health; (3) to support the family's own resources and problem-solving skills; and (4) to give professionals information and tools to work with parents and create positive interaction with them.

Description of the intervention: The aim of the intervention is to promote positive early interaction between the child and the parents. The intervention is primarily intended to support pregnant and post-natal women and young children, and employees working with their families. The intervention is delivered by interviews conducted at home, with both parents present. It is recommended that the interviews should take place during the last trimester at the latest, and within 4–8 weeks after delivery. The interview forms are used as the basis of a structured method to assess the interaction between children and their parents. The forms help identify and address perceptions, concerns, and potential difficulties related to pregnancy, childbirth and the baby, and to identify the need for support. Forms also help to identify family resources and available support, as well as to find solutions. The method is influenced by a resource-oriented, systems theoretical, constructive and cognitive-behavioral theoretical background. The training program also includes research and practical procedures concerning the psychological development of small children and early interaction. The intervention was developed by the Finnish Institute for Health and Welfare and Tampere University Hospital/Child Psychiatry.

Evaluation of the documentation: The evaluation of the effectiveness of the intervention is based on a European cross-cultural quasi-experimental study (European Early Promotion Project, EEPP) conducted in five European countries (England, Serbia, Greece, Cyprus, and Finland, N = 824 families). The data was collected when the children were between 6 and 8 weeks old, and again at the age of 24 months. Only EEPP interview ratings (semi-structured interview on e.g. infant's characteristics, the parent's marital relationship, family functioning, health) and the HOME Inventory (an assessment tool to evaluate the quality of parenting and the home environment) were used both before the intervention and at 24-month assessment (Davis et al., 2005; Puura et al., 2005) Overall, the study showed that at two years the intervention had positive effects on mother–child intervention. The strongest effects were seen in the Greek sample, where mothers in the intervention group (n = 25) had a better relationship with their child, used less punishment, provided more variety for the child and were more involved as well as more facilitative than mothers in the control group (n = 24). In addition to having better relationship with their children, mothers in the intervention group in the UK (n = 74) were more responsive towards their children, provided more appropriate play material, were more involved and used less control than mothers in the control group (n = 77). The changes in these variables in both countries were statistically significant. In the Finnish sample (n = 144 parents) total HOME scores increased significantly in the intervention group (n = 83) compared to the control group (n = 61) at 24-month assessment. The emotional and verbal responsivity also increased, but the change was not significant. No significant differences were found in the EEPP interview variables (Puura et al., 2005). For longer term family and child outcomes, the clearest positive effects were seen

in the Greek intervention sample, on depression, self-esteem, relationship with partners, better living environment, parenting stress, child's behavior difficulties and the developmental process. Mothers in the Finnish intervention groups had also had fewer episodes of minor depression since the birth of the child and their children had better physical health. Temperamental benefits were found in samples from Greece, Finland, and Cyprus. When comparing parent's satisfaction with promotional services at 24 months, parents in general were more satisfied with them than the usual services offered to the control group, and changes between groups were significant in Greece. A comparison between countries showed that parents in Greece were the most satisfied and Finnish parents the least satisfied (Davis et al., 2005).
Due to methodological shortcomings (initial differences between the groups, lack of randomization), the intervention is considered to be at level 2 – Intervention with some level of evidence.

References:

Davis, H., Dusoir, T., Papadopoulou, K., Dimitrakaki, C., Cox, A., Ispanovic-Radojkovic, V., Puura K., Vizacou, S., Paradisiotou, A., Rudic, N., Chisgolm, B., Leontiou, F., Mäntymaa, M., Radosavljev, J., Riga, E., Day, C., & Tamminen, T. (2005). Child and family outcomes of the European early promotion project. *International Journal of Mental Health Promotion, 7*, 63–81.

Puura, K., Davis, H., Mäntymaa, M., Tamminen, T., Roberts, R., Dragonas, T., Papadopoulu, K., Dimitrakaki, C., Paradisiotou, A., Vizacou, S., Leontiou, F., Rudic, N., Miladinovic, T., & Radojkovic, A. (2005). The outcome of the European early promotion project: Mother–child interaction. *International Journal of Mental Health Promotion, 7*, 82–94.

Name of the intervention:	**Level of evidence:**
TheraPlay	1

Authors: Kirsi Peltonen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. One article with two pre–post studies was included (Wettig et al., 2011). The intervention was evaluated by Kasvun tuki (in Finnish).

Target group: Parents and their children.

Aims (primary and secondary): The aim of the intervention is to help parents to play with their child in a way that establishes felt safety, increases social engagement, expands arousal regulation, and supports the development of positive self-esteem for both the child and the parent.

Description of the intervention: TheraPlay is a dyadic child and family short therapy that has an average of 10–20 sessions and follow-up visits with varying frequency. In treatment, the TheraPlay practitioner guides the parent and child activities, which build attunement and understanding of each other, replicating early relationship experiences that are proven to lead to secure attachment. TheraPlay interactions focus on four essential qualities: (1) structure: the adult, the leader in the relationship, creates organization and predictability for the child, which communicates safety; (2) nurture: the adult provides caring that can calm and soothe the child in a manner that makes them feel good physically and emotionally; (3) engagement: the adult is present in a manner such that the child experiences being seen, heard, felt, and accepted; and (4) challenge: the adult supports the child in the acquisition and mastery of new skills, enhancing the child's sense of competence and confidence. Theraplay was developed by Jernberg in 1979 (1987).

Evaluation of the documentation: Wettig, Franke, and O'Connor (2011) have evaluated the effectiveness of Theraplay in treating shy, socially withdrawn children. Their article presents two studies. Both are sub-studies of larger samples among children with a dual diagnosis, which are published in a book chapter (Wettig et al., 2006). Wettig et al. (2011) is a peer reviewed article. The article reports the results of selected samples of 22 (Study A) and 125 (Study B) children who manifested clinically significant shyness and comorbid communication disorders. Study A was conducted in Germany and Study B in Germany/ Austria. Wettig et al. (2006) present the results of RCT in Study A, with waiting list control group, but in the article used in this evaluation (Wettig et al., 2011, using the subsamples) all treatments were combined, resulting in pre–post designs without control groups. In both studies, the age range of children (2 years, 6 months to 6 years, 11 months) was reported only for original samples (Wettig et al., 2006). In the article used in this evaluation, only the mean ages of children (4 years, 2 months) in both studies were reported. The aim of the studies was to make socially impaired children more amenable to language therapy by decreasing their behavior problems, and to increase their cooperativeness and ability to pay attention. The decrease in shyness, lack of self-confidence, excessive conformity, attention deficit, poor co-operation, oppositional defiance, and receptive language disorder was statistically significant in both studies. Study A reported a two-year follow-up showing consistency of results. Effect sizes were not reported.
Because there was lack of information whether 2 year olds were part of the peer reviewed studies included in this evaluation, or whether 2 year olds were merged with the other age groups, TheraPlay has limited evidence among children under the age of 3 years, and it is classified at level 1 – Intervention with no evidence.

References:

Jernberg, A. M. (1987) *Theraplay: A new treatment using structured play for children and their families*. Jossey-Bass. (German Theraplay – Eine directive Spieltherapie. Trans. U. Franke. Gustav Fischer.)

Wettig, H., Franke, U., & Fjordbak, B.S. (2006). Evaluating the effectiveness of Theraplay. In C. E Schaefer & H. G. Kaduson (Eds.), *Contemporary play therapy*. Guilford Press.

Wettig, H., Franke, U., & O'Connor, K. (2011). Evaluating the effectiveness of Theraplay in treating shy, socially withdrawn children. *International Journal of Playtherapy*, *20*(1), 26–27. https://doi.org/10.1037/a0022666

Name of the intervention:	**Level of evidence:**
Transdiagnostic Cognitive Behavioral Group Treatment (TCBGT) for Pregnant Women	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search did not identify any scientific evaluations of the intervention. The results of one pilot study were found (Sigurðardóttir, 2017).

Target group: Pregnant women with depression or anxiety.

Aims (primary and secondary): The primary aim of the intervention is to treat mild to moderate depressive and anxiety symptoms in pregnant women in a primary care setting.

Description of the intervention: The protocol of TCBGT is based on disorder-specific cognitive behavioral treatment (CBT), which has been found to be effective in treating anxiety and depression (Cuijpers et al., 2019). TCBGT has been adapted to the special needs of pregnant women by including significant perinatal content such as pregnancy, birth and parenting. The group meetings consist of six weekly two-hour sessions led by a psychologist and a midwife. The sessions include discussions about various feelings that may arise during pregnancy, ways to improve mental and physical well-being during pregnancy, body image, fetal development and bonding with the baby. Participants are given homework at the end of each session. Each group has about 10–20 participants. All expectant parents and parents with young children have the option of attending. TCBGT for pregnant women was developed in Iceland.

Evaluation of the documentation: In a meta-analysis of transdiagnostic psychological treatments of anxiety and depression with 47 controlled and non-controlled studies, the overall between-group effect showed medium effect for anxiety severity and large effect for depression (Newby et al., 2015). This contradicts the findings of another meta-analysis with eight randomized controlled trials, which concluded that even though there are positive signs of the effectiveness of transdiagnostic CBT on anxiety and depression, there is still insufficient evidence to replace disorder-specific CBT with it (Andersen et al., 2016). There is also contradictory evidence of group CBT being as effective as individual treatment format (Cuijpers et al., 2019; Newby et al., 2015). A meta-analysis of CBT to treat perinatal anxiety symptoms (both individual and group-based) looked at pooled data from 13 controlled and non-controlled studies (Maguire et al., 2018). The analysis showed small effect between groups at post-treatment, but large mean effect size across the treatment groups from pre- to post-treatment within groups. Brief and standard CBT interventions seemed to result in similar effect sizes.
In Iceland two pre–post studies have been conducted with TCBGT by Kristjánsdóttir and colleagues (2016, 2019) with patients in primary care with diagnoses of depression and/or anxiety disorders. The results of the five-week treatment (Kristjánsdóttir et al., 2016) found significant pre–post differences (N = 441). The treatment was equally effective for both anxiety disorders and depression, the effect sizes being between small and medium. Number of diagnoses did not affect the outcome. The six-week treatment (Kristjánsdóttir et al., 2019) showed significant pre–post differences with no evidence of the treatment being differentially effective for general and disorder specific symptoms (N = 233). Effect sizes ranged from medium to large. A pilot study of TCBGT on pregnant women (N = 44) in Iceland was carried out by Sigurðardóttir and colleagues (2017). The results of the six-week treatment showed significant reduction on depressive and anxiety symptoms measured at the beginning of each session. Effect sizes were medium. Clinically significant change in depressive symptoms was reached with 50% of women and for anxiety 28.7% of attending women.

Even though there is strong evidence of the effectiveness of CBT, the effectiveness of the transdiagnostic CBT is less evident and slightly contradictory, especially delivered in a group format for pregnant women. Thus, the intervention is considered to be at level 2 – Intervention with some level of evidence.

References:

Andersen, P., Toner, P., & Bland, M. (2016). Effectiveness of transdiagnostic cognitive behaviour therapy for anxiety and depression in adults: A systematic review and meta-analysis. *Behavioural and Cognitive Psychotherapy, 44*, 673–690. https://doi.org/10.1017/S1352465816000229

Cuijpers, P., Noma, H., Karyotaki, E., Cipriani, A., & Furukawa, T.A. (2019). Effectiveness and acceptability of cognitive behavior therapy delivery formats in adults with depression: A network meta-analysis. *JAMA Psychiatry, 76*(7), 700–707. https://doi:10.1001/jamapsychiatry.2019.0268

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Sigurðardóttir, K.Ó. (2017). *The effect of six-week transdiagnostic cognitive behavioural group therapy on anxiety and depressive symptoms among pregnant women: A pilot study*. Thesis in MSc in Clinical Psychology, University of Reykjavik.

Name of the intervention:	**Level of evidence:**
Triple P – Positive Parenting Program®	3

Authors: Kirsi Peltonen & Marko Merikukka

Documentation and literature: The literature research revealed hundreds of empirical studies of Triple P, dozens of which were targeted to children aged 0–2 years. We decided to include only (a) meta-analysis, (b) large scale population studies and (c) Nordic studies.

Target group: Parents of children aged up to 12 years.

Aims (primary and secondary): The aims are to support parenting and family life, prevent and treat behavioral and emotional problems in children, prevent problems in the family, school and community before they arise, and create family environments that encourage children to realize their potential.

Description of the intervention: Triple P draws on social learning, cognitive behavioral and developmental theory, as well as research into risk factors associated with the development of social and behavioral problems in children. It aims to equip parents with the skills and confidence they need to be self-sufficient and to be able to manage family issues without ongoing support. Triple P is available at five different levels depending on the parents' support needs. There are also special programs – for parents of children with a disability (Stepping Stones), for parents going through separation or divorce (Family Transitions), for parents of children who are overweight (Lifestyle) and for indigenous parents (Indigenous). Other specialist programs are being trialed or are in development.

Evaluation of the documentation: We used the data from six meta-analyses, two population studies and one Nordic RCT to find out the effectiveness of Triple P. First, in 2008, Nowak and Heinrichs conducted a meta-analysis evaluating the impact of the Triple P on parent and child outcome measures in 55 studies. The study indicated that Triple P caused positive changes in parenting skills, child problem behavior and parental well-being in the small to moderate range, varying as a function of the intensity of the intervention. More improvement was associated with more intensive formats and initially more distressed families. The role of age was studied as a moderator, together with other factors. The results showed greater intervention effects on all measures for younger children (using 5.5, the centered mean, as the cut-off). In the same year, De Graaf et al. (2008) conducted a meta-analysis of only Level 4 of Triple P, with 14 studies. Results indicate that Level 4 reduced disruptive behaviors in children, with further improvements in a long-term follow-up. The overall mean effect size of the child behavior observed by parents post-measurement was large and statistically significant. The overall mean effect size concerning the long-term measurement of child behavior was also large and statistically significant. De Graaf et al. (2008) also conducted several additional meta-analyses to examine whether effects were moderated by the age of children (younger than 4 years vs. older). The moderator effect was insignificant, meaning that intervention was equally effective in younger and older groups. In 2009, Prinz et al. conducted a Triple P System Population Trial, in which 18 counties were randomly assigned to either the Triple P system or the services-as-usual control condition over a five-year study period. The referent population in the 18 counties was all families with at least one child under 8 years of age; in the counties assigned the Triple P system, this numbers approximately 85,000 families in any given year. Large effect sizes were found for three independently derived population indicators: substantiated child maltreatment, child out-of-home placements, and child maltreatment. Differential and positive effects in the Triple P system counties were found for rates of substantiated child maltreatment (CM) with a medium effect size, child out-of-home placements, and hospitalizations or emergency-room visits for CM injuries. In 2012, Wilson et al. used Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)

guidelines to examine reporting and other biases in a systematic way and to delineate any gaps in the evidence base supporting Triple P. A total of 33 eligible studies was identified and 23 of these were incorporated in the meta-analysis. Thirty-two of the 33 eligible studies were authored by Triple-P affiliated personnel and only two papers contained conflict of interest statements. No studies involved children younger than 2 years old. For maternally reported outcomes the summary effect size was moderate. Paternally reported outcomes following Triple P intervention were smaller and did not differ significantly from the control condition. In 2014, Sanders et al. conducted a meta-analysis of 101 studies over a 33-year period. Significant short-term effects were found for: children's social, emotional, and behavioral outcomes; parenting practices; parenting satisfaction and efficacy; parental adjustment; parental relationship; and child observational data. Significant effects were found for all outcomes at long-term. Age was studied as one of the moderators and it turned out that studies involving children of a younger age had significantly more effect on child social, emotional, and behavioral outcomes when entered as a single moderator into the model. However, when all significant predictors were included in the analysis, the age was no longer significant. The country of the study was not a significant moderator, either alone or in the full moderators' model. One year later, Bauman et al. (2015) wanted to check whether there were adequate cultural adaptations of Triple P and found only one. Finally, in 2020, Schilling et al. examined the impact of the implementation of the Triple P in North Carolina (NC) on reducing child maltreatment (CM). Thirty-four of 100 counties in NC implemented Triple P and a panel data set was constructed, containing county-level child welfare data and emergency department (ED) discharge data for 100 counties in NC. Implementation of Triple P was associated with a 4% decrease in the county rate of investigated reports of CM and a 7% decrease in the county rate of children in foster care. There was no reduction in county-level rates of ED visits with ICD-9-CM codes concerning child maltreatment.

The only Nordic study we could find was a Swedish study for the families of 3–5-year-old children. A cluster randomized controlled trial (universal, self-selection allowing Triple P vs. waiting list control) was conducted to assess the costs and effects of Triple P Levels 2–3 on child externalizing behaviors and parental mental health (Sampaio et al., 2015). Child outcomes were based on 355 children and parental outcomes on 759 parents (parental sample) with baseline data. However only 29% (n = 67) of parents attended the intervention. Triple P showed no significant improvement in child externalizing behaviors or parental mental health at 6-, 12- or 18-month follow-up points. The authors concluded that offering low intensity levels of Triple P with 29% attendance may not be a reasonable use of public resources, as no evidence of improvement in child externalizing behaviors or parental mental health was found. There is lot of evidence for the effectiveness of Triple P in all age groups on children's social, emotional and behavioral outcomes, parenting problems, parenting skills, parental well-being, parenting practices, parenting satisfaction and efficacy, parental adjustment, parental relationship and child maltreatment. However, the fact that much of the published work is authored by affiliates of the Triple P organization puts the independence of the evidence in a less favorable position. There is slight evidence that Triple P might be effective in younger age groups. There is only one Nordic study showing no evidence for effectiveness. Also, the meta-analysis of Dutch studies did not show effectiveness. The method is classified at level 3, with a good level of evidence.

