

Literature Review- Best Practices for Working with Parents to Promote Young Children's Development in Family-Child Health (Tipat-Halav) Settings

March 2020

This report was by Inbal Millo, Dr. Nataly Moyal and Dr. Maya Yaari from Goshen, with the support of the Bernard Van-Leer foundation and the Rothschild foundation, to inform an initiative in the Israeli Ministry of Health to update and upskill the work with parent in Tipat Halav services



Background	3
Early Childhood Language Development and Literacy	5
Background	5
Contents of interventions	6
Settings of interventions	8
Main strategies	9
Interventions for early childhood language development and literacy	
References	19
Emotion Regulation and Behavioral Difficulties	21
Background	21
Contents of interventions	22
Settings of interventions	23
Main strategies	24
Staff training	25
Dropout prevention	26
Interventions for early childhood emotion regulation and behavioral difficulties	27
References	42
Parent-child play and playfulness	45
Background	45
Intervention goals	47
Contents of interventions	48
Setting of interventions	49
Main Strategies	50
Intervention Programs for Early Childhood Play	52
Bibliography	60
Parents' Subjective Well-Being	62
Background	62
Contents of interventions	63
Setting of interventions	64
Main strategies	65
Staff training	66
Dropout prevention	66
Intervention programs to improve parents' subject well-being	67
Bibliography	80

Background

Parental behavior during early childhood is a fundamental key in ensuring optimal child development from all perspectives: physical, emotional, social and cognitive. In Israel, Tipat Halav service (Family/Maternal-Child Health Centers), are the first healthcare station for parents and babies. It is a free, universal service, reaching ~95% of the population in Israel across all sectors. Babies have a standard schedule of visits with the Tipat Halav nurse across the first few years of life. The Ministry of Health, in rolling out its new strategy for The First 1000 Days, has found that parent support during the early years is a key issue that the public has expressed a need for that is not being sufficiently met. The Ministry is committed to bringing about change in this area, including in Tipat Halav services. A new vision has been developed for the Tipat Halav service and its critical role in supporting families and promoting optimal child development.

The partnership between the Bernard Van Leer Foundation, Yad HaNadiv Foundation and Israel's Ministry of Health has identified an opportunity to work together on the aspect of nurses' professional development in promoting parent and child outcome. The objective of this initiative is to develop a National Program to Strengthen the Capacity of Tipat Halav Nurses to Support Parents. This initiative is an organisational practice-change process; and it involves building a leadership group, developing knowledge based professional development tools (e.g. training module, protocol, screening tool) and implementing them across the service.

The first phase of the initiative is a nurse-leadership program, involving 35 nurses who constitute the leadership group of the initiative. These nurses undergo in-depth training that focuses on developing and improving leadership skills and change-making abilities and expand and consolidate the professional expertise needed for working effectively with parents. Additionally, the group undergoes an in-depth learning of four selected developmental topics for which specific parenting behaviors can be identified. Then, the group will develop and design tools, solutions, and routines for working with parents to promote these specific parenting behaviors. The development of these tools will combine the professional knowledge and leadership skills acquired in the study program with practical, evidence-based, models that can be implemented by all the nurses in the network.

This work model is based on a **co-design** principle, wherein the decisions, learning methods, and byproducts are manufactured jointly by the leaders and the participants of the process. This will enable a broad and effective transformation of the Tipat Halav network while ensuring the high-

quality of the professional content. In order to ensure the efficacy of the program in influencing parental behavior and children's outcome, the tools and interventions designed will be evidenceinformed and based on best practices that have been proven to be effective in similar settings.

The aim of this review is to map the current evidence on best practices in parent-mediated interventions in the four selected topics and establish the evidence-base for the development and design with the nurses.

Early Childhood Language Development and Literacy

Background

Language development is a critical part of children's overall development. It supports the child's ability to communicate, to express and understand feelings, to think and solve problems, and to develop and maintain relationships. Learning to understand, use and enjoy language is the first step in literacy, and the basis for learning to read and write. Research indicates that children's vocabulary when starting school predicts both word-reading ability at the end of the first year of school and reading comprehension in later years (Duff, Reen, Plunkett, & Nation, 2015). Difficulties in language development may have far-reaching implications. Children who start kindergarten with a disadvantage in reading struggle to perform later as they progress in the school system and are more prone to life-long economic and social disability. Furthermore, Meta-analytic research indicates that language impairment in children doubles the risk for subsequent increases in externalizing behavior problems (Yew & O'Kearney, 2013).