References:

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Name of the intervention:	**Level of evidence:**
Tuning in to Toddlers (TOTS)	1

Authors: Charlotte Reedtz & Monica Martinussen

Documentation and literature: Based on the literature search and extended search efforts, one study was included (Lauw et al., 2014).

Target group: Children aged 18–36 months with behavior externalizing problems, and their parents.

Aims (primary and secondary): Tuning in to Kids (TIK), on which TOTS is based, aims to prevent problems developing in children, promote emotional competence (in parents and children), and when present, reduce and treat problems with children's emotional and behavioral functioning.

Description of the intervention: The TOTS program is based on the Tuning into Kids (TIK) parenting program, which it extends to younger children. TOTS is an emotion-focused parenting program designed to assist parents to establish better relationships with their children. TOTS/TIK teaches parents simple emotion coaching skills; how to recognize, understand, and manage their own and their children's emotions. The emotion coaching includes five steps. When children experience emotions, parents: (1) notice the emotion; (2) see it as an opportunity for intimacy and teaching; (3) communicate an understanding and acceptance of the emotion; (4) assist the child to use words to describe how they feel; and (5) if necessary, assist with problem-solving and/or set limits around behavior (Havighurst, et al., 2009). This is done through exercises, group discussions, role-play, psychoeducation, DVD materials, and home activities. The adaptation from the TIK to the TOTS program included assessing the developmental needs and abilities of toddlers, a focus on recognizing and responding to attachment and exploration needs, and age-appropriate ways to deal with tantrums. TOTS is a six-session two-hour weekly parenting group program. TOTS/TIK was developed in Australia and is accessible through the University of Melbourne.

Evaluation of the documentation: The TOTS program has so far only been evaluated in one pilot study (N = 34) with mothers and their toddlers (Lauw, et al., 2014). Results showed significant post-intervention improvements in parents' emotion coaching and use of emotion talk, and significant reductions in parents' rejection of the child's emotions. In addition, mothers reported fewer behavior problems in their child post-intervention. However, the study did not include a control group, and hence the effects may have been caused by variables or factors other than the program itself. As there are no international or Nordic effect studies of sufficient quality supporting the evidence of TOTS, the intervention is rated at evidence Level 1, interventions with no evidence.

References:

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Name of the intervention:	**Level of evidence:**
Video Interaction Guidance (VIG–MLL)®	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The evidence assessment was based on a literature search. Two RCT studies were included (Hoffenkamp et al., 2015; Barlow et al., 2016). The intervention was evaluated by Kasvun tuki.

Target group: Babies, toddlers, school-age-children, and young adults.

Aims (primary and secondary): The aim of the intervention is to increase attuned interaction between parent and child.

Description of the intervention: VIG–MLL® is a short-term, non-intrusive, behaviorally focused, preventive video-feedback intervention that guides parents to reflect on their own successful interactions with their child. The goal of VIG is not only to change the parent's behavior but also to change their thinking about and ways of dealing with particularly challenging interaction situations in their daily lives and strengthening their mentalization ability. Parents are helped to notice and respond to the child's interaction initiatives. The intervention is based on theories of intersubjectivity and mediated learning.

Evaluation of the documentation: Barlow et al. (2016) and Hoffenkamp et al. (2015) have evaluated the impact of the program by conducting RCTs with preterm babies. Altogether, 31 mothers (*N* = 15 intervention, *N* = 16 control) participated in Barlow et al.'s study and 150 families (*N* = 75 intervention, *N* = 75 control) in the study by Hoffenkamp et al. (2015). The primary outcome in the study by Hoffenkamp and colleagues (2015) was parental interactive behavior (sensitivity, intrusiveness, and withdrawal) as observed in videotaped dyadic parent–infant interaction, and in the study by Barlow and colleagues (2016) sensitivity was assessed by the CARE Index. The results in both studies showed improvement in sensitive behavior; however, the differences between groups were not significant in Barlow et al.'s (2016) study. Mothers' withdrawn behavior decreased significantly immediately after two VIG meetings, as well as three weeks after the intervention (Hoffenkamp et al., 2015). However, group differences were not significant at six months after the intervention, and they were not significant for fathers at either time point. There were non-significant differences favoring the intervention group for depression, anxiety and parenting stress in Barlow et al.'s study (2016), but not in Hoffenkamp et al.'s study (2015). No difference was found between groups in terms of the proportion of parents with post-traumatic stress disorder (Barlow et al., 2016) or parents' intrusive behavior (Hoffenkamp et al., 2015). The significant findings in the study by Hoffenkamp et al. (2015) had mostly small to medium effect sizes. Almost all of the data in Barlow's study (2016) showed non-significant findings, which might be due to an understrength sample size. Since the study findings were somewhat contradictory and studies were conducted only on preterm babies and thus cannot be generalized to older children (up to 2 years old), the intervention is considered to be at level 2 – Intervention with some level of evidence.

References:

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Hoffenkamp, H. N., Tooten, A., Hall, R. A. S., Braeken, J., Eliëns, M. P. J., Vingerhoets, A. J. J. M., & van Bakel, H. J. A. (2015). Effectiveness of hospital-based video interaction guidance on parental interactive behavior, bonding, and stress after preterm birth: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 83*, 416–429.

Name of the intervention:	**Level of evidence:**
Watch, Wait and Wonder	2

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search found one partially randomized study and its follow-up study (Cohen et al., 1999, 2002). The intervention has been evaluated by the California Evidence-Based Clearinghouse (CEBC) and Early Intervention Foundation (EIF).

Target group: Parents and their children 0–4 years of age, who have relational and developmental issues.

Aims (primary and secondary): The aim of the intervention is to enhance maternal sensitivity and responsiveness, the child–parent attachment relationship, the child's sense of self and self-efficacy, and emotion regulation.

Description of the intervention: Watch, Wait and Wonder (WWW) is a child-led psychotherapeutic approach that specifically and directly uses the infant's spontaneous activity in a free play format to enhance maternal sensitivity and responsiveness, the child's sense of self and self-efficacy, emotion regulation, and the child–parent attachment relationship. The approach provides space for the infant/child and parent to work through developmental and relational struggles through play. Also central to the process is engaging the parent to be reflective about the child's inner world of initiatives, feelings, thoughts and desires, through which the parent recognizes the separate self of the infant and gains an understanding of their own emotional responses to their child. The program is delivered by a trained infant mental health specialist over an 8–18 weekly individual one-hour sessions (average of 14 sessions) (Muir et al., 1999). The intervention was developed by Dr Lojkasek and Elisabeth Muir at the Hincks-Dellcrest Institute, Canada (www.watchwaitandwonder.com).

Evaluation of the documentation: The participants in the study by Cohen and colleagues (1999) were 67 infants (10–30 months old) and their mothers, who were randomized to WWW and more traditional mother–infant psychodynamic psychotherapy (PPT). The randomization was done with 2/3 of the mother–infant dyadics. The goal of the study was to evaluate the effects of the WWW intervention on infant development, parenting stress, parenting sense of competence and parental depression compared to PPT. Mothers in both groups showed improvements in parenting stress, mother–infant interaction and infant's problem symptoms. Mothers in the WWW intervention showed significantly greater improvements in attachment, maternal depression, infant's cognitive development and emotional regulation.

Fifty-eight mothers participated in the six-month follow-up study (Cohen et al., 2002). The results indicated that the positive effects in both groups were maintained in mother–infant interaction, parenting stress, and infant's symptoms. The gains in maternal depression, infant's cognitive development and emotion regulation emerged in both groups, but at a different pace, observed in WWW at post-treatment and in PPT at follow-up. Parenting stress and comfort in dealing with infant behaviors improved more among mothers in WWW group.

There is an international effect study supporting the evidence of the Wait, Watch and Wonder. However, the study lacked the control group, had small sample size and insufficient randomization. Furthermore, there are no Nordic studies. Thus, the intervention is rated at evidence level 2 – Intervention with some level of evidence.

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Psychological Tests

The complete review of each psychological test is presented in alphabetical order in the next section. Of the 33 psychological tests reviewed, 4 (12%) were rated level 1, 20 (61%) level 2, 5 (15%) level 3, and 4 (12%) level 4. See Table 2 for an overview of all reviewed tests. The mean level of quality was 2.27 (SD = 0.83). A total of 20 tests (61%) were classified as being used for screening purposes. There were no significant differences in the mean level of quality between the screening instruments and other instruments (M_{screen} = 2.3, SD_{screen} = 0.98 vs M_{not} = 2.2, SD_{not} = 0.60, t = –.23, p > .05). The majority were questionnaires including self-report measures (15 of 33 = 45%), with the remainder classified as interviews (7 of 33 = 21%), observations (8 of 33 = 24%), and observation and interview (1 of 33 = 3%). Two tests included equipment/stimulus material (6%). Children were the target group in 9 of the tests (27%), children and caretakers were the target group in 7 tests (21%), mothers, fathers or parents were the target group in 11 tests (33%), and adults were the target group in 6 tests (18%). All of the tests that had the highest quality ratings were related to assessing mental health among adults, including parents.

Table 2. Overview of tests reviewed

Name of test	Purpose	Target group	Type of test	Used for screening	Rating of quality
Achenbach System of Empirically Based Assessment (ASEBA) Preschool	To assess social skills, emotional and behavioral difficulties, in addition to language delays.	Children	Questionnaire	No	2
Adverse Childhood Experiences (ACE)	To screen for childhood exposure to abuse and household dysfunction during the first 18 years of life.	Mothers	Self-report	Yes	2
Ages and Stages Questionnaires (ASQ)	To screen for developmental level including communication, fine and gross motor skills, problem solving, and personal/social development.	Children	Questionnaire	Yes	3
Ages and Stages Questionnaire: Social and Emotional (ASQ:SE)	To screen for and assess parent-reported social and emotional difficulties in children.	Children	Questionnaire	Yes	2
Ainsworth Strange Situation Procedure (SSP)	To measure mother–child attachment quality and to classify attachment security.	Child and mother	Observation	No	2
Alarm Distress Baby Scale (ADBB)	To screen for infant social withdrawal behavior, to detect signs of congenital, attachment, and relational difficulties.	Children	Observation	Yes	3
Alcohol Use Disorders	To screen for harmful or hazardous drinking habits.	Adults	Self-report	Yes	2

Identification Test (AUDIT)					
Bayley Scales of Infant and Toddler Development (BSID, BSID-II, BSID-III)	To assess developmental level.	Children	Test incl. equipment	No	2
BOEL (Blik Orienteret Efter Lyd; Glance Oriented After Sound)	To test the child's interaction, attention and reaction to visual and sound stimuli, in order to identify hearing and communication disorders.	Children	Test incl. equipment	Yes	2
CARE Index	To screen for and assess adult sensitivity in a dyadic context (child 0–24 months).	Child and parent	Observation	No	2
Classroom Assessment Scoring System (CLASS) Toddler	Observational instrument to assess emotional and behavioral support within the classroom.	Child and teacher	Observation	No	2
Clinical Outcomes in Routine Evaluation – Outcome Measures (CORE–OM)	To assess mental health symptoms and problems before and after treatment.	Adults	Self-report	No	4
Crowell Procedure	Observation of caregiver–child interaction.	Child and parent	Observation	No	2
Domestic Abuse, Stalking and Honor-Based Violence (DASH)	To help identify those at high risk of harm from domestic abuse, and who should be referred to a Multi-Agency Risk Assessment Conference (MARAC) meeting in order to manage the risk.	Adults	Interview	Yes	1
Domestic Violence Filter and Mapping Form (Lähisuhdeväkivallan suodatin – ja kartoituslomake)	To systematically map the risk of intimate partner and domestic violence in social and healthcare services.	Parents	Interview	Yes	1
Depression and Anxiety Stress Scale (DASS)	To screen for depression, anxiety and stress.	Adults	Self-report	Yes	2
Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0–5)	Diagnostic classification of mental health and developmental disorders in early childhood.	Children	Interview	No	2
Edinburgh Postnatal	To measure and screen for depression (postnatal and perinatal).	Fathers	Self-report	Yes	4

Depression Scale (EPDS) – fathers					
Edinburgh Postnatal Depression Scale (EPDS) – mothers	To measure and screen for depression (postnatal and perinatal).	Mothers	Self-report	Yes	4
Generalized Anxiety Disorder Scale 2-item (GAD-2)	To screen for generalized anxiety disorder (GAD), and other anxiety disorders.	Adults	Self-report	Yes	2
Generalized Anxiety Disorder Scale 7-item (GAD-7)	To screen for generalized anxiety disorder (GAD), and other anxiety disorders.	Adults	Self-report	Yes	4
Lausanne Trilogue Play (LTP)	Observational instrument to assess co-parenting alliance and interactions with the child.	Child and parent	Observation	No	2
Marschak Interaction Method (MIM)	To assess parent–child interaction (positive vs. problematic).	Child and parent	Observation	No	2
Modified Checklist for Autism in Toddlers (M-CHAT) and revised version (M-CHAT-R/F)	To identify early indicators of autism.	Children	Interview	Yes	3
Parent–Child Early Relational Assessment (PCERA)	To measure the quality of the parent–child relationship by assessing the affective and behavioral characteristics of their interaction.	Child and parent	Observation	No	2
Parenting Stress Index (PSI)	To assess parental stress.	Parents	Self-report	Yes	3
Parents' Evaluation of Development Status (PEDS©)	To assess children's development in language, motor skills, self-help, early academic skills, behavior and social-emotional/mental health.	Parents	Questionnaire	Yes	2
Resource form/ barometer	To assess resources and strain factors of first-time mothers and fathers.	Parents	Self-report	Yes	1
TWEAK Alcohol Screening Test	To identify pregnant women with harmful drinking habits.	Mothers	Interview	Yes	2
Vane-psy [Vauvan psyykkinen ja neurologinen kehitys]	To monitor the development of infants and toddlers.	Children	Observation/ interview	No	3
VAVU – Interview to support early parent–child interaction [Varhaista	To help identify and address perceptions, concerns, and potential difficulties related to pregnancy, childbirth, and the baby.	Parents	Interview	Yes	1

vuorovaikutusta tukeva haastattelu]					
Whooley Questions	To screen for depression (pre- and postnatal).	Mothers	Self-report	Yes	2
Working Model of the Child Interview (WMCI)	To assess parents' internal representations (working models) of their relationship to a particular child.	Parents	Interview	No	2

Reviews of Psychological Tests

Name of the test:	**Overall assessment of quality:**
Achenbach System of Empirically Based Assessment (ASEBA) Preschool	2

Authors: Sabine Kaiser & Susann Dahl Pettersen

Documentation and literature: The literature search resulted in one PsykTestBarn review of the Child Behavior Checklist (CBCL; Kornør & Jozefiak, 2012), two chapters of the ASEBA manual (Achenbach & Rescorla, 2000a, 2000b) and 36 hits from the literature search, one of which was included.

Test taker/informant: The ASEBA Preschool consists of the CBCL 1½–5 years, the Caregiver–Teacher Report Form 1½–5 (C–TRF), and the Language Development Survey 18–35 months (LDS). Parents rate the child on the CBCL 1½–5 and the LDS. The C–TRF is completed by preschool teachers and daycare providers.

Purpose/use: To assess social skills, emotional and behavioral difficulties, as well as language delays.

Description of the test: The ASEBA Preschool version was introduced in 2000 (Kristensen et al., 2010). The CBCL 1½–5 and C–TRF both consist of 100 problem items, of which 99 are closed items rated on a three-point scale from 0 (not true) to 2 (very true) and one item is open-ended. The child's Total Problem Score can be from 0 to 200, reached by summarizing the scores (Kristensen et al., 2010). There are syndrome scales that can be further classified into an Internalizing scale and an Externalizing scale (Kaaresen et al., 2008). Furthermore, both tests have DSM-oriented scales for five different problems. The LDS assesses the child's language skills on two different scales and risk factors for language delays. The use of the ASEBA requires at least a master's degree or equivalent training in standardized assessment or two years of residency in pediatrics, psychiatry, or family practice (https://aseba.org/aseba-training-request/).

Copyright/available from: Information about distributors of the ASEBA in the different countries is available on the ASEBA homepage (https://aseba.org/distributors/).

Evaluation of the documentation (reliability, validity and norms): The PsykTestBarn review of CBCL was based on Norwegian studies only and did not identify studies using samples from the current age group (0–2 years). Kristensen et al. (2010) conducted a norm study that was age- and gender-stratified using the CBCL 1½–5 (*n* = 850) and C–TRF (*n* = 624) in Denmark. The translation process is described and includes back-translation. Cronbach's alpha was found to be good to excellent for both tests for the Total Problem scale, the Internalizing scale, and the Externalizing scale. For the DSM-oriented scales Cronbach's alpha was not adequate for three scales, adequate for six scales, and good for one scale. There is supporting evidence of test reliability, and Danish norms exist for CBCL and C–TRF. Evidence of construct validity is lacking for the age group 0–2 years. No studies on the language sub-test (LDS) were found. The ASEBA is therefore rated at level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Adverse Childhood Experiences (ACE)	2

Authors: Kirsi Peltonen & Sabine Kaiser

Documentation and literature: The literature search resulted in five articles, of which one was suitable for the current evaluation (Rohder et al., 2019). An additional search identified five articles that were relevant to the evaluation (Chung et al., 2010; Felitti et al., 1998; Murphy et al., 2014; Steele et al., 2016; Sun et al., 2017).

Test taker/informant: Mothers, pre- and post-natal.

Purpose/use: To screen for childhood exposure to abuse and household dysfunction during the first 18 years of life.

Description of the test: The ACE is a self-report measure for adverse experiences before the age of 18 (Felitti et al., 1998). The original ACE contains seven categories: three categories of childhood abuse (psychological abuse, two questions; physical abuse, two questions; and sexual abuse, four questions), and four categories of exposure to household dysfunction during childhood (exposure to substance abuse, two questions; mental illness, two questions; violent treatment of mother or stepmother, four questions; and criminal behavior in the household, one question). Respondents are defined as exposed to a category if they respond "yes" to one or more of the questions in that category. However, multiple adaptations of the questionnaire have been used since the original study. The total score is usually calculated as well.

Copyright/available from: The original ACE questionnaire is available from Centers for Disease Control and Prevention (https://www.cdc.gov/violenceprevention/aces/about.html).

Evaluation of the documentation (reliability, validity and norms): All the studies included were conducted in the US, except for the study by Rohder et al. (2019), which used a Danish–Scottish sample. All studies had adapted the original measure by adding categories and/or changing the questions. Because the ACE provides retrospective reports of adverse experiences, the assessment of validity is challenging. A test-retest reliability of the ACE measures would provide indications that the measures will lead to stable responses over time. Once an adverse experience has occurred, such as abuse or exposure to an alcoholic parent, it cannot be changed or undone (Steele et al., 2016). This was tested in one large-scale population study, which found that the retrospective reports of ACEs had good-to-excellent test-retest reliability (Dube et al., 2003), but we could not find such studies among mothers only. One study has evaluated the internal consistency of ACE and found it to be good in a clinical (N = 75) and community (N = 41) sample of mothers (Murphy et al., 2014). However, the ACE items were coded binary and Cronbach's alpha was used as a measure for internal consistency.

Greater exposure to ACEs has been correlated repeatedly with adverse outcomes such as unresolved or discordant adult attachment (Murphy et al., 2014), child developmental risk concern (Sun et al., 2017), parenting stress (Steele et al., 2016), risky health behavior postpartum, heightened caregiving (Chung et al., 2010), caregiving helplessness, and role reversal in pregnancy and postpartum (Rohder et al., 2019). In sum, we found no test-retest reliability studies among our target group, and only one study of internal consistency. In addition to this, a lot of different versions of the test have been used, which indicates a lack of standardization. ACE has been found to correlate with many adverse outcomes among mothers pre- and post-natal, but that cannot be considered as conclusive evidence of construct validity. The majority of the studies were also conducted with American samples. Therefore, the overall assessment of quality is level 2 – Test with some but inadequate quality.

References:

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Name of the test:	**Overall assessment of quality:**
Ages and Stages Questionnaires (ASQ)	3

Authors: Monica Martinussen & Marte Rye

Documentation and literature: One review published in PsykTestBarn (Martinussen & Valla, 2013) was included in addition to four articles from Norway and Denmark (Valla et al., 2017; Vedel et al., 2020; Wang et al., 2014; Østergaard, 2012).

Test taker/informant: Small children (4–60 months). Parents or caretakers complete the form.

Purpose/use: Screening for developmental level including communication, fine and gross motor skills, problem solving, and personal/social development.

Description of the test: The Ages & Stages Questionnaires (ASQ) was developed in the 1980s in the US as a developmental screening tool for babies and young children (Squires et al., 1997). The item number and content vary depending on the age of the child. The test questions are grouped into six subscales and a total score. It takes 10–20 minutes for parents to complete the questionnaire. Relevant education and training are required for professionals in order to use the test. The most recent version is ASQ-3.

Copyright/available from: Information may be found at: https://agesandstages.com/products-pricing/asq3/

Evaluation of the documentation (reliability, validity and norms): The PsykTestBarn review included a total of four Norwegian studies and one Swedish study (Martinussen & Valla, 2013). Two studies were conducted on samples from the general population and the others were conducted on selected groups. Based on these studies, the review concluded that reliability of scales varied a lot, and for some age groups and scales it was unsatisfactory (alpha < .70). However, for the total score it was found to be good to excellent, in terms of both test-retest reliability and internal consistency. In terms of construct validity there is some support, both in terms of correlations with measures of general intelligence based on a study of children from the age of 3 years old. Also, expected group differences had been reported between premature children and typically developing children. Norwegian norms are available based on a large Norwegian study, but studies should verify these and examine the test's ability to adequately screen for developmental problems. Another more recent review of ASQ used in the US compared to Scandinavia, concluded that up-to-date norming and validation studies are needed throughout Scandinavia (Marks et al., 2019). The additional studies not included in the PsykTestBarn review included a large population-based Norwegian study (*N* = 63,000), where the results indicated that communication and motor skills assessed by ASQ were found to be stable from 1½ years to 3 years (Wang et al., 2012). A CFA of the included items partly confirmed the original factor solution. Another population-based study (*N* = 1371) found that infants with a low gestational age, low Apgar score, and maternal depression in addition to other factors may be at risk for developing less beneficial developmental pathways as assessed with ASQ over a 24-month period (Valla et al., 2017). A Danish study (Østergaard et al., 2012) of typically developing children (*N* = 298) presented norms for the age groups 9, 18 and 21 months that may be used when screening for developmental delays. A twin study (*N* = 841) from Denmark found associations between several neonatal complications and later poorer development using the ASQ at 18, 48 and 60 months (Vedel, 2020). There is some documentation of the reliability of the test, especially the total score. There are also studies supporting the construct validity, and norms exist for some languages, placing the test at level 3 – Test with a good level of quality. Since the intended test use is screening, more evidence to support this use is needed.

References:

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Name of the test:	**Overall assessment of quality:**
Ages and Stages Questionnaire: Social and Emotional (ASQ:SE)	2

Authors: Marte Rye & Lene-Mari P. Rasmussen

Documentation and literature: ASQ:SE has been evaluated in PsykTestBarn (Rasmussen & Martinussen, 2013). Six articles were included after the literature search.

Test taker/informant: Children from 3–66 months (ASQ:SE) or 1–72 months (ASQ:SE-2). Parent-completed.

Purpose/use: Screening tool for assessing parent-reported social and emotional difficulties in children.

Description of the test: The ASQ:SE was developed to complement the Ages and Stages Questionnaire (ASQ) with issues of social and emotional (SE) competence (Squires et al., 2001). The questionnaire includes the following domains: self-regulation, compliance, communication, adaptive behavior, autonomy, affect, and interaction. ASQ:SE-2 includes nine versions, each adapted to the age and developmental level of the child. The number of items increases with the age of the children, and each item is answered on a three-point Likert scale.

Copyright/available from: Information about distributors of the ASQ:SE in different countries is available at https://agesandstages.com/languages/

Evaluation of the documentation (reliability, validity and norms): The PsykTestBarn review included one Norwegian article presenting a mean total score in a clinical sample (premature) and four Swedish articles where one provided some support of construct validity in a clinical sample (*N* = 68) in terms of correlations with mothers' symptoms. Internal consistency (Cronbach's alpha) was .79. A Norwegian RCT study on parent–child interaction problems (children 0–24 months) showed significantly less parental concern regarding SE development at follow-up compared to TAU, using ASQ:SE 6–36 months versions (Høivik et al., 2015). Further, two Swedish cross-sectional studies of 3-year-olds (*N* = 7179) used ASQ:SE, and found that SE problems were reported more frequently in boys (12.3%) than girls (5.6%) (Vaezghasemi et al., 2020). Also, parents not living together reported more SE problems (Eurenius et al., 2019). Items concerning interest in sexual words, sleep, disinterest, unhappiness, and self-injury were reported more often among 3-year-olds with high ASQ:SE scores, and Cronbach's alpha was .78 (Vaezghasemi et al., 2020). Internationally, the US norm study (ASQ:SE-2) of 16,394 children reported a sensitivity of 77.8% to 84.0%, and a specificity of 76.2 to 98.0% when compared with three other SE-related measures and clinical diagnoses, test-rest reliability of 0.89 and overall Cronbach's alpha = .84 (Squires et al., 2015). A review by Pontoppidan et al. (2017) on both versions of ASQ:SE reported Cronbach's alphas ranging from 0.71–87, inter-rater reliability .91, agreement with similar measures .81–.95, sensitivity .81 and specificity .84. A review for ages 2–2½ years showed mixed psychometric results for translated/adapted versions of ASQ:SE (Velikonja et al., 2016). Altogether, the reliability seems satisfactory, but there is a lack of Nordic up-to-date norming and validation studies. ASQ:SE is therefore placed at level 2 – Test with some but inadequate quality.

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Name of the test:	**Overall assessment of quality:**
Ainsworth Strange Situation Procedure (SSP)	2

Authors: Sabine Kaiser & Kirsi Peltonen

Documentation and literature: The literature search identified one article that described the origin of the test (Van Rosmalen et al., 2015) and 13 articles from the database search. Of those, five were included in the current evaluation.

Test taker/informant: Infants between 9 and 18 months. Observations are videotaped and coded afterwards.

Purpose/use: To measure mother–child attachment quality and to classify attachment security.

Description of the test: The SSP was developed by Ainsworth, and the theoretical background of the test is based on attachment theory (Van Rosmalen et al., 2015). It consists of eight scenarios in which the child is placed in a strange environment together with a caregiver, when a stranger comes in and the caregiver leaves (Van Rosmalen et al., 2015). The procedure takes about 20 minutes. The strange environment, the stranger, and the separation from the caregiver make the SSP stressful for the child, which prompts attachment behavior. The scenarios are analyzed and attachment to the mother is classified as secure, insecure avoidant, insecure ambivalent, or disorganized (Van Rosmalen et al., 2015). The SSP has been criticized because it puts the infant in an "artificially designed and provocative examination condition" (Landorph & Skovgaard, 2008, p. 632).

Copyright/available from: Training takes one to two weeks, in addition to further studies over the 18-month certification period (https://attachment-training.com/training/).

Evaluation of the documentation (reliability, validity and norms): All of the five studies that are included were conducted in Nordic countries. One study had a Norwegian sample (Heidi, 2015), one Swedish (Lamb et al., 1982), one Danish (Smith-Nielsen et al., 2016), and two had Finnish samples (Hautamäki et al., 2008; Kouvo et al., 2003). None were psychometric articles. Sample sizes were in general small. Two of the included articles reported inter-rater reliability. Kappa was found to be inadequate (the percentage match was 76% to 96% in Heidi (2015)) to good (Smith-Nielsen et al., 2016) and one study reported five disagreements in 102 classifications (Lamb et al., 1982). In the Finnish samples, kappa values were not offered but the percentage matches were 86% (Kouvo et al., 2003) and 100% (Hautamäki et al., 2008). There were no studies directly examining the construct validity of the test. Heidi (2015) reported that most children in foster care were securely attached and no significant group differences between children in foster care compared to low risk children were found. Smith-Nielsen et al. (2016) found that infants of mothers with depression and personality disorders scored higher on insecurity. Kouvo et al. (2003) reported that autonomous attachment (Adult Attachment Interview) of parents was strongly associated to secure attachment of a child. Hautamäki et al. (2008) reported that there was a continuation of attachment styles across grandmother, mother, and child. An additional literature search identified five international studies that used the SSP to validate questionnaires. The findings are inconsistent. Cadman et al. (2018) and Van Dam and Van Ijzendoorn (1988) found no support for construct validity when examining the Brief Attachment Scale and the parental Attachment Q-set, respectively, while three studies, of which two were using the same sample (Fonagy et al., 2016; Luyten et al., 2017), found some support for construct validity (Carcamo et al., 2014) when examining the Reflective Functioning Questionnaire and the Massie-Campbell Attachment During Stress Scale, respectively, with the SSP. Overall, the SSP is placed at level 2 – Test with some but inadequate quality.

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Name of the test:	**Overall assessment of quality:**
Alarm Distress Baby Scale (ADBB)	3

Authors: Sabine Kaiser & Monica Martinussen

Documentation and literature: The literature search resulted in one review from PsykTestBarn (Braarud & Richter, 2014) and 63 hits from the search of databases. Of those 63 articles, 19 were relevant and 7 were based on Nordic samples.

Test taker/informant: Children between 2 and 24 months. Medical doctors, nurses, psychologists, or other healthcare professionals who work with toddlers and small children can assess the child.

Purpose/use: Screening for infant social withdrawal behavior, to detect signs of congenital, attachment, and relational difficulties.

Description of the test: The ADBB was developed by Guedeney and Fermanian (2001) in France. It consists of eight items (facial expression, eye contact, general level of activity, self-stimulating gestures, vocalizations, briskness of response to stimulation, relationship, and attraction), which the observer rates on a five-point scale with different response categories that describe "no unusual behavior" (0) to "severe unusual behavior" (4) (Guedeney & Fermanian, 2001). The final score ranges from 0 to 32 and higher scores indicate more signs of social withdrawal. The observation takes between 10–15 minutes (Braarud & Richter, 2014). A summary of conducted research about the ADBB can be found in Guedeney et al. (2013).

Copyright/available from: Healthcare professionals have to undergo a training in order to use the ADBB (Guedeney & Fermanian, 2001).

Evaluation of the documentation (reliability, validity and norms): The PsykTestBarn review included one Norwegian article by Braarud and colleagues (2013), who found some inconsistent results regarding construct validity and concluded that the examination of the psychometric properties of the ADBB in Scandinavia was not satisfactory. Other Nordic studies not included in the PsykTestBarn review were from Norway (Moe et al., 2016), Denmark (Smith-Nielsen et al., 2019), and Finland (Puura et al., 2007, 2019, 2013, 2010). None are psychometric studies or reported norms. Puura et al. (2007) found in, accordance with the original study from Guedeney and Fermanian (2001), that the best cut-off point for the ADBB was 5, taking into consideration sensitivity and specificity when predicting mother–infant interaction assessed with a more comprehensive test (GSR). This finding also supports the construct validity of the test. In terms of inter-rater reliability Puura et al. (2010) reported a kappa ranging from inadequate to excellent and Moe et al. (2016) reported on Cohen's K that was good to excellent. Puura et al. (2019) and Smith-Nielsen et al. (2019) found an ICC that was excellent. Some support for construct validity has been found in these studies where ADBB has been linked to shared pleasure (Puura et al., 2019), maternal sensitivity (Puura et al., 2013), postpartum depression (Smith-Nielsen, 2019), as well as group differences between full-term and preterm babies in ADBB score (Moe et al., 2016). To sum up, the ADBB is a widely used instrument with overall good to excellent inter-rater reliability. No Nordic articles report on internal consistency and there are no norm studies. Evaluations of the construct validity are based on associations with other instruments and differences between groups. Sample sizes of the included studies were relatively small, especially for some of the samples used for estimating inter-rater reliability. Based on the current evaluation of the ADBB, there was sufficient documentation to rate the ADBB at level 3 – Test with a good level of quality.

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Name of the test:	**Overall assessment of quality:**
Alcohol Use Disorders Identification Test (AUDIT)	2

Authors: Henriette Kyrrestad and Sabine Kaiser

Documentation and literature: The literature search identified 85 articles, of which seven were included in the evaluation.

Test taker/informant: Adults

Purpose/use: To screen for harmful or hazardous drinking habits

Description of the test: The AUDIT was developed by a collaborative project initiated by the WHO (Saunders et al., 1993). The questionnaire consists of 10 items, where items 1–3 measure alcohol consumption, items 4–6 drinking behavior, and items 7–8 adverse reactions. Items 9–10 assess alcohol-related problems. Each question is scored from 0 to 4 and the maximum score is 40. According to the WHO, a score from 1 to 7 indicates low-risk consumption, scores of 8 to 14 suggest risky or hazardous drinking habits and a score of 15 or higher indicates alcohol dependence. There are derivatives of the AUDIT and the most frequently used is AUDIT-C, which consists only of the first three items (Bush et al., 1998). The AUDIT can be self-administrated or filled out by a professional, which takes about 5–10 minutes. The AUDIT is translated into Norwegian, Swedish, Finnish, and Danish.

Copyright/available from: The AUDIT questionnaire is free to use and different language versions are available at https://auditscreen.org.