Research emphasizes that rich home literacy environment and exposure to rich oral language are crucial for supporting language development at the critical period of early childhood (Terrell and Watson, 2018). A literate home environment begins with the presence of easily accessible reading and writing materials and is shaped by the child's experiences with print materials, family attitudes about literacy, and adult modeling of reading and writing activities (Roberts, Jurgens, & Burchinal, 2005). Other studies underscored the positive effects of shared reading; Reading regularly with young children stimulates optimal patterns of brain development, which, in turn, builds language and literacy skills, including increases in vocabulary, knowledge of print, ability to recognize all the alphabet letters, write their names, read or pretend to read (Niklas and Schneider, 2013). Activities that develop an awareness of rhyme, prosody, and rhythm, such as nursery rhymes, songs, and fingerplays help build a foundation for reading as well (Lawhon & Cobb, 2002).

Language acquisition and literacy experiences begin at birth. Thus, the American Academy of Pediatrics (AAP) recommends promoting early literacy skills for children beginning in infancy and continuing at least until the age of kindergarten entry. Interventions programs are particularly important for children living in poverty, a group that is especially vulnerable to not receiving early literacy experiences and thus demonstrating delayed literacy development (Tichnor-Wagner, Garwood, Bratsch-Hines, & Vernon-Feagans, 2015). Primary emphasis is placed on strengthening

parents' abilities and attitudes towards establishing a rich literate home environment, interacting with their child in ways that promote and encourage communication and language learning, and enhancing both the quantity and quality of shared reading.

All the intervention programs included in this review are short-term evidence-based programs (up to 12 sessions), that have been found effective for children under the age of 3. The programs have been tested as part of a randomized control trial (RCT) or a pre-post trial. Some of the programs were designed as preventive interventions aimed at possible language and literacy problems among at-risk populations (families with low socio-economic backgrounds or other risk factors), and some were aimed at promoting language and literacy skills among the general population. Only studies that had been conducted in the last 15 years (starting in 2004) were included in this review. Measures of efficacy included parent-reported literacy-promoting attitudes and practices; children's language production; emergent literacy skills and school readiness.

Contents of interventions

The intervention programs covered a wide range of contents aimed to improve parental knowledge and skills regarding their children language and pre-literacy development. These contents may be organized under several main themes:

- 1) Language development: Teaching parents the process of language acquisition and preliteracy skills, such as phonemic awareness (the ability to hear and manipulate units of sound, such as phonemes, onsets, rimes and syllables), phonics (the relationships between the letters of written language and the sounds of spoken language), vocabulary, and comprehension (the skills to absorb what they read, analyze it, make sense of it, and make it their own); Understanding of the strong relationship between oral language attainments with subsequent literacy skills; Establishing developmentally appropriate expectations including preliterate development of book handling and interaction.
- 2) <u>Modifying attitudes towards literacy</u>: Shifting from a tendency to believe that children's language and literacy skills are innate towards an understanding that these abilities can be improved. Strengthening values such as reading to children at a younger age and perceiving reading aloud as an enjoyable favorite activity.
- 3) <u>Speech-language stimulation strategies</u>: Strategies to provide rich linguistic input to the child, such as paying attention to the child's interest and responding/commenting, self-talk

(the adult describes what he or she is thinking, seeing, hearing, touching or doing; "I'm giving you a handful of animal crackers"), parallel-talk (linking words directly to children's current actions or experiences; "You are holding all the crackers in one hand!"), pairing words with action (saying "up" each time the child is picked up"), modelling (repeating the target word in meaningful contexts to increase the child's likelihood of acquiring the language), reflect on the child's verbal productions and expanding child's utterance (repeating something the child says with more detailed language, or more grammatically correct language), encouraging interaction rather than being directive (prompting with open-ended questions, using a time delay to let the child express himself, giving multiple choices rather than using yes-no questions).