Evaluation of the documentation (reliability, validity and norms): Selin (2003) tested 457 adults in a general population in Sweden with the AUDIT on two different occasions with one month between the measurements. The internal consistency for the AUDIT in terms of Cronbach's alpha was good at time 1 and adequate at time 2. The test-retest reliability was measured by the intra-class correlation coefficient for the scale ranged between inadequate to good. Using the recommended cut-off score of 8+ as indicating hazardous drinking there was a good correspondence between those classified as risky drinkers at time 1 and time 2. Lund et al. (2019) found that the AUDIT predicted emotionally reactive problems and somatic complaints for the child at age 3 and not at age 5, which gives inconclusive results for the criterion-related validity. Lehikoinen et al. (2016) found that AUDIT predicted decreased head size from mid-pregnancy to childhood.
Two studies explored the association of pregnant women's alcohol use and mental health (Magnusson et al., 2007; Stene-Larsen et al., 2013). Stene-Larsen et al. (2013) found some support for the construct validity, while Magnusson et al. (2007) did not. Furthermore, two studies examined the prevalence of hazardous drinking during pregnancy, but none can be used to reach conclusions about the psychometric properties (Comasco et al., 2012; Göransson et al., 2003). The AUDIT is a widely used instrument with overall adequate to good internal consistency. However, results about validity are inconclusive and there is no adequate documentation about sensitivity and specificity. The AUDIT is rated at level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Bayley Scales of Infant and Toddler Development (BSID, BSID-II, BSID-III)	2

Authors: Monica Martinussen & Sabine Kaiser

Documentation and literature: One PsykTestBarn review (Richter & Valla, 2013) was included in the evaluation in addition to five articles (Kahr Nilsson et al., 2019; Krogh et al., 2012; Månsson & Stjernqvist, 2014; Sajaniemi et al., 2001; Skovgaard et al., 2019).

Test taker/informant: Babies/toddlers.

Purpose/use: To assess the developmental level (1–42 months).

Description of the test: BSID was the first published in 1969, and the current version BSID-III (Bayley, 2006) measures cognitive, language, and motor developmental functioning, including social and emotional behavior in infants and toddlers. Test administration takes between 30 to 90 minutes depending on the child's age. The language and motor scales each consists of two subscales: an expressive and a receptive communication subscale and a fine and gross motor scale, respectively. The numbers of items passed are converted into scaled scores with a mean of 10 (*SD* = 3) and composite scores with a mean of 100 (*SD* = 15).

Copyright/available from: Available from Pearson Assessment (https://www.pearsonclinical.no/bayley-iii).

Evaluation of the documentation (reliability, validity and norms): The PsykTestBarn review was based on five Norwegian studies and one Danish study. However, only one Norwegian study reported psychometric data that included predictive validity where Bayley was related to a psycho-motor developmental index (Richter & Valla, 2013). The review concluded that there was little evidence of the psychometric properties of the Norwegian or Scandinavian versions of the BSID-III.

A Swedish study compared scores on BSID-III of extremely preterm babies with control children at the age of 2½ years (*N* = 765). As expected, the preterm children scored lower than children born at term for all scales with large group differences (Månsson & Stjernqvist, 2014). A small study of children (*N* = 45) between 4 and 13 months found substantial differences between Danish and American children on the cognitive, motor, and language scales for BSID-III, indicating the need for Nordic norms. The differences on the motor and cognitive scales were not seen at all ages, and were not consistently higher or lower than the US norms (Krogh et al., 2012). Another Danish study using BSID-III found that exposure to psychosocial adversity and stressors were associated with poorer development (*N* = 211; Kahr Nilsson et al., 2019). A third Danish study (population-based) found that delay in cognitive functioning (BSID-II) at 0–6 months predicted neuro-psychiatric disorders at 1½ years for a subset of 210 children (Skovgaard et al., 2008). A study of the Finnish version of the BSID-II found that cognitive performance assessed with Bayley at the age of 2 (*N* = 81) predicted full scale IQ (WPPSI-R) at the age of 4, which supports the construct validity of the measure (Sajaniemi et al., 2001). There are no studies reporting reliability or norms based on Nordic samples, but there are some studies supporting the construct validity of the test which results in a level 2 rating – Test with some but inadequate level of quality.

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Name of the test: BOEL (Blik Orienteret Efter Lyd; Glance Oriented After Sound)	**Overall assessment of quality:** 2
Authors: Sabine Kaiser & Marte Rye	
Documentation and literature: The literature search identified 18 articles, of which seven were included. For one article, the full text was not available and it was therefore excluded (Marckmann, 1978).	
Test taker/informant: Children 7–10 months old.	
Purpose/use: To test the child's interaction, attention and reaction to visual and sound stimuli in order to identify hearing and communication disorders.	
Description of the test: The BOEL test is a visual and hearing test. The tester sits in front of the child, applies different stimuli and interprets the child's reaction. Children who fail to respond to one of the stimuli are retested after 2–3 weeks and if needed followed up (Ravn & Bjerager, 2004). The tester required thorough training (Junker et al., 1982).	
Copyright/available from: Not known.	
Evaluation of the documentation (reliability, validity and norms): Of the seven included articles, one was conducted in Norway (Rasting & Lindbaek, 1998), three in Denmark (Jakobsen et al., 2007; Mortensen et al., 2003; Ravn & Bjerager, 2004), and three in Sweden (Barr et al., 1978; Barr & Stensland Junker, 1978; Huber et al., 1978), of which two used the same sample and present overlapping results (Barr et al., 1978; Barr & Stensland Junker, 1978). Two Danish studies (Jakobsen et al., 2007; Ravn & Bjerager, 2004) and three Swedish studies (Barr et al., 1978; Barr & Stensland Junker, 1978; Huber et al., 1978) examined the BOEL test as a screening instrument. In a sample of 30,000 infants, the Swedish studies found relatively low sensitivity but underlined the importance of good training and concluded that the BOEL test is a good clinical approach to identifying hearing loss. Huber et al. (1978) found relatively good predictive validity of the BOEL for ear infection, with some false positive and few false negatives. Correlations with other instruments showed mixed results in terms of construct validity (Huber et al., 1978). Both Danish studies found relatively low sensitivity and predictive validity of the test. However, Jakobsen et al. (2007), who used a rather small but random sample, concluded that the test is better than a general clinical assess-ment to predict later contact and attention disorders. Ravn and Bjerager (2004), on the other hand, con-cluded that the test is widespread in Denmark, but should be replaced. Mortensen et al. (2003) found that children who were exposed to different drugs during pregnancy had more abnormal test results on the BOEL test than children who were not exposed to drugs. Rasting and Lindbaek (1998) concluded that there was little concordance between the BOEL test and tympanometry to assess ear infection. Overall, no study reported on inter-rater reliability, and the sensitivity of the BOEL test seems to be rather low. Therefore, with some but inadequate support of the psychometric properties, the test is rated at level 2 – Test with some but inadequate level of quality.	

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Name of the test:	**Overall assessment of quality:**
Care Index	2

Authors: Monica Martinussen & Charlotte Reedtz

Documentation and literature: Three Nordic articles were included in this review (Killen et al., 2006; Kristensen et al., 2017; Pajulo et al., 2011).

Test taker/informant: Parent and child.

Purpose/use: A screening tool for assessing adult sensitivity in a dyadic context (child 0–24 months).

Description of the test: The Care Index was developed by Patricia M. Crittenden (Crittenden, 1979–2004), and the manual and scoring system have been developed over the years. It identifies two opposite forms of insensitivity – over- and under-engagement with the infant – and the purpose is to identify high or low risk dyads. The observation is brief, requiring only 3–5 minutes of videotape of the parent and child. Professionals who code the interaction need extensive training, and experienced coders need approximately 15 minutes to code the video. The measure assesses mothers on three scales: sensitivity, control, and unresponsiveness. There are also four scales for infants: cooperativeness, compulsivity, difficultness, and passivity. The score may be used as a continuous score (0–14) or grouped in three categories where one category is "good enough" and the other two represent problematic interactions (at risk and maltreatment).

Copyright/available from: Available from Crittenden (https://www.patcrittenden.com/include/care_index.htm).

Evaluation of the documentation (reliability, validity and norms): One Norwegian study of 293 mothers and children from different risk samples (low, high, and institution) followed the children from 3 months to 4½ years old. Good inter-rater reliability (between 75% and 95%) was found, and expected group differences were also detected between subsamples. There were some correlations between education, social network, and maternal sensitivity. A study of Finnish substance-abusing mothers in treatment (N = 34) found that higher maternal sensitivity in interaction with the baby at 4 months postpartum was associated with higher development scores in the child at the same time point (Pajulo et al., 2011), which supports the construct validity of the test. A Danish intervention study among vulnerable families reported good inter-rater reliability for the ratings when examined in a subsample; however, it is not completely clear how the estimations were done. In addition, the study indicated that the Care Index was sensitive to change as indicated by differences between the intervention and control group after intervention (Kristensen et al., 2017). There are two Nordic studies supporting the inter-rater reliability of the scoring after receiving training from Crittenden, and some support of the construct validity of the test. However, documentation supporting the use for screening purposes is needed. The Care Index is classified at level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Classroom Assessment Scoring System (CLASS) Toddler	2

Authors: Lene-Mari P. Rasmussen & Charlotte Reedtz

Documentation and literature: One Nordic study was identified and included in the evaluation of the instrument.

Test taker/informant: Trained observers assess teachers in classrooms for toddlers, focusing on how they interact with the children.

Purpose/use: Observational instrument to assess emotional and behavioral support within the classroom.

Description of the test: The CLASS Toddler (CLASS-T) is used for observing and assessing the quality of the emotional and instructional elements in classrooms for toddlers, with children from 15–36 months. The CLASS is based on theory and research supporting the conclusion that interactions between teacher and child are the basis of all learning in young children, and the instrument consists of two global domains: emotional and behavioral support, and engaged support for learning (La Paro et al., 2012). Each domain includes dimensions that focus on specific teacher–child interactions, expressed through different behavioral indicators. Through 20-minute cycles of observation and 10-minute coding, each dimension is rated on a seven-point scale from low (1, 2), medium (3, 4, 5) to high (6, 7) based on the frequency, intensity, and duration of interactional behaviors observed across the 20-minute segment. This is repeated four times, and dimension scores are then averaged across the cycles to yield a classroom score for each dimension. To perform CLASS-T, observers need to attend training and be certified in the use of the test.

Copyright/available from: Teachstone® delivers CLASS, including CLASS-T (La Paro et al., 2012), and provides training and all other material required to observe teacher–child interactions. More information can be found at the Teachstone homepage: https://teachstone.com/

Evaluation of the documentation (reliability, validity and norms): According to the literature search, there is only one Nordic study using the CLASS-T version. This study investigated cortisol levels in toddlers (N = 112, mean age = 23.17 months, SD = 3.8) in Norwegian childcare (Drugli et al., 2018). The study reported an intra-class correlation (ICC) of 0.93 between observers, but no other psychometric properties about the instrument were reported. According to international research, the CLASS-T has shown good internal consistency, with reliability estimates of .88–.89, and a two-factor structure has been supported (Bandel et al., 2014; Castle et al., 2016; Thomason & La Paro, 2009). A Dutch study (Slot et al., 2017) investigated the properties of CLASS-T more extensively in a sample of 276 classrooms and 375 teachers. They conducted a confirmatory factor analysis (CFA) to assess the structural validity, item response theory (IRT) to evaluate the measurement properties of the indicators, and criterion validity. Results revealed adequate measurement quality. However, the data in the Dutch study supported a three-domain structure instead of the current two-domain structure in CLASS-T. More research is warranted, especially within the Nordic countries, and CLASS-T is rated at level 2 – Test with some but inadequate level of quality.

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Name of the test: Clinical Outcomes in Routine Evaluation – Outcome Measures (CORE-OM)	**Overall assessment of quality:** 4
Authors: Monica Martinussen & Henriette Kyrrestad	
Documentation and literature: Five psychometric studies of the instrument were included in this review (Elfström et al., 2012; Héðinsson et al,, 2013; Honkalampi et al., 2017; Kristjánsdóttir et al., 2015; Skre et al., 2013).	
Test taker/informant: Adults.	
Purpose/use: To assess mental health symptoms and problems before and after treatment.	
Description of the test: CORE-OM is a self-report instrument designed as an outcome measure for evaluating the effects of psychological therapy. It includes 34 items, covering four domains: subjective well-being (4 items), problems/symptoms (12 items), life/social functioning (12 items), and risk to self and others (6 items). The mean score of all items (or the mean of all non-risk items) is also computed. The respondent answers whether he or she has experienced a particular symptom during the previous week (e.g., I have felt tense, worried or nervous) on a five-point scale from "not at all" to "most or all the time".	
Copyright/available from: The measure was developed in English by Evans et al. (2000, 2002), and it can be reproduced on paper free of charge so long as no alterations are made www.coreims.co.uk/copyright.pdf). It has been translated into many languages including Norwegian, Swedish, Finnish, Danish, and Icelandic. An overview can be found here: https://www.coresystemtrust.org.uk/	
Evaluation of the documentation (reliability, validity and norms): A study of the Finnish version included psychiatric patients (*n* = 201) and non-clinical participants (*n* = 209) (Honkalampi et al., 2017). The results indicated good to excellent internal consistency for all scales except the risk-domain in both groups, and excellent alpha for the overall score (alpha = .94 and .91). The construct validity was supported with high correlations with relevant measures (BDI and SCL90), especially in the clinical group (Honkalampi et al., 2017). The Norwegian version was examined in a clinical sample (*n* = 527) collected from outpatient mental health services, and a non-clinical sample (*n* = 464) (Skre et al., 2013). Cronbach's alpha for the total score was excellent for both samples (.92 and .93). The test-retest reliability was examined in a subsample, and indicated good stability over time (.76). Factor analyses partly confirmed the four domains and indicated a g-factor which explained most of the variance between CORE items (Skre et al., 2013). Having experienced stress recently was also related to CORE-OM based on a subsample of students (Skre et al., 2013). The Icelandic version (Kristjánsdóttir et al., 2015) was evaluated for reliability and validity in three groups: patients undergoing psychological treatment in general practice (*n* = 289); psychiatric outpatients (*n* = 98); and student controls (*n* = 207). Internal consistency was good to excellent for the CORE-OM total score and its domains, except the risk domain. Test-retest reliability (.80 for total score) was excellent. When predicting clinical diagnosis, the total score resulted in a sensitivity of 82% and specificity of 70%, and CORE-OM was also related to measures of depression and anxiety (Beck instruments), and differentiated between clinical and non-clinical samples which also supports the construct validity (Kristjánsdóttir et al., 2015). A second Icelandic clinical study (*N* = 100) compared change scores from CORE-OM to another outcome measure (PSYCHLOPS), and they were highly correlated (.71) (Héðinsson et al., 2013). The psychometric properties of the Swedish version (Elfström et al., 2012) was examined in a student sample (*n* = 229) and in a clinical group (*n* = 619). It showed excellent internal consistency (.93–.94 for the total score) and test-retest reliability (.85 based on a subsample) as well as convergent validity when compared to	

measures of anxiety and depression (HADS) (Elfström et al., 2012). Overall, The CORE-OM has demonstrated good to excellent reliability and validity for all the Nordic languages examined for both clinical and non-clinical samples, which results in it being rated at level 4 – Test with a high level of quality.

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Name of the test:	**Overall assessment of quality:**
Crowell Procedure	2

Authors: Marte Rye & Monica Martinussen

Documentation and literature: Based on the literature search, no Nordic studies were located and two international studies focusing on the psychometric properties of the Crowell Procedure were included (Loop et al., 2017; Sprang & Craig, 2014). The Crowell Procedure is currently under evaluation for PsykTestBarn.

Test taker/informant: Caregivers and preschool children.

Purpose/use: Observation of caregiver and child behavior during interaction, for instance during episodes of problem-solving, free play or stress.

Description of the test: The Crowell Procedure (Crowell & Feldman, 1988) was initially developed for children from the age of 12 to 60 months in order to observe child and caregiver behavior during interactions. The procedure involves seven activities including structured tasks (teaching tasks), unstructured tasks (free play, bubbles) and a separation-reunion phase. The procedure lasts about 30–45 minutes and is videotaped, allowing for subsequent coding of caregiver–child interaction. The initial coding system by Crowell and Feldman (1988) assessed nine variables related to child behavior (enthusiasm, persistence, self-reliance, affection, negativity, avoidance, controlling behavior, anxiety, and compliance), as well as an estimation of caregivers help and support.

Copyright/available from: In Norway, training in the Crowell Procedure is offered by RBUP East and South.

Evaluation of the documentation (reliability, validity and norms): The Crowell Procedure is frequently used for both research and clinical purposes. In a sample of 151 caregiver–child dyads (child mean age = 3.1 years, *SD* = 1.25), Sprang and Craig (2014) examined the psychometric properties of the Crowell Problem Solving Procedure Rating Scale with four caregiver items and seven child items rated from 1–7 on a Likert scale. An exploratory factor analysis suggested two globes scales scores with high internal consistency, one for the child's affective presentations (Omega reliability coefficient = .88) and the other for the caregiver's responsiveness (Omega reliability coefficient = .84), or a total score assessing overall relational functioning. Construct validity was supported in terms of significant relationships between aspects of the caregiver–child relationship and a related measure of the quality of the caregiver–child interaction. In a sample of 137 caregiver–child dyads with children between 36 and 72 months old (mean age = 53.96, *SD* = 8.08), discriminant analyses showed that an adapted version of the procedure (five episodes), using a coding system adapted by Heller et al. (1999), differentiated between children with clinical levels of externalizing behavior (attention problems and aggressive behavior) and normally developing children (Loop et al., 2017). Internal consistency measured with Chronbach's alpha for total child scale was .88, and for parent scale = .80, while construct validity was supported in terms of correlations with measures of parenting and child behavior. There seems to be a need for more research examining the psychometric properties of the Crowell Procedure both internationally and in the Nordic countries for the age group 0–2 years, hence the procedure is placed at evidence level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Domestic Abuse, Stalking and Honor-Based Violence (DASH)	1

Authors: Taina Laajasalo & Marko Merikukka

Documentation and literature: Chalkey & Strang, 2017; Robinson et al., 2016; Sebire & Barling, 2016; Thornton, 2017; and Turner et al., 2019.