- 4) <u>Supporting rich home literacy environment</u>: Providing with information on why a literacyrich environment is important and how to establish one: children learn the meanings of most words indirectly, through everyday experiences with oral and written language. Understating the importance of incorporating language and literacy activities to the children's daily lives.
- 5) <u>Shared reading</u>: Advising parents that reading aloud with young children can enhance parent-child relationships and prepare young minds to learn language and early literacy skills, and counseling about developmentally appropriate shared-reading. Picture book reading provides children with many of the skills that are necessary for school readiness: vocabulary, sound structure, the meaning of print, the structure of stories and language, sustained attention, the pleasure of learning, and on and on.
- 6) <u>Dialogic reading</u>: Teaching strategies to improve the quality of shared reading, by using different types of prompts to encourage the child to take an active role in the shared reading. Types of prompts include:
 - Completion prompts leaving a blank at the end of a sentence and get the child to fill it in.
 - Recall prompts questions about what happened in a book a child has already read.
 - Open-ended prompts prompts that focus on the pictures in books, asking for example, "tell me what's happening in this picture.".
 - Wh- prompts what, where, when, why, and how questions.

 Distancing prompts - asking children to relate the pictures or words in the book they are reading to experiences outside the book. For example: "Remember when we went to the animal park last week. Which of these animals did we see there?"

Dialogic reading also includes following the child's lead (doing less and less reading of the written words in the book each time, yet keeping it fun and interesting for the child), being responsive to the child's comments and questions, and following the child's utterances with feedback, such as praise (praising the child's efforts to tell the story or label objects within the book, for an example: "That's right!"), expansion (by rephrasing and adding information to what he said, for example, if the child says it's a truck, say "correct, it's a *red fire* truck!"), or repetition (repeating the prompt to make sure the child has learned from the expansion, for an example: "can you say *fire truck*?").

Settings of interventions

<u>Regular childcare visits</u> – A widespread type of literacy promotion program is clinic-based interventions which are implemented in universal public health platforms, taking advantage of different routine visits (e.g. primary care or child health centers) to reach out to a broad population with minimum effort and stigma. For these programs, doctors and nurses are trained to deliver short interventions including psychoeducation, encouraging and modeling strategies and delivering handouts or other guidance materials.

<u>Home visits</u> – An additional method for reaching out, particularly to minorities and families with low socioeconomic background, were interventions conducted using the format of home visits. This format was used to incorporate strategies and behaviors into the home environment and emphasizing the importance of routines and familiar daily activities in language and literacy promotion interventions. Using home visits allowed for individual adjustments of the contents and strategies, thus benefiting the family.

<u>Parent groups</u> – Parent groups were designed to create a framework of community support that would encourage people to stick to the program and create a discourse on the contents of the intervention between the formal encounters. In most of the programs, group sessions were followed with some form of individual adjustments and feedback.

<u>Self-instruction programs</u> – Programs of this type include printed or videotaped materials, delivered to families for self-use. These programs are the least expensive, yet they do not provide opportunities for personal contact and instruction.

Main strategies

Several main techniques are used in the different intervention programs:

- <u>Psychoeducation</u> Including guidance and explanation about language and literacy development, the importance of reading aloud, the principles of dialogic reading, the establishment of rich home literacy environment and so forth.
- <u>Guidance materials</u> Many programs included printed or videotaped materials to enhance the contents of psychoeducation or as a substitute in-person instruction. These materials also served as a reminder of the learnt principles.
- Modeling Modeling was commonly used to demonstrating the use of different strategies and promote accurate implementation by the parents.
- <u>Role play</u> A technique that was used to practice the learning material, which allows one to explore and experience different ways to apply behaviors and strategies, anticipate difficulties, and improve problem-solving skills.
- 5) <u>Feedback</u> Some programs used a feedback technique, based on observation and evaluation following a (live or filmed) interaction. This provides the opportunity to emphasize issues and skills that have improved, point out behaviors that require attention, and rehash the learning material, as well as having a discussion to bring about additional improvement.
- 6) <u>Gift books</u> A unique technique which was widely used in most of the literacy promotion interventions. This component includes the gift of developmental-appropriate picture books, used to encourage shared reading and enhance the presence of literate stimulation in the home environment. Gift books are particularly important in programs that were designed for families in disadvantage areas.
- <u>Daily practice</u> Many intervention programs included home assignments whose goal was practicing and accumulating experience between encounters and implementing desired behaviors and reactions.

8) <u>Daily log</u> – Self documentation of the daily practice was used to monitor the use of learned strategies, time spent on shared reading, and language objectives. Daily log was used to give the parents feedback on their progress and enhance motivation and engagement with the intervention program. One program used a special device to monitor the parents use of language, which served as a real-time feedback.