Test taker/informant: Frontline police officers and other professionals working with victims of domestic abuse.

Purpose/use: DASH is a tool for professionals working with adult victims of domestic abuse. It is used to help identify victims who are at high risk of harm caused by domestic abuse, and whose cases should be referred to a Multi-Agency Risk Assessment Conferences (MARAC) meeting in order to manage the risk.

Description of the test: DASH is a structured professional judgement scale consisting of 24 yes/no/not known questions related to risk factors of severe domestic violence, such as the presence of coercive control (for example, "Does [name of abuser(s)] try to control everything you do and/or are they excessively jealous?"). Following the 24 questions, three additional questions are posed, including one involving children ("Do you believe that there are risks facing the children in the family?). Risk is classified as low, medium or high. A threshold (cut-off) of 14 yes answers is the suggested cut-off for grading a case as high risk, although professional judgement also plays a central role.
Typically, the attending officers in a given case will complete DASH when responding to a domestic abuse call or shortly afterwards, but in practice, the ways DASH is used and graded by police officers and other professionals, mainly victim support organizations, vary (Turner et al., 2019). If a case is deemed high risk, more intense intervention and support services for victims should follow, and the DASH score is used for referring victims to Multi-Agency Risk Assessment Conferences (MARACs).

Copyright/available from: Available in Finnish from the Finnish Institute for Health and Welfare (THL) at https://thl.fi/documents/605877/1663634/marak_riskinarviointilomake_suomi.pdf/c3714af4-9d8a-4591-a0ab-222d525fa551

Evaluation of the documentation (reliability, validity and norms): In terms of inter-rater reliability, Sebire and Barling (2016) assessed the stability of 38 police officers' assessments using the DASH risk assessment form. The risk was assessed as low, medium or high in four case examples at two different points in time. Intraclass correlation (ICC) was used to assess the level of inter-rater reliability at Time 1 and Time 2. Before the Time 2 assessment, the officers were reminded of the national risk grading definitions to assess whether this would have an impact on the consistency of the officers' risk grading decisions. At the first risk assessment, the rater consistency was weak. The second assessments were more consistent, but still only fair. Two-thirds of the police officers' assessments were similar on both occasions. Overall, there is limited knowledge about the reliability of DASH and the inter-rater reliability seems to be modest. Further, a recent study stated that the application of DASH is not consistent among users (Robinson et al., 2016). In terms of predictive validity, two studies show that DASH gradings are poor predictors of domestic homicide. In Chalkley and Strang (2017) the false negative rate was 67%; for example, in deadly violence cases with prior police contact, 47 out of 67 cases were not classified by DASH as "high risk". The false positive rate was 99% (12,279 cases of no serious harm among 12,301 cases receiving an assessment of high risk). In the study by Thornton (2017), there were 53 cases where there was some form of deadly violence (murder, attempted murder, manslaughter, and grievous bodily harm with intent) and prior police contact. Only six of

these had been classified as high risk, giving an 89% false negative rate. None of the 13 murder cases had been assessed as "high risk" based on DASH or its predecessor, giving a 100% false negative rate in prediction of murder. A false positive rate of 99% was observed: only five victims out of 1745 were correctly assessed as high risk. Authors state that the predictive accuracy of DASH is low, although it could be argued that false positives are examples of situations where preventive efforts and the subsequent MARAC process have succeeded.

Finally, Turner et al. (2019) aimed to evaluate how well the DASH assessments can predict serious harm (defined based on the Crime Severity Score) and revictimization. A DASH grading of "high risk" indicates that it is predicted that the victim is at risk of serious harm in the future. The study found a low number of true positives: the officers correctly ranked 5.7% of the revictimization cases as high risk (true positive rate). The false negative rate was estimated to be at least 67% when stringent criteria, focusing only on cases classified as high-risk, was used. If revictimization cases that were initially labelled as medium risk were also considered to be false negatives, the total false negative rate rose to 94%. The overall accuracy was 91%. This is a poor result, considering that the rate of non-revictimization is 94%. The authors concluded that each element of the DASH questionnaire is only weakly predictive of revictimization, and only little better than random. Questions related to criminal history, substance use, and mental health had the best predictive ability, although this was still poor. The authors speculated that the poor results could have been related to the fact that the instrument is focused on the wrong risk factors, or that the problem could be located in the time the gradings are made and the data collected. As for future development efforts, the authors emphasized that risk assessment cannot be reduced to the task of prediction, but also needs to include issues such as safeguarding, identification of past harm and safety planning. DASH is assessed to be at level 1 – Test with no or a low level of quality.

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Name of the test:	**Overall assessment of quality:**
Domestic Violence Filter and Mapping Form (Lähisuhdeväkivallan suodatin – ja kartoituslomake)	1

Authors: Taina Laajasalo & Marko Merikukka

Documentation and literature: The literature search found no documentation or literature on the questionnaire.

Test taker/informant: A social or healthcare professional conducts the interview and completes the questionnaire.

Purpose/use: The Domestic Violence Filter and Mapping Form is designed to map systematically the risk of intimate partner and domestic violence in social and healthcare services.

Description of the test: The rationale behind the questionnaire is that in order to identify intimate partner and domestic violence, questions about experiences of violence should be asked directly. The questionnaire contains three routine questions (yes/no):
1. Have you ever experienced physical, psychological, or sexual violence or abuse in any of your intimate relationships?
2. Does the violence you experienced still affect your health, well-being, or life management?
3. Is there any physical, psychological, or sexual violence or abuse in your current intimate relationships?
If the client/patient answers affirmatively to questions 2 or 3, further assessment questions about the violent victimization follow, as well as the client's and professional's assessments of the situation. The Domestic Violence Filter and Mapping Form is completed by the professional when they have gathered information about the client's background and life situation. The Department of Health and Welfare (THL) developed the form in co-operation with the Central Finland Health Care District.

Copyright/available from: The questionnaire can be found on the website of the Finnish Institute for Health and Welfare: https://www.thl.fi/attachments/kasvunkumppanit/vakivalta/THL_lahisuhdevakivalta_lomake_ENG.pdf

Evaluation of the documentation (reliability, validity and norms): There is no data on the reliability, validity or norms. The questionnaire is assessed to be at level 1 – Test with no or a low level of quality.

Name of the test:	**Overall assessment of quality:**
Depression and Anxiety Stress Scale (DASS)	2

Authors: Lene-Mari P. Rasmussen & Charlotte Reedtz

Documentation and literature: The literature search identified four studies on DASS-42 (full version) and one study on DASS-21 (short version).

Test taker/informant: Adults (parents).

Purpose/use: To screen for depression, anxiety, and stress.

Description of the test: The DASS-42 was developed in Australia by Lovibond and Lovibond (1995), and is used to screen for depression, anxiety and stress. The DASS-21 is a short form of the 42-item self-report measure. For both instruments, the items are divided into three subscales rated on a four-point scale ("did not apply to me at all" to "applied to me very much, or most of the time") to measure distress in the general adult population. High scores are associated with increased distress.

Copyright/available from: The instrument (in English) can be downloaded free of charge. For full interpretive information, the DASS manual can be purchased at http://www2.psy.unsw.edu.au/groups/dass/order.htm

Evaluation of the documentation (reliability, validity and norms): Studies on DASS-42 and DASS-21 reporting results from pregnant women or adults with children (0–2 years) within the Nordic countries are limited, and even fewer of these report any psychometric properties of the instruments. Most of the studies only report means and standard deviations, and some have calculated internal consistency (Cronbach's alpha). One Icelandic study on pregnant women (Lydsdottir et al., 2019), reported good to excellent internal consistency for all subscales in the study, including DASS-42 (except the Stress scale). Another study on pregnant Icelandic women (N = 562) screening for perinatal distress (Jonsdottir et al., 2017), reported a Cronbach's alpha ranging from 0.85 to 0.92 for the three subscales. The full version of the instrument was also used in two Danish studies (Dahlerup et al., 2018; Jónsson et al., 2015), where DASS was used as a self-report scale for parents/legal guardians measuring symptoms of depression, anxiety, and tension/stress. None of these reported psychometric documentation of the instrument. Salari et al. (2014) used the depression scale of DASS-21 in a study of Swedish parents, and reported separate Cronbach alphas for mothers (ranging from .74 to .88) and fathers (ranging from .72 to .87). Overall, limited information regarding the translation of the instruments is provided. Internationally, the instrument has been translated into multiple languages and investigated in both clinical and non-clinical samples (e.g., Brown et al., 1997; Crawford & Henry, 2003), and sound psychometric properties are supported. However, more research within the Nordic countries is needed due to the limited documentation of the psychometrics properties, especially the validity of the measure, placing the instrument at level 2 – Test with some but inadequate level of quality.

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Name of the test: Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC: 0–5)	**Overall assessment of quality:** 2
Authors: Marte Rye & Susann Dahl Pettersen	
Documentation and literature: The literature search located five Nordic studies on the DC-system. No international articles described the validity and reliability of the DC: 0–5.	
Test taker/informant: Professionals in mental health and related fields.	
Purpose/use: Diagnostic classification of mental health and developmental disorders in early childhood.	
Description of the test: The DC: 0–5 (ZERO TO THREE, 2016) constitutes a revised and updated version of the diagnostic classification system DC: 0–3 (ZERO TO THREE, 1994) and DC: 0–3R (ZERO TO THREE, 2005). Each version has been revised and updated by task force groups based on clinical experience, empirical evidence, and theoretical understandings of early childhood psychopathology (Emde, 2016; Zeanah et al., 2016), and DC:0–5 with a special emphasis on the network of family relationships and the age range expanded from three years to five years of age (Zeanah & Lieberman, 2016). A Norwegian manual was published in 2020 (ZERO TO THREE, 2020). The classifications follow a multiaxial system: Axis I) Clinical Disorders; Axis II) Relational Context; Axis III) Physical Health Conditions and Considerations; Axis IV) Psychosocial Stressors; and Axis V) Developmental Competence.	
Copyright/available from: The organization ZERO TO THREE (https://www.zerotothree.org/resources/2221-dc-0-5-manual-and-training).	
Evaluation of the documentation (reliability, validity and norms): Regarding DC: 0–5, the literature search identified no Nordic or international studies focusing on its reliability or validity. Three studies used the DC:0–3 in the same sample, or subgroup of the same sample, consisting of 138 children (mean age = 24 months, *SD* = 13.60) from an outpatient child psychiatric clinic in Norway (Moe & Mothander, 2009; Mothander & Moe, 2008, 2010). Inter-rater reliability was based on experienced clinicians' classification of five cases, with a total of four cases agreement. A total of 59% were diagnosed within Axis I, with regulatory, affect and traumatic stress disorder as the most frequent, while 48% were classified as having a relationship disorder according to Axis II (Mothander & Moe, 2008; Moe & Mothander, 2009). The relationship between DC:0–3 and parental self-rating of their children's problems was complex (Mothander & Moe, 2008), and parents' self-ratings of their own depressive symptoms and parental stress were marginally related to DC:0–3 (Mothander & Moe, 2010). In a Swedish RCT study examining the effect of COS-P on parents' internal representations and emotional availability, with children aged 0–4 years, the DC:0-3R was used to get a picture of childrens mental state at baseline in the intervention sample (*n*=28 dyads) and the TAU sample (*N*=24 dyads) (Mothander et al., 2018). There were no significant differences in classifications on Axis I to Axis V between the two groups at baseline and the study reported no associations between DC: 0-3R and the outcome measures at baseline. In a Danish study of 210 children aged 18 months, the total number of exposures to psychosocial adversity and stressors as classified by the DC: 0–3 predicted mental health problems in the clinical concern range (Nilsson et al., 2019). An overall conclusion on level of quality is complicated as the DC: 0–5 is not a traditional assessment tool but a diagnostic multiaxial classification framework that is based on previous versions of the system and work from task force groups combining clinical experience, empirical evidence, and theoretical understandings. The Norwegian manual was also relatively recently published, leaving little time for psychometric studies to be	

conducted. As reliability, validity and diagnostic precision should be established, the DC: 0–5 is placed at level 2 – Test with some but inadequate level of quality.

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Name of the test: Edinburgh Postnatal Depression Scale (EPDS) – fathers	**Overall assessment of quality:** 4
Authors: Sabine Kaiser & Henriette Kyrrestad	
Documentation and literature: The literature search resulted in the inclusion of ten articles of which two Swedish articles used the same sample (Kerstis et al., 2013; Kerstis, Nohlert et al., 2016).	
Test taker/informant: Men/fathers.	
Purpose/use: To screen for perinatal depressive disorder.	
Description of the test: The EPDS is usually used to screen for depressive symptoms in postpartum women. However, the current evaluation focuses on the EPDS used to screen fathers for depression. It is a 10-item self-report questionnaire, with response categories ranging from 0 to 3. The overall score can range between 0 and 30 and higher scores indicate more depressive symptoms.	
Copyright/available from: The Royal College of Psychiatrists in the UK owns the copyright for the EPDS.	
Evaluation of the documentation (reliability, validity and norms): The included studies were from Norway (Fredriksen et al., 2019), Sweden (Edhborg, 2008; Johansson et al., 2017; Kerstis et al., 2013; Kerstis, Nohlert et al., 2016; Kerstis, Aarts et al., 2016; Massoudi et al., 2013; Mörelius et al., 2015; Seimyr et al., 2009) and Finland (Karukivi et al., 2015). Two studies reported Cronbach's alpha which was good (Massoudi et al., 2013) or ranged between adequate to good at various assessments points (Fredriksen et al., 2019). Massoudi et al. (2013) conducted a factor analysis and excluded item 10 (thoughts of self-harm) from further analyses. They identified two factors for fathers (N = 885). The optimal cut-off point for the screening of major depression among fathers was a score of greater than 12 with a sensitivity of 100% and a specificity of 94.9%. Mothers were found to have more depressive symptoms or higher scores on the EPDS than fathers in most studies (Edhborg, 2008; Johansson et al., 2017; Kerstis et al., 2013; Kerstis, Nohlert et al., 2016) but in general mothers and fathers scores were related (Fredriksen et al., 2019; Kerstis et al., 2013; Kerstis, Nohlert et al., 2016). There was a relationship between fathers' EPDS scores and other questionnaires that measure depression (Edhborg, 2008), relationship problems and feeling of incompetence (Johansson et al., 2017), and sense of coherence (Kerstis et al., 2013). Overall, the included studies were of good methodological quality and findings indicate at least adequate internal consistency. Relationships with other instruments were in the expected direction, which supports that the construct validity and documentation about sensitivity and specificity were good. The translation procedures have not been described. The EPDS is rated on level 4 – Test with a high level of quality.	

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Name of the test: Edinburgh Postnatal Depression Scale (EPDS) – mothers	**Overall assessment of quality:** 4

Authors: Monica Martinussen & Susann D. Pettersen

Documentation and literature: The literature search resulted in the inclusion of two systematic reviews (Hanssen-Bauer & Welander-Vatn, 2012; Larun et al., 2013), in addition to two more recent studies not included in the reviews (Lydsdottir et al., 2019; Smith-Nielsen et al., 2018).

Test taker/informant: Women/mothers.

Purpose/use: To measure and screen for depression (postnatal and perinatal).

Description of the test: The EPDS is usually used to screen for depressive symptoms in postnatal women, but may also be used perinatal. The original version was developed in English (Cox et al., 1987), and it has been translated into 37 languages including Nordic languages (Cox et al., 2014). It is a 10-item self-report questionnaire, with response categories ranging from 0 to 3. The overall score can range between 0 and 30 and higher scores indicate more depressive symptoms. The recommend cut-off score varies between countries and ranges from 10 to 13 points.

Copyright/available from: The Royal College of Psychiatrists in the UK owns the copyright for the EPDS.

Evaluation of the documentation (reliability, validity and norms): A review (Larun et al., 2013) on the accuracy of EPDS for screening among pregnant and postpartum women found 16 studies from Europe, Canada, Australia, and New Zealand. The results showed that screening with EPDS for depressive symptoms in postnatal women has a sensitivity of 0.93 and specificity of 0.78 given a cut-off of ≥10 points (Larun et al., 2013). Another review from PsykTestBarn identified 11 Norwegian studies and four Swedish studies (Hanssen-Bauer & Welander-Vatn, 2012). The review concluded that Cronbach's alpha and test-reliability was good and EPDS had good construct validity, based on large correlation coefficients with the measures of depression and mental health. Diagnostic precision was only examined in two of the included studies and the authors concluded that it should be further examined with the better diagnostic procedures for depression. This Norwegian study reported excellent sensitivity (100%) and specificity of 87% for severe depression in a sample of postpartum women (subsample of 56 from 320) (Eberhard-Gran et al., 2001) (cut-off ≥ 10). The Swedish study examined the EPDS in a group of pregnant women (*N* = 918), and a smaller group (*N* = 121) was interviewed to diagnose depression (Rubertsson et al., 2011). ROC curve was calculated for prediction of depression, and the optimal cut-off was 13 points (sensitivity = 77% and specificity = 94%). A Danish validation study (*N* = 320) published after the PsykTestBarn review examined the test in a group of postpartum women (Smith-Nielsen et al., 2018). The findings indicated reasonable sensitivity and specificity (82% and 93%) at a cut-off score of ≥ 11 when compared to clinical diagnoses. Factor analyses indicated three factors (depression, anxiety and self-harm) for the Danish version. The second study, not included in the reviews, was a large study of Icelandic women who completed the EPDS several times during pregnancy (*N* = 2397). Internal consistency and test-retest reliability were good. Construct validity was supported in a factor analysis (one general factor and two group factors). Sensitivity and specificity were 80% and 89% with a cut-off of 11 or higher (Lydsdottir et al., 2019) based on a smaller sample. Overall, the studies and reviews of EPDS indicated good internal consistency and test-rest reliability. Construct validity in terms of relationships with other relevant instruments was high and in the expected direction, and documentation about sensitivity and specificity was good but varied between

studies depending on the cut-off score used, diagnostic method, and possibly sample (post- or perinatal). The translation procedures have been described for some languages. The EPDS is rated at level 4 – Test with a high level of quality.