Interventions for early childhood language development and literacy

Program	Source	Setting	Population	Duration (hours)	Main Techniques	Additional Components	Results
Reach Out and Read (ROR)	Needlman et al., 2005; Klass et al., 2009	Regular childcare visits	General; At risk	Less than an hour	Psychoeducation, Modeling, Gift Books		Improvement was observed
ROR+ Observation- Feedback Protocol (OFP)	Needlman et al., 2018	Regular childcare visits	General	Less than an hour	Psychoeducation, Feedback, Modeling, Gift Books		Improvement was observed (more than ROR)
Let's Read	Goldfeld et al., 2012	Regular childcare visits	General	Less than an hour	Psychoeducation, Modeling, Guidance Materials, Gift Books	Low intensity program	No improvement
Dialogic Reading (DR)	Huebner & Meltzoff, 2005	Parent group\ Self-instruction	General	1.5-2 hours	Psychoeducation, Modeling, Daily Practice, Guidance Materials, Gift Book. On group sessions: Role-play and Feedback		Improvement was observed
Parents Supporting Learning	Niklas et al., 2015	Parent group + Individual session	General	1-1.5 hours	Psychoeducation, Guidance Materials, Gift Book, Modeling and Feedback		Improvement was observed
parent-based intervention (PBI)	Gibbard et al., 2004	Parent group	General	16.5 hours	Psychoeducation, Daily Practice	language-delayed children.	Improvement was observed
Let's Learn Language	Wake et al., 2011	Parent group	At risk	12 hours	Psychoeducation, Guidance Materials, Feedback, Daily Practice	language-delayed children.	No improvement
Contingent Talk Intervention	McGillion et al., 2017	Home visits	General	1 hour	Psychoeducation, Guidance Materials, Modeling, Daily Practice, Daily Log		Short term Improvement
Infant Behavior Program (IBP)	Bagner et al., 2016	Home visits	At risk	5-10.5 hours	Psychoeducation, Feedback, Daily Practice, Daily Log	Focus on parent- infant interaction	Long term improvement
Parent-Directed Language Intervention	Suskind et al., 2016	Home visits	At risk	8 hours	Psychoeducation, Guidance Materials, Modeling, Feedback	Device-based feedback and goal setting	Improvement was observed
Speech-Language Stimulation (India)	Rajesh & Venkatesh, 2019	Home visits	At risk	3 hours	Psychoeducation, Guidance Materials, Modeling, Feedback	language-delayed children.	Long term improvement
Take 30 to Read to Me	Letourneau et al., 2015	Self-instruction	At risk	none	Gift Books, Guidance Materials	Newborns	Some improvement

Reach Out and Read (ROR; Needlman et al., 2005; Klass et al., 2009)

Intervention program designed to promote books and reading aloud in the preschool years (6 months to 5 years of age). ROR includes 3 components: 1) anticipatory guidance about reading aloud delivered as an integral part of routine preventive care, 2) the gift of a picture book at repeated health supervision visits, carefully chosen to be developmentally appropriate, and 3) waiting room volunteers who read aloud with the children, modeling effective strategies for the parents, such as dialogic reading and reinforcements. Throughout the visit, the child's book-handling behaviors and reactions to the book and pictures provide natural opportunities for the provider's comments and guidance about reading aloud and early literacy skills at different developmental stages. The provider incorporates books and reading into the other topics of anticipatory guidance, including bedtime and daily routines and school readiness. The program effectiveness was evaluated in multiple studies, including researches that examined the intervention efficacy as applied in real-world settings. The program website: www.reachoutandread.org.

Reach Out and Read with the Observation-Feedback Protocol (OFB; Needlman et al., 2018)

This additional intervention component consists of a short observation-feedback protocol (2-3 minutes) and is administrated by the health care practitioner during the regular Reach Out and Read intervention (ROR). This component was designed to actively engage parents by having them read aloud during the visit and thus enhance the efficacy of the intervention. To incorporate this component, the doctors were instructed to follow an OFP, as follows: (1) elicit parental concerns – parents are asked to describe their concerns regarding reading aloud; (2) ask the parent to "look at a book with your child, like you would at home," in order to observe the child's response; (3) observe for approximately 30 to 60 seconds; and (4) give feedback to the parent. The feedback should focus on things the parent and child did well (i.e., strength-based). The doctor may also make specific recommendations or model reading aloud techniques. The OFP component was associated with increases in the likelihood that parents would

recall having learned about reading aloud, endorse uncertainty about their reading aloud abilities and a desire to learn more.