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Name of the test:	**Overall assessment of quality:**
Generalized Anxiety Disorder Scale 2-item (GAD-2)	2

Authors: Lene-Mari P. Rasmussen & Monica Martinussen

Documentation and literature: The literature search identified two Nordic articles, which were included.

Test taker/informant: Adults

Purpose/use: To screen for generalized anxiety disorder (GAD), and other anxiety disorders.

Description of the test: The Generalized Anxiety Disorder Scale – 2 items (GAD-2) is a short version of the screening measure, the Generalized Anxiety Disorder Scale – 7 items (GAD-7), developed by Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues (2006). GAD-2 comprises the first two questions of GAD-7. The items are rated on a four-point scale (0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day), where the respondents assess how often the symptoms have been bothering them the last two weeks. Generally, if the sum score exceeds 3 points, further diagnostic evaluation for GAD is needed. The GAD-2 can also be used to screen for panic disorder, social anxiety disorder, and post-traumatic stress disorder (Kroenke et al., 2007).

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Evaluation of the documentation (reliability, validity and norms): Within the Nordic countries, results from a Finnish study (Kujanpää et al., 2014) of 150 patients who were high utilizers of healthcare (Mage = 62.7, SD = 13.0) from different municipal health centers indicated that GAD-2 was a valid measure for identifying GAD in primary healthcare. Sensitivity was 83% and specificity was 90%, based on the 3-point cut-off. Sensitivity and specificity were lower for other anxiety disorders. A Norwegian study (Berge et al., 2019) among heart patients (N = 232) with a mean age of 72 (SD = 11.3) found that among patients reporting over the cut-off on the screening tool (≥ 2 in this study), 73% also scored above cut-off on the Hospital Anxiety and Depression Scale (HADS). This implied that GAD-2 could be used to screen for anxiety among heart patients. It may, however, be discussed whether the Nordic studies include the target population relevant for this evaluation as they are older and have more health problems. Internationally, Plummer et al., (2016) conducted a systematic review of studies that have validated the English version of GAD-2 towards "gold standard" clinical interviews/diagnosis. They found acceptable pooled sensitivity and specificity values at a cut-off of 3 [sensitivity: 0.76 (95% CI 0.55–0.89), specificity: 0.81 (95% CI 0.60–0.92)], on the accuracy of the GAD-2 for identifying GAD. GAD-2 also had moderate sensitivity, and variable specificity in detecting other anxiety disorders (with a 3-point cut-off). Results were acceptable, but variable, indicating that more research is warranted regarding the accuracy of the GAD-2. Overall, the limited documentation within the Nordic countries regarding the psychometric properties places the GAD-2 at level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Generalized Anxiety Disorder Scale 7-item (GAD-7)	4

Authors: Monica Martinussen & Lene-Mari P. Rasmussen

Documentation and literature: The literature search identified six articles based on Nordic samples, which were included.

Test taker/informant: Adults.

Purpose/use: Screening for generalized anxiety disorder (GAD), and other anxiety disorders.

Description of the test: The Generalized Anxiety Disorder Scale – 7 items (GAD-7) was developed by Robert L. Spitzer, Kurt Kroenke, Janet B.W. Williams, and Bernd Löwe (2006). The items are rated on a four-point scale (0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day), where the respondents assess how often the symptoms have been bothering them in the previous two weeks. Generally, if the score exceeds 10 points, further diagnostic evaluation for GAD is needed (Kroenke et al., 2010), but some studies have used 8 points as the cut-off score (see e.g., Knapstad et al., 2020). The GAD-7 can also be used to screen for panic disorder, social anxiety disorder, and post-traumatic stress disorder (Kroenke et al., 2007).

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Evaluation of the documentation (reliability, validity and norms): A Norwegian treatment study indicated good internal consistency for the scale (alpha = .83) based on a patient sample (*N* = 774) (Knapstad et. al, 2020). There were similar findings in a Swedish treatment study (*N* = 78) (Cronbach's alpha = .88) (Rozental et al., 2018). In a large population-based study in Finland (Kujanpää et al., 2014) (*N* = 5480), the results indicated that people screening positive on GAD-7 (≥ 10) had over twice as many healthcare visits as those who tested negative, and an even larger difference was detected for mental healthcare visits. Results from a sample of 150 Finnish patients who were high utilizers of primary healthcare from different municipal health centers indicated that GAD-7 was a valid measure for identifying GAD. Sensitivity was 100% and specificity was 82.6% when predicting diagnosed anxiety in a psychiatric interview, based on a 7-point cut-off score (Kujanpää et al., 2014). Another population-based study among adolescents in Finland (*N* = 111,171, age 14–18) indicated that the internal consistency of GAD-7 was good (Cronbach's alpha = .91), and the instrument's unidimensional factor structure was supported. The associations of GAD-7 sum scores with self-report measures of depression and social anxiety supported the construct validity (Tiirikainen et al., 2019). In a study of 469 female Finnish employees, GAD-7 was correlated with a headache impact test as expected according to the authors (Malmberg-Ceder et al., 2019). Internationally, Plummer et al., (2016) conducted a systematic review of studies that have validated GAD-7 towards "gold standard" clinical interviews/diagnosis. None of the 11 included studies were from the Nordic countries. They found acceptable pooled sensitivity and specificity values with a cut-off of 8 (sensitivity = 0.83, specificity = 0.81) when predicting diagnosed anxiety disorder. Overall, there is adequate support for the psychometric properties of the test, especially the Finnish language version. The GAD-7 is rated at level 4 – Test with a high level of quality. There is still a lack of research based on pregnant and postpartum women.

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Name of the test:	**Overall assessment of quality:**
Lausanne Trilogue Play (LTP)	2

Authors: Lene-Mari P. Rasmussen & Monica Martinussen

Documentation and literature: The literature search identified two Swedish articles, and an additional search identified two Finnish studies relevant for inclusion.

Test taker/informant: Both parents are observed interacting with their children, primarily babies up to 12 months, but it can also be used with older children. There is also a version for expectant parents, which uses a doll during the interaction and play.

Purpose/use: Observational instrument to assess co-parenting alliance and interactions with the child.

Description of the test: Fivaz-Deupeursinge and Corboz-Warnery (1999) developed the LTP model, which is a semi-standardized tool to observe family interactions. During the play sessions both parents are video recorded, and then the triadic interactions between the child and the parents are coded. The families are placed in a triangle and asked to interact in four pre-defined situations: (1) one parent playing with the child and the other one observing; (2) switching roles, with the other parent playing with the child; (3) both parents interacting; and (4) parents interacting with each other, and not the child. Observation of expectant parents includes role-playing with a doll in similar situations (Carneiro et al., 2006). Different scoring systems have been used to assess the interactions in LTP.

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Evaluation of the documentation (reliability, validity and norms): Two Swedish studies from the same population-based samples have evaluated the LTP method (Hedenbro & Rydelius, 2014, 2019). The studies investigated the communicative development of babies (aged 3–48 months) and how the triadic interactions between the child and parents were associated with peer and social competence at the age of 4 years (N = 15) and again at 15 years of age (N = 17). Results indicated an association between babies' early communicative abilities, and later peer and social competence based on correlations. The Child and Parents' Interaction Coding System (CPICS) is used to assess LTP; however, minimal psychometric properties are reported, referring only to a previous study by Hedenbro and Lidén (2002) reporting reliability tests between observers using Pearson correlations. Two Finnish studies from the same sample (N = 120 families) examined parents' psychological well-being and self-efficacy (Korja et al., 2015), and mother's marital satisfaction (Korja et al., 2016), and how this was associated with the triadic family interactions. They found that maternal depression and anxiety were negatively related to family interactions and that mother's marital satisfaction was related to family relationships. In these studies, LTP was coded using the Family Alliance Assessment Scale (FAAS; Favez et al., 2011), which contains seven theoretical concepts on 15 scales and has shown good inter-rater reliability and good validity based on comparisons between different Swiss samples, and the parent self-reports. Based on the limited documentation of the different scoring systems used and small sample sizes, the instrument is rated at level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Marschak Interaction Method (MIM)	2

Authors: Marte Rye & Lene-Mari P. Rasmussen

Documentation and literature: The literature search identified 29 articles of which two were included in the evaluation. Author correspondence resulted in the additional inclusion of two studies. The MIM is currently under evaluation for the online journal PsykTestBarn (Rye & Drozd, submitted). Two rating systems are developed in the Nordic countries and are therefore included in this evaluation; the Dyadic Emotional Interaction Style (D-EIS; Salo & Mäkelä, 2018) and the Marschak Interaction Method of Psychometrics (MIM-P; Hart, 2019).

Test taker/informant: Caregivers and children between 1 and 18 years.

Purpose/use: Play-based observation method to assess parent–child interactions.

Description of the test: The Marschak Interaction Method (MIM) is often used together with the play therapy intervention Theraplay (Theraplay Institute, 2017), which reflects the domains of engagement, nurture, challenge, and structure. MIM consists of sets of tasks performed by the caregiver and the child together. The sessions (which last 30–60 minutes each) are videotaped to allow for later identification of patterns reflecting the quality of the parent–child relationship.

Copyright/available from: The Theraplay Institute. Training in D-EIS and MIM-P is needed.

Evaluation of the documentation (reliability, validity and norms): The MIM has not been standardized and normed, and several different rating systems exist. In D-EIS, the structure and the challenge domain are combined in the Parental Guidance scale due to high intercorrelations between the scales (Salo & Mäkelä, in press), and a playfulness scale is added. Each scale is scored on a scale from 1 to 5, where a lower score indicates problematic models of interaction and a higher score indicates positive interaction, with a score of 3 as the limit of concern. Two validation studies concerning the youngest age group is summarized in Salo & Mäkelä (in press). In the first study (N = 33 mother–child dyads, children 1 year old), convergent validity was supported in terms of correlations between D-EIS and assessments of emotional availability and parental reflective functioning. In the other study (N = 43 parent–child dyads, child mean age 4.6 years; SD = 2.6 years), inter-rater reliability ranged from .81 to .93 in different domains, and the D-EIS differentiated between groups of children, with a child psychiatric group scoring the lowest. In a thesis by Munger (2019) on a US sample of 50 parents and children aged 18–42 months, regression and correlation results partly supported the convergent validity of D-EIS. D-EIS was related to social and emotional risk but not the other assessments used, and it predicted intervention need. The MIM-P consists of five dimensions (structure, relational, engagement, nurture, and challenge) that are scored separately for parents and children, as well as an interaction score, on a scale from 1 to 9. Lower scores indicate problematic interaction (1–3; red zone) and higher scores indicate positive interaction (7–9; green zone). MIM-P has not been validated for children aged 0–3 years. The existence of several rating systems complicates an overall evaluation of validity and reliability, but there seems to be a need for more research on all ratings systems for the age group 0–3, hence MIM is placed on evidence level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Modified Checklist for Autism in Toddlers (M-CHAT) and revised version (M-CHAT-R/F)	3

Authors: Kirsi Peltonen & Monica Martinussen

Documentation and literature: A literature review was done and 13 relevant publications identified: Baird et al., 2000; Baron-Cohen et al., 1996; Chlebowski et al., 2013; Dumont-Mathieu & Fein, 2005; Höglund Carlsson et al., 2010; Kleinman et al., 2008; Miniscalco et al., 2018; Nygren et al., 2012; Robins et al., 2001, 2014, 2018; and Stenberg et al., 2014.

Test taker/informant: Parents/caregivers.

Purpose/use: To identify early indicators of autism.

Description of the test: M-CHAT (Dumont-Mathieu & Fein, 2005; Robins et al., 2001) is a 23-item parent report checklist that screens for symptoms of autism in toddlers aged 16–30 months. It can be administered by the healthcare provider without prior education. It takes 5–10 minutes to complete (with "yes" or "no" responses). For the majority of questions, a response of "yes" indicates typical development. However, for four of the questions, a response of "yes" is flagged as indicative of an ASD diagnosis. The telephone interview is administered to a caregiver of the child who screened positive. M-CHAT was developed on the basis of the original instrument, CHAT, which includes 30 items (Baron-Cohen, Allen, & Gillberg, 1992), in order to improve the sensitivity of the instrument. The revised version of M-CHAT with structured follow up-questions (M-CHAT-R/F) was developed in order to reduce the number of cases that initially screen positive and need the follow-up, while maintaining high sensitivity (Robins et al., 2018).

Copyright/available from: The M-CHAT and M-CHAT-R/F are copyrighted instruments available at no charge for clinical, research, and educational purposes (www.mchatscreen.com).

Evaluation of the documentation (reliability, validity and norms): The M-CHAT has been shown to have good psychometric properties in large samples in the US and Nordic countries. First, three studies were conducted among American toddlers. In Robins and colleagues' (2001) study among toddlers aged 18–24 months (*N* = 1293, unselected pediatric population together with the high-risk early intervention population), the reliability was found to be adequate both for the entire checklist, α = .85 and for the six critical items, α = .83. Based on discriminant function analysis, cut-offs lead to sensitivity of .87–.97, specificity of .95–.99, positive predictive power (PPV) of .36–.80, and negative predictive power of .99 depending on which score was used when predicting DSM-IV diagnosis for autistic disorders. In Kleinman and colleagues' (2008) study among toddlers aged 16–30 months from low- and high-risk sources (*N* = 3793), the PPV for M-CHAT was .36 for the initial screening and .74 for the screening plus follow-up telephone interview. When separating referral sources, PPV was low for the low-risk sample but acceptable with the follow-up telephone interview. In Chlebowski's (2013) study, 54% of children who screened positive on the M-CHAT presented with an autism spectrum disorder. Second, a study among 18-month-old Norwegian toddlers was conducted. Stenberg et al. (2014, *N*= 52026) found that M-CHAT without follow-up interview had a specificity of 92.7% and a sensitivity of 34.1% when predicting clinical diagnoses. The test is sometimes used in combination with clinical assessments, such as observation made by trained nurses of the child's joint attention abilities (JA-OBS) (Nygren et al., 2012, *N* = 3999; Miniscalco et al., 2018, *N* = 176) or other measures, such as the Screening Tool for Autism in Toddlers & Young Children (Robins, 2014). The internal consistency of the measure is good, and the so is the specificity when predicting diagnoses. The sensitivity is more variable between studies. The measure is rated at level 3 –

Test with a good level of quality, especially when followed up by phone calls.

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Name of the test:	**Overall assessment of quality:**
Parent-Child Early Relational Assessment (PCERA)	2

Authors: Taina Laajasalo & Marko Merikukka

Documentation and literature: Anke et al., 2019; Clark, 1985, 1999; Haapsamo et al., 2013; Korja et al., 2008, 2010; Lotzin et al., 2015; Misund et al., 2016; and Savonlahti et al., 2005.

Test taker/informant: A trained professional observes and rates a five-minute free-play situation between the parent and the child.

Purpose/use: PCERA measures the quality of the parent–child relationship by assessing the affective and behavioral characteristics of their interaction.

Description of the test: The Parent-Child Early Relational Assessment (PCERA; Clark, 1985) is an observa-tional method for measuring the affective and behavioral characteristics present in the interaction between the parent and a child aged 0–60 months. Mother–infant interaction in a free-play situation lasting five minutes is video-recorded and analyzed using the PCERA method.
The original PCERA (Clark, 1985, 1999) consists of 65 items:
- 29 parental items (forming three parent scales: positive affective involvement and verbalization; negative affect and behavior; and intrusiveness, insensitivity, and inconsistency)
- 28 infant items (forming three infant scales: positive affect, communicative, and social skills; quality of play, interest, and attentional skills; and dysregulation and irritability)
- 8 dyadic items (forming two dyadic scales: mutu-ality and dyadic disorganization and tension).
The amount, duration, and intensity of affect and behavior are rated. All items are rated on a five-point Likert scale (1 = area of concern, 5 = area of strength). High PCERA scores indicate positive affect and behavior. The amount, duration, and intensity of affect and behavior are rated. All items are rated on a five-point Likert scale (1 = area of concern, 5 = area of strength). High PCERA scores indicate positive affect and behavior.

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Evaluation of the documentation (reliability, validity and norms):
Reliability: In a review by Lotzin et al. (2015), 24 observational tools for assessing parent–infant interaction evaluated for the psychometric soundness was evaluated. According to this systematic review, PCERA has demonstrated evidence of adequate internal consistency, based on the Cronbach's α test statistic, and inter-rater reliability. Although no Scandinavian studies have concentrated specifically on the psychometrics of the PCERA, several Scandinavian studies have nevertheless provided information of the reliability indices of the instrument. In a Norwegian study by Misund et al. (2016) the inter-rater reliability was assessed by calculating the mean agreement percentage between two raters. The mean of inter-rater agreements was 80% when assessing parent–infant interaction when the infant was aged 6 months (corrected age for preterm babies) and 81% when the infant was aged 18 months. In the same study, Cronbach's α coefficients were calculated to assess the internal consistency of PCERA parent, infant, and dyadic subscales. Alphas ranged from acceptable to excellent. In a Finnish study by Kivijärvi et al. (2005), 32 randomly selected mother–infant dyads with their 3- and 12-month-old infants in free-play and feeding situations (totaling 128 mother–infant interaction tapes) were observed by two researchers. The average percentage of agreement computed from all 65 PCERA items was 79% (when collapsing the five-point scale of the items into three categories). For individual items the kappa coefficient varied from 0.3 to 1.0. Similarly, high overall agreements between raters have been reported in other Finnish studies (e.g. Savonlahti et al. 2005;

Korja et al., 2010; Haapsamo et al., 2013).

Validity: In Lotzin et al. (2015) several domains of validity were assessed. Based on a review of studies with credible quality, the PCERA demonstrated adequate content validity and factorial validity. No evidence on convergent or divergent validity, discriminant validity, and criterion validity was reported. In an early study by Clark (1999) evidence for convergent and discriminant validity was reported. In Scandinavian studies, PCERA has evidenced concurrent validity with the Working Model of the Child Interview (WMCI; Korja et al., 2010). Further, in several Scandinavian studies the PCERA has established its ability to differentiate between high-risk parent–infant dyads and normative dyads. A Norwegian study (Anke et al., 2019) compared mother–infant dyads where the mother had a bipolar disorder (n = 26) to dyads where the mother had no mental disorder (n = 30). Significantly more concerns in mother–infant interactions at 3 months postpartum were observed in all three PCERA domains (maternal behavior, infant behavior and dyadic coordination) when the mother suffered from bipolar disorder. The effect sizes were from medium to large, except on one subscale. Savonlahti et al. (2005) compared substance abusing mothers (n = 14) to mother–infant pairs (n =12) with only minimal clinical risks. Only infant and dyad items of the PCERA were used in this study. Differences between the two groups were not statistically significant for infants' interactive capacities. However, for items reflecting dyadic interaction, more interactive deficiencies among high-risk mother-infant dyads were found: lower interactive capacity between the mother and the child was found in the feeding situation, shown especially as lack of "mutuality" in the interaction. Further, the PCERA has also been found to differentiate between mothers who have depressive symptoms and mothers who do not have symptoms of depression: in Korja et al. (2008) PCERA scores on the maternal positive affective involvement scale and the maternal positive communication scale were lower in mothers with depressive symptoms.

To summarize, the PCERA has frequently been used in Scandinavian studies (18 publications located in the literature search). None of the Scandinavian studies were psychometric studies; rather, they were studies where the instrument has been used as a measure of parent–infant interaction for the purposes of the study. Nevertheless, these studies give some limited information of the reliability and validity of the test. No norm studies utilizing Scandinavian samples were found. Thus, PCERA is assessed to be at level 2 – Test with some but inadequate level of quality.

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Name of the test:	**Overall assessment of quality:**
Parenting Stress Index (PSI)	3

Authors: Monica Martinussen & Charlotte Reedtz

Documentation and literature: One review article in PsykTestBarn (Kornør & Martinussen, 2011) and five articles from four studies (Huhtala et al., 2012; Korja et al., 2014; Landsem et al., 2014; Östberg et al., 1997; Sarfi et al., 2013) were included.

Test taker/informant: Parents (with children 0–12 years old).

Purpose/use: To assess parental stress.

Description of the test: The Parenting Stress Index (PSI) is a questionnaire designed to evaluate the magnitude of stress in the parent–child system, and includes three major domains of stress: child characteristics; parent characteristics; and situational/demographic life stress. Two domains, Child and Parent, combine to form the Total Stress scale. The Life Stress scale provides information about the amount of parent stress caused by factors outside the parent–child relationship. Within the Child Domain, there are six subscales (Distractibility/Hyperactivity, Adaptability, Reinforces Parent, Demandingness, Mood, and Acceptability). Within the Parent Domain, seven subscales include (Competence, Isolation, Attachment, Health, Role Restriction, Depression, and Spouse/Parenting Partner Relationship). The test was developed by Abidin (1982, 1995) and the current version is the fourth, which includes 120 items and takes approximately 20 minutes to complete. A short version (36 items) is also available. According to the test publisher, PSI has been translated into more than 30 languages.

Copyright/available from: Pearson Assessment Resources, USA (PAR) (https://www.parinc.com/Products/PKey/333).

Evaluation of the documentation (reliability, validity and norms): The PsykTestBarn review (Kornør & Martinussen, 2011) included five articles based on three independent Norwegian intervention studies. The review concluded that the reliability was excellent (total score, child and parent domains), but there was so far insufficient evidence regarding the construct validity of the Norwegian version. A more recent Norwegian intervention study examined changes over time for term and preterm babies and indicated less stress in the intervention group and better development of stress over time compared to the control group (Landsem et al., 2014). A small study of children born to mothers in opioid maintenance treatment (OMT) in Norway ($N \approx 70$) (Sarfi et al., 2013) indicated good reliability (alpha = .83 Total score, .79 for Parent domain and .77 for Child domain). In an intervention study a Swedish version of the PSI was examined in three samples of mothers (approx. 1300) (Östberg et al., 1997). Factor analyses partly supported the original factor structure and an overall secondary factor was detected supporting the use of the Total score. High alpha coefficients were found (.89 Total score) and test-retest correlations (.89) indicated good stability over time (one month). The construct validity was supported by correlations with overall ratings of parental stress, reported child problems, mothers' depression and lack of support (Östberg et al., 1997). The Finnish version of PSI was used in a study of very low birthweight infants ($N = 182$) (Huhtala et al., 2012). Cognitive delay (at 2 years) was associated with more parenting stress among fathers, and mothers reported more parenting stress related to accepting the infant with cognitive delay (Huhtala et al., 2012). A second article based on the same study reported an association between early excessive crying behavior and parental stress at the age of 2 and 4 years (Korja et al., 2014). The majority of Nordic studies are probably conducted on the third edition of PSI, and not the most recent fourth edition. There is considerable evidence supporting the reliability of the test, some studies supporting the construct validity, but norms seem to be lacking for the

Nordic languages, placing the test at level 3 – Test with a good level of quality.

References:

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Name of the test:	**Overall assessment of quality:**
Parents' Evaluation of Development Status (PEDS©)	2

Authors: Lene-Mari P. Rasmussen & Monica Martinussen

Documentation and literature: No relevant articles were located in the literature search.

Test taker/informant: Parents of children from birth (to 5 months) and to 8 years of age.

Purpose/use: PEDS assesses children`s development in language, motor, self-help, early academic skill, behavior, and social-emotional/mental health.

Description of the test: PEDS is a 10-item brief screening and surveillance tool to assess children`s development, behavior and mental health, developed by Dr. Frances Page Glascoe. It takes about two minutes to complete, either filled out by the parents, or conducted as a short interview by healthcare personnel. PEDS consists of questions covering areas such as language, fine and gross motor skills, behavior, socialization, self-care and learning (e.g., "Do you have any concerns about how your child behaves?"). The parents answer "yes", "no", or "a little", and elaborate in the comments field if they have any concerns. Based on parents' concerns, an estimate of developmental risk is categorized in different paths (low, medium or high), and used for further assessment if needed. There is also a PEDS: Developmental Milestones (PEDS:DM), and a modified version called the Survey PEDS. The PEDS:DM consists of between six and eight items depending on the age range, and each item taps into different developmental domains (fine and gross motor, expressive language, receptive language, self-help, social-emotional, and for older children, reading and math). The Survey PEDS consists of 12 close-ended questions, often used in population studies and not as a clinical assessment tool.

Copyright/available from: PEDStest.com, LLC holds the international copyright. The tests and other material may be ordered online at https://pedstest.com/static/Ordering/.

Evaluation of the documentation (reliability, validity and norms): No Nordic studies were identified, but according to the test's webpage, an evaluation of PEDS is ongoing in Iceland (PEDStest, 2020). Outside the Nordic countries, PEDS has been translated into many languages, and used worldwide (Woolfenden et al., 2014). Psychometric findings on standardization, reliability, validity, and accuracy seems to be reported in the second version of the test manual from 2013 (PEDStest, 2020). Hence, a list of results from the manual implies that PEDS was re-standardized and re-validated in a representative sample of 47,531 families from 27 states in the US and Canada, and different reliability and validity assessments have been conducted; however, no documentation confirming this has been possible to retrieve. Glascoe et al. (2019) reported a sensitivity of 74–96% and specificity of 73–83% for PEDS, which was based on 44 published studies where PEDS was administered correctly, but no information regarding these studies is given, including where they are published (Glascoe et al., 2019). For PEDS:DM, the same study reports a sensitivity of 83–84% and likewise for specificity. Based on the lack of documentation, the test is rated at level 2 – Test with some but inadequate level of quality.

References:

Glascoe, F. P., Gellasch, P., & Chen, V. (2019). When do clinicians decide to screen children for mental health-behavioral-developmental delays/disorders: Is it time to reconsider policy recommendations? *The Journal of Pediatrics*, *206*, 248–255. https://doi.org/10.1016/j.jpeds.2018.08.084

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Name of the test: The resource form/barometer	**Overall assessment of quality:** 1
Authors: Kirsi Peltonen & Marko Merikukka	
Documentation and literature: Kaljunen et al., 2005.	
Test taker/informant: Mothers, pre- and post-natal.	
Purpose/use: To assess the resources of and strain factors for first-time mothers and fathers.	
Description of the test: The form includes three main categories: (1) Personal resources of parents (including sections on parents' developmental history, with four items, and health and life habits, with five items); (2) the family's internal resources (including sections on partner relationship, with five items, growth to parent and parenthood, with five items, and material resources, with five items); and (3) The external resources of the family (including a section on social support, with five items).	
Copyright/available from: Unknown.	
Evaluation of the documentation (reliability, validity and norms): According to Kaljunen et al., (2005), the usefulness of and necessity for the Resource Form were evaluated through structured questions concerning each specific item, among researchers studying maternal and child health clinics (n = 13), public health nurses (n = 43) and first-time mothers and fathers (n = 33). The criteria of the resource form were evaluated as important, clear and comprehensive, with agreement by 85% of nurses and 73% of parents. The Cronbach alpha for usefulness and necessity of the measure was .98 for the whole form, .94 for internal resources of the family, .68 for external resources of the family and .83 for personal resources of parents. Because only the usefulness and necessity of the items were evaluated, not the psychometrics of the questionnaire as such, the measure is rated at level 1–Test with no or a low level of quality.	

References:

Kaljunen, L., Pelkonen, M., & Hakulinen-Viitanen, T. (2005). Voimavaralomakkeen kehittäminen ensimmäistä lastaan odottavan perheen voimavaraisuuden tunnistamiseksi [ad English translation of title]. *Hoitotiede,18*, 132–139.

Name of the test:	**Overall assessment of quality:**
TWEAK	2

Authors: Henriette Kyrrestad & Sabine Kaiser

Documentation and literature: The literature search identified 19 articles, of which two were included in the evaluation (Præstegaard et al., 2018; Weile et al., 2020).

Test taker/informant: Pregnant women.

Purpose/use: To identify pregnant women who are risk drinkers.

Description of the test: TWEAK was developed by Russell (1994). The test name is an acronym for Tolerance, Worries, Eye-opener, Amnesia and K(C)ut-down. Tolerance is measured by one of the following questions: (1a) "How many drinks can you hold?"; and (1b) "How many drinks does it take to make you feel high?". Worries refers to question number two, "Have close friends or relatives worried or complained about your drinking in the past year?". Eye-opener refers to question number three, "Do you sometimes take a drink in the morning when you first get up?" Amnesia refers to item four, "Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?" and K(C)ut-down to number five, "Do you sometimes feel the need to cut down on your drinking?". The maximum score on TWEAK is seven points. A positive answer on the Tolerance or the Worries question counts for two points, while a positive answer on the Eye-opener, Amnesia and K(C)ut-down questions counts for one point. A total score of two or more points indicates harmful drinking in accordance with Russell (1994). The test takes less than two minutes and is usually done in a face-to-face interview. The scoring and interpreting of the results takes about a minute.

Copyright/available from: The TWEAK and scoring instructions are available at no cost. No training is required.

Evaluation of the documentation (reliability, validity and norms): The two included studies were both conducted in Denmark (Præstegaard et al., 2018; Weile et al., 2020). Præstegaard et al. (2018) tested the ability of TWEAK to screen risk drinking during pregnancy among 1895 women attending routine antenatal care using face-to-face interviews, with assessments from experienced midwives as a criterion. The translation process was described, and included back-translation. The study presented different cut-off scores with corresponding sensitivity, specificity, positive- and negative predictive values for the screening test for two groups (periconceptional risk drinking and risk drinking during pregnancy), which again were divided into different risk groups. Præstegaard et al. (2018) concluded that the ability of the TWEAK to identify risk drinking during pregnancy was quite low, but marginally better than for identifying periconceptional risk drinking. Weile et al. (2020) screened 447 pregnant women who reported alcohol intake in pregnancy, with the TWEAK as part of an online questionnaire. Their findings showed that the answers to the TWEAK items were complete except for the first item, to which only 9% responded, suggesting that this item may be too complex when TWEAK is self-administrated. There were no norms or reliability estimates reported in any of the studies. This, combined with the relatively low sensitivity estimates, suggests insufficient documentation of the psychometric properties. The TWEAK Alcohol Screening Test is rated on level 2 – Test with some but inadequate level of quality.

References:

Præstegaard, C., Kesmodel, P. S., & Kesmodel, U. S. (2018). Is TWEAK a valid screening questionnaire to identify alcohol risk drinkers among pregnant women in Denmark? *Acta Obstetricia et Gynecologica Scandinavica*, *97*(4), 483–490. https://doi.org/10.1111/aogs.13314

Russell, M. (1994). New assessment tools for risk drinking during pregnancy: T-ACE, TWEAK, and Others. *Alcohol Health and Research World*, *18*(1), 55–61.

Weile, L. K. K., Wu, C., Hegaard, H. K., Kesmodel, U. S., Henriksen, T. B., Ibsen, I. O., & Nohr, E. A. (2020). Identification of alcohol risk drinking behaviour in pregnancy using a web-based questionnaire: Large-scale implementation in antenatal care. *Alcohol and Alcoholism*, *55*(2), 225–232. https://doi.org/10.1093/alcalc/agz100

Name of the test: Vane-psy [Vauvan psyykkinen ja neurologinen kehitys]	**Overall assessment of quality**: 3
Authors: Kirsi Peltonen & Marko Merikukka	
Documentation and literature: Mustonen et al., 2006.	
Test taker/informant: Children aged 0–2 years.	
Purpose/use: To monitor the development of infants and toddlers.	
Description of the test: Vane was developed at North Karelia Central Hospital in Finland in connection with the monitoring of preterm development. The assessment method is based on the Touwen test (Touwen, 1976) and Structured Observation of Motor Performance in Infants (SOMP-I) (Persson & Strömberg, 1993, 1995), but items based on critical literature in the field have been added (Fagan et al., 1986; Prechtl et al., 1997). In addition, the method includes the assessment based on vision and hearing behavior. Vane includes detailed instructions for assessing the neurological development of infants aged 1½, 4, 8, and 18 months. Each assessment contains 26 to 29 sections, some of which can be assessed on the basis of a parent interview.	
Copyright/available from: Available in Finnish from The Finnish Institute for Health and Welfare (THL) at https://thl.fi/fi/web/lastenneuvolakasikirja/terveystarkastusten-menetelmat/neurologis-kognitiivinen-kehitys/vanepsy	
Evaluation of the documentation (reliability, validity and norms): Mustonen et al. (2006) studied which combination of sections in Vane are most likely to find significant neurocognitive abnormalities for premature infants aged 1½, 4, and 8 months (n = 24). The combination of the Bailey test and clinical neuro-logical examination (cerebral palsy and/or Bailey MDI < 85) at the age of 3 years was used as a reference. The mutual superiority of Vane and ultrasound in terms of problem prediction was also compared. All children with abnormally neurocognitive development had a slightly or markedly abnormal overall score in all Vane assessments. At 4 months of age, all abnormally developed children had a distinctly abnormal Vane, whereas none who developed normally had a distinctly abnormal Vane. For those with an abnormal overall Vane score, the results of the Bailey test were clearly different from those with an abnormal overall Vane score. Ultrasound failed to predict the corresponding Bailey test result. Vane sensitivity values ranged from 0.83–1.0 and specificity values from 0.92–0.93 at 1½, 4, and 8 months of age. Vane is assessed to be at Level 3 – Test with a good level of quality, since its sensitivity and specificity are shown to be adequate in one Nordic study, with adequate methodological quality.	

References:

Fagan, J. F., Singer, L. T., Montie, J. E., & Shepherd, P. A. (1986). Selective screening device for the early detection of normal or delayed cognitive development in infants at risk for later mental retardation. *Pediatrics, 78*, 1021–1026.

Mustonen, K., Hermanson, E., Koivu, M., Fellman, & von Wendt, V. L. (2006). Kuinka Vauvan neurologinen arviointi -menetelmä Vane pystyy ennustamaan pienten keskosten neurokognitiivista kehitystä? *Suomen Lääkärilehti, 9*, 955–961.

Persson, K., & Strömberg, B. (1993). A protocol for structured observation of motor

performance in preterm and term infants. *Upsala Journal of Medical Sciences, 98*, 65–76.

Persson, K., & Strömberg, B. (1995). Structured Observation of Motor Performance (SOMP-I) applied to neonatally healthy full-term infants at the ages of 0–10 months. *Early Human Development, 43*, 205–24.

Prechtl, H. F. R., Einspieler, C., Cioni, G., Bos, A. F., Ferrari, F., & Sontheimer, D. (1997). An early marker for neurological deficits after perinatal brain lesions. *Lancet, 349*, 1361–1363.

Touwen, B. (1976). *Neurological development in infancy.* Clinics in Developmental Medicine No 58. William Heinemann Medical Books Ltd.

Name of the test:	**Overall assessment of quality:**
VAVU – Interview to support early parent-child interaction [Varhaista vuorovaikutusta tukeva haastattelu]	1

Authors: Piia Karjalainen & Marko Merikukka

Documentation and literature: The literature search found no documentation or literature about the intervention.

Test taker/informant: A healthcare professional conducts the interview and completes the questionnaire.

Purpose/use: The purpose of the interview is to help identify and address perceptions, concerns, and potential difficulties related to pregnancy, childbirth, and the baby. The interview helps to identify the family's resources, the need for support and the support available, and to find solutions.

Description of the test: The early interaction interview is designed to be used with pregnant women, mothers who have given birth, and families with children. The interview is conducted at home during the nurse's health visit, preferably in the presence of both parents, with the father attending all or part of the time according to the mother's wishes. The interview form serves as a framework for discussion. The interviews are conducted during pregnancy (during weeks 27–40) and postpartum (4–8 weeks after childbirth). The pregnancy interview form consists of 11 sections: feelings about the woman's current pregnancy; support for the family; anticipated changes in family life; the self-image of the pregnant woman; the self-image of the father; parents' expectations and views about their unborn baby; expectations about childbirth; expectations about feeding the baby; interaction between parents; family economy and environment; and life events. Some questions are answered yes/no, and others are multiple choice. The postpartum interview consists of 10 sections: childbirth; mental health; the attitudes of the family and received support; parents' concerns about the child; the parents' views of the child; mother–child interaction; interaction between the father/other parent and the child; parents' resources to meet child's needs; family economy and environment; and life events. All the questions are open-ended.
On the basis of the VaVu interview forms, a structured assessment method suitable for the reception work of nurses and doctors has been developed for children aged 0–18 months to assess parental interaction. The method is based on the issues raised in the VaVu interview and discussions, but also on the assessor's observations of the child–parent interaction in the reception situation, both at the behavioral level and in terms of the emotional content of the interaction.
Interaction assessment takes place at three levels: (1) observations of interaction at the behavioral level; (2) observations of the emotional content of the interaction; and (3) the level of parental perceptions of parenthood and relationship to the child that emerge in the discussion. The items on the form are: holding the child; handling the child; talking to the child; smiling at the child; enjoying the child; tolerance of feeling bad; understanding the child's clues and responding to them. The evaluation scale is from 1–5 (5–4 = well-functioning, 3 = no concern, 2–1 = concern or anomaly of the intervention).

Copyright/available from: Available in Finnish from The Finnish Institute for Health and Welfare (THL): https://thl.fi/fi/web/lastenneuvolakasikirja/terveystarkastusten-menetelmat/psykososiaalinen-kehitys/vavu

Evaluation of the documentation (reliability, validity and norms): There are no Nordic or international (European or North American) studies examining the psychometric properties

of the interview forms or the structured interview method. The tests are rated at level 1 – Tests with no or a low level of quality.

Name of the test:	**Overall assessment of quality:**
Whooley Questions	2

Authors: Monica Martinussen & Sabine Kaiser

Documentation and literature: One Nordic (Finland) study was located in the search (Suija et al., 2012). Further search efforts resulted in a meta-analysis (Bosanquet et al., 2015) and three studies from the UK (Darwin et al., 2016, Howard et al., 2018; Littlewood et al., 2018).

Test taker/informant: Adults (including mothers).

Purpose/use: To screen for depression (pre- and postnatal).

Description of the test: The test was developed by Mary Whooley (Wholley et al., 1997). It is comprised of two questions, and if the respondent answers yes to at least one question, further follow-up is recommended (Whooley, 2016). One item is: "During the past month, have you often been bothered by feeling down, depressed or hopeless?" The test is sometimes used with an additional help-question (i.e., "Is this something you feel you need/ want help with?") (Arroll et al., 2003). The test may be used for different groups in primary care, including expectant mothers.

Copyright/available from: The English version is available online from the developer (Whooley et al., 1997; Whooley, 2016): https://whooleyquestions.ucsf.edu/content/home

Evaluation of the documentation (reliability, validity and norms): One Nordic validation study was located (Suija et al., 2012). However, the sample consisted of older adults from the general population in Finland (*N* = 474, age 72–73 years). In this study, the Whooley Questions were compared with the results from a diagnostic interview. The sensitivity was 62.5% and specificity of 88.9% when predicting major depression. No information regarding reliability was reported. A meta-analysis of 10 studies, including the Finnish study (Bosanquet et. al., 2012) and the original US study (Whooley et al., 1997) resulted in a mean sensitivity of 95% and mean specificity of 65% when compared to a gold-standard diagnosis of major depression. The samples included varied in terms of age, gender, and prevalence of depression. Three studies from the UK have examined the test for pregnant women. One study compared the Whooley Questions with the Edinburgh Postnatal Depression Scale (sensitivity of 45.7% and sensitivity of 92.1%; Darwin et al., 2016). Another UK study, using clinical interview as the gold standard, found similar results (sensitivity was 41%, and specificity 95%) among a sample of expecting mothers (*N* = 545; Howard et al., 2018). A third UK study (*N* = 391) by Littlewood et al., (2018) compared the Whooley Questions to depression detected in a self-completed structured assessment during pregnancy (week 20), and 3–4 months after birth (Littlewood et al., 2018). The sensitivity was 85.0% and specificity 83.4%. Similar findings were found postnatal (85.7% and 80.6%). There is a lack of Nordic studies for our target group. No studies reported information regarding test reliability, and the diagnostic accuracy varied a lot between studies, resulting in a rating of level 2 – Test with some level of quality.

References:

Arroll, B., Khin, N., & Kerse, N. (2003). Screening for depression in primary care with two verbally asked questions: Cross sectional study. *British Medical Journal, 327*, 1144–1146. https://doi.org/10.1136/bmj.327.7424.1144

Bosanquet, K., Bailey, D., Gilbody, S., Harden, M., Manea, L., Nutbrown, S., & McMillan, D. (2015). Diagnostic accuracy of the Whooley Questions for the identification of depression: A diagnostic meta-analysis. *BMJ Open,* 9(5), e008913. https://doi.org/10.1136/bmjopen-2015-008913

Darwin, Z., McGowan, L., & Edozien L. C. (2016). Identification of women at risk of depression in pregnancy: Using women's accounts to understand the poor specificity of the Whooley and Arroll case finding questions in clinical practice. *Archives of Women's Mental Health, 19*(1), 41–49.

Howard, L. M., Ryan, E. G., Trevillion, K., Anderson, F., Bick, D., Bye, A., Byford, S., O'Connor, S., Sands, P., Demilew, J., Milgrom, J., & Pickles, A. (2018). Accuracy of the Whooley Questions and the Edinburgh Postnatal Depression Scale in identifying depression and other mental disorders in early pregnancy. *British Journal of Psychiatry, 212*(1), 50–56. https://doi.org/10.1192/bjp.2017.9

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Suija, K., Rajala, U., Jokelainen, J., Liukkonen, T., Härkönen, P., Keinänen-Kiukaanniemi, S., & Timonen, M. (2012). Validation of the Whooley Questions and the Beck Depression Inventory in older adults. *Scandinavian Journal of Primary Health Care, 30*(4), 259–264. https://doi.org/10.3109/02813432.2012.732473

Whooley, M. A. (2016). Screening for depression – a tale of two questions. *JAMA Internal Medicine, 176*(4), 436–437. https://doi.org/10.1001/jamainternmed.2015.8493

Whooley, M. A., Avins, A. L., Miranda, J., & Browner, W. S. (1997). Case-finding instruments for depression: Two questions are as good as many. *Journal of General Internal Medicine, 12*(7), 439–445. https://doi.org/10.1046/j.1525-1497.1997.00076.x

Name of the test:	**Overall assessment of quality:**
Working Model of the Child Interview (WMCI)	2

Authors: Taina Laajasalo & Marko Merikukka

Documentation and literature: The literature search found 10 peer-reviewed articles.

Test taker/informant: A professional conducts the interview, which lasts approximately one hour, with the child's caregiver.

Purpose/use: To assess the parents' internal representations (working models) of their relationship to a particular child.

Description of the test: WMCI is a structured interview used for assessing parents' internal representations (called working models) of their relationship to a particular child. The caregiver is asked to describe a number of areas including: emotional reactions during the pregnancy; child's personality and development; relationship with the infant/child; perceived and anticipated difficulties with infant/child characteristics; reactions to the infant/child's behavior or distress in different contexts; and anticipated difficulties in the infant/child's later development. WMCI can be administered to male and female caregivers from pregnancy onwards. The interview is recorded and transcribed before the content is coded. Six qualitative rating scales, related to factors such as richness of caregiver perceptions and caregiving sensitivity, are followed by two content scales: infant difficulty; and fear for infant safety. In addition, the affective tone expressed by the caregiver during the interview is measured, for example joy, anger, guilt or indifference (Benoit, Parker et al., 1997; Benoit, Zeanah et al., 1997). Results are then used to classify the caregiver's representations into three main categories: (1) balanced; (2) disengaged; or (3) distorted (Benoit, Parker et al., 1997; Benoit, Zeanah et al., 1997). Balanced representations are characterized by caregiver responses that, for example, provide a diverse range of descriptions of the child, display interest in the child and show acceptance of the child's individuality.

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Evaluation of the documentation (reliability, validity and norms): Several studies have investigated the reliability of the WMCI: generally, maternal representation categories (balanced, disengaged, or distorted) have demonstrated good inter-rater reliability. In Benoit, Parker et al. (1997) the inter-rater agreement about overall classification was 85% for the prenatal WMCI and 89% for the WMCI conducted when the infant was 11-months. In a Finnish study (Korja et al., 2009) the inter-rater agreement regarding the three main categories was 0.90. However, three of the six qualitative scales had inter-rater agreements under 0.65 and were excluded from further analysis. The WMCI has also shown good stability (e.g. Benoit, Parker et al., 1997; Theran et al., 2005). In Benoit, Parker et al. (1997), the stability of the WMCI classifications (n = 96) was 80% over 12 months, measured pre- and postnatally, compared to 51% expected by chance alone. Likewise, in a sample of 206 women, the prenatal (third semester) classifications were compared to measurements a year later (infants' first birthday). When the three representations were collapsed into balanced and non-balanced categories, 71% of the sample was stable over time. Mothers who had balanced representations had significantly more stable representations than women who had non-balanced representations. Studies have shown that WMCI has adequate concurrent validity. A review by Vreeswijk et al. (2012) found 24 studies using the WMCI. According to their review, several studies (e.g. Benoit, Parker et al., 1997) have shown that parents' internal representations of their infants are significantly related to Strange Situation classifications (Ainsworth et al., 1978) and Adult Attachment Interview classifications (Main et al., 1985), which are generally considered the "gold standards" for

assessment of the attachment relationships. Balanced representations relate to secure infant attachment, disengaged representations relate to avoidant infant attachment, and distorted representations are related to resistant or ambivalent attachment classifications (Benoit, Parker et al., 1997; Zeanah et al., 1994). Further, a sample of a Finnish study by Korja et al. (2010) consisted of 38 preterm infants and 45 healthy, full-term infants, and their mothers. All were firstborn children of native Finnish-speaking mothers. The study showed that balanced representations measured with the WMCI at 12 months were related to a higher quality of observed mother–infant interaction at 6 and 12 months (measured by the Parent-Child Early Relational Assessment; PCERA). Distorted maternal representations were most strongly related to non-optimal, concerning mother–infant interaction (Korja et al., 2010). The WMCI has also showed predictive ability in several studies (Vreeswijk et al., 2012). For example, in a sample of 96 mothers (mean age 29.2 years) in their third trimester of pregnancy, infants of mothers who had balanced representations of their child prenatally were more likely to demonstrate secure attachment behavior at 1 year of age (Benoit, Zeanah et al., 1997). Finally, the WMCI has evidenced discriminant validity. According to several studies, it distinguishes clinical and non-clinical groups (Vreeswijk et al., 2012); combining the results of several studies in non-clinical populations (n = 513), more than half (53%) of the mothers have balanced representations, while in the clinical groups (n = 399), most representations are classified as either disengaged (23–34%) or distorted (43–44%) and the difference between clinical and non-clinical groups is significant (Vreeswijk et al., 2012). To conclude, there are several international studies providing information on psychometric properties of the WMCI, including a systematic review. However only two Scandinavian (Finnish) studies describing limited psychometric data of the WMCI were found. There were no norm studies based on Scandinavian samples. Thus, the WMCI was given a rating of 2 – Test with some but inadequate level of quality.

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Discussion and conclusion

The overall aim of this report is to assess the evidence base for identified psychosocial interventions and psychological tests that are being used in the Nordic countries during the first 1000 days of a child's life – that is, during pregnancy and the first two years after birth. The report provides an overview and short systematic review of the identified psychosocial interventions and psychological tests sampled from Denmark, Sweden, Finland, Norway, and Iceland.

The final list included a total of 63 psychosocial interventions and 33 psychological tests. Of the 63 psychosocial interventions 57% were rated at level 1, 29% at level 2, 11% at level 3, and 3% at level 4. The large number of available interventions is good news, given the goal of promoting emotional bonding, positive mental health and wellbeing in pre- and postnatal care. However, despite the large number and variety of psychosocial interventions for the youngest children, research documenting the effects of these interventions is scarce. Most interventions identified in this review have not been adequately evaluated, and hence the time and resources spent on these interventions may or may not be well invested. The lack of evidence about interventions should not be taken to mean that the interventions have no effect. This could be true in some cases, but in many cases it simply means that there are no studies that have evaluated the effects. In other cases, studies have been done but not in methodologically sound ways or only in studies conducted outside the Nordic countries (which is a requirement for classification at the highest level). This implies that there is great potential for more Nordic studies that set out to evaluate the effects of available interventions. There are some interventions with good or strong evidence. However, the dissemination of these interventions does not seem to have any more support than interventions with less evidence.

Of the 33 psychological tests, 12% were rated at level 1, 61% at level 2, 15% at level 3 and 12% at level 4. Many of the screening instruments were related to assessing parental risk factors such as mental health problems, alcohol and drug use, and domestic violence. However, for many of them, there did not seem to be sufficient documentation of the predictive validity of the tests used for this purpose. There was a lack of studies in which the test scores were examined in relation to more objective criteria, for example a clinical diagnosis or an outcome. The tests with the highest level of quality included measures of adult mental health, such as anxiety and depression. The majority of the tests used for both children and adults originated outside the Nordic countries, and the psychometric properties related to the Nordic version(s) were examined only to some degree. In general, little was reported about the translation process and cultural adaption, and Nordic norms were frequently missing. It may very well be that these tests have good psychometric properties, but the documentation was missing, and 73% were classified at the two lowest levels, indicating insufficient documentation. As test scores may be used for making decisions related to both parents and their babies, choosing interventions or intervening in other ways, there is a clear need for high quality tests with good psychometric properties (EFPA, 2013).

There was great variation in terms of professional requirements (formal education, training and supervision) for those using interventions and tests. Some were mainly intended to be used in a psychological/medical examination or for treatment, whereas others were intended to be used more freely in different settings, for example as universal preventive efforts. The studies included in the reviews also varied in terms of the participation of the developers of the interventions and tests. It is not unusual for the developer to conduct the first studies, but it is always desirable for further studies to be conducted by researchers independent of the developers. This has not been explicitly reported in reviews, but can be detected from the reference lists attached to each evaluation.

Limitations

In this project, a large number of reviews (N = 96) were conducted in a relatively short time period by a total of 14 researchers. This may have led to some differences in how the reviews were conducted and also in terms of the inclusion/exclusion of studies. For each evaluation, a systematic literature search was conducted. However, in cases where the authors of the evaluation identified a lack of relevant studies in the systematic search, they supplemented the search with a manual search based on their experience and this may have led to variations in the reviews. In order to increase consistency, we established criteria for the inclusion and exclusion of studies, and for how the evidence should be rated. All the authors participated in the same training course to facilitate a joint understanding of the criteria and procedures. As an additional quality assurance, all reviews of tests and interventions were reviewed and approved by one of the editors.

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About this publication

The First 1000 Days in the Nordic Countries Psychosocial Interventions and Psychological Tests: A Review of the Evidence

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