Let's Read (Goldfeld et al., 2012)

The Let's Read program is delivered at 4 time points during the usual 4, 12- and 18month, and 31/2-year-old well-child care visits. At each time point, intervention nurses spend 2-10 minutes delivering, modeling, and discussing the Let's Read literacy promotion messages with the parent. The educational strategies comprised role-play, feedback, and modeling practice, supported by tip sheets and a desk mat acting as a quick trial reference guide and reminder. Each family also receives a take-home pack containing an age-appropriate picture book, book list, and guidance materials designed to enhance literacy acquisition through shared reading activities characterized by interactive reading style, parental verbal responsiveness, and appropriate book selection.

Dialogic reading (DR; Huebner & Meltzoff, 2005)

A 2-session intervention program targeted to promote the language skills of 2- and 3year-old children. Dialogic reading is based on 3 principals: (1) the use of evocative techniques that encourage the child's active participation in telling the story - prompting the child to say something about the book, for an example by asking wh-questions (2) use of feedback to the child in the form of expansions (rephrasing and adding information to it), and praise the child's efforts to tell the story and label objects within the book, and (3) progressive change to stay at or beyond the child's current level of independent functioning – that is, the adult continually encourages the child to say just a little more than the child would naturally. The first session focuses on reading behaviors that reduce participation (asking the child pointing questions, yes/no questions, criticism) and reading behaviors that increased a child's participation (frequent use of what questions, questions about function and attributes, praise, repetition and imitation of the child's utterances, following the child's lead). Parents are asked to use the new way of reading with their children daily, 5–10 min per day, for four weeks. On the following session, parents are taught two additional reading behaviors: verbal expansions and open-ended questions, that help children build more sophisticated sentence-level skills. Both sessions are supplemented by an instructional videotape introducing and illustrating each technique with brief vignettes of adults and children reading together. Three methods of instruction in dialogic reading were tested: (1) In-person instruction in a parent group: the trainer presents the videotape and then reviews the techniques, models them, and help the parents practice using role-play and corrective feedback; (2) self-instruction by videotape with a 5 minutes telephone coaching after a week to clarify questions; and, (3) self-instruction by videotape alone. Parents demonstrated an increase in dialogic reading behaviors following the intervention, and the children's language use improved. There was a significant difference favoring in-person instruction as the more efficacious method of instruction.

Parents Supporting Learning (Nikals et al., 2015)

A low-intensity intervention program for 3-4 years old children, designed to increase literacy and numeracy. The program is based on a 30 minutes parent group, equipping parents with knowledge of (1) the importance of the home learning environment, (2) the principles of counting and (3) the principles of dialogic reading. Handouts are provided following the presentation, and the parents are invited to a 30-45 minutes individualized session with their children at a later date. On the individualized session, each child receives a copy of a popular children's storybook and a dice-based counting game. Parents read the book with their children and receives feedback on their reading, along with coaching on how to enact the key aspects of dialogic reading: encouraging the child to complete the blank at the end of a sentence when the adult pauses in a meaningful manner, asking questions about the book and encouraging the child to recall and retell the story, encouraging the child's higher order thinking by asking 'whquestions', and linking the story with the child's personal lived experience. Both children's literacy and the home literacy environment were demonstrated to improve following the intervention.

Parent Based Intervention (PBI; Gibbard et al., 2004)

A program designed for toddlers at 22 to 36 months of age with language delay (little or no expressive language). The program includes 11 group sessions delivered by a speech therapist, each lasting approximately 90 minutes. The sessions emphasize development of a child's expressive language by using daily routines and naturally occurring situations. Over the sessions, language objectives are set for the parents to work on at home with their child. In the group sessions the interventionist explains and clarifies each objective to the parents through structured teaching demonstrations for each language objective set. Parents are encouraged to think about each language objectives by using daily routines and naturally occurring situations. The speech and language therapists who ran the PBI groups were given additional training on their implementation. The study results indicated that children who received PBI made significantly greater language gains than children who received general care.

Let's Learn Language (Wake et al., 2011)

This program is a modified version of "You Make the Difference" that was shortened from nine to six weekly two hours sessions for slow to talk toddlers at ages 2 and 3 years. In each session, the group leader opens by reviewing the previous week's home practice and showing video clips of parent-child interactions to highlight previously learnt strategies; this is followed by a participative lecture. In the last 30 minutes, each parent and child pair are videotaped practicing the new strategies with coaching as needed, from which a short positive clip was drawn for the group to view the following week to reinforce specific strategies. Little evidence was found for language or behavior improvement, both immediately and at 3 years of age.

Contingent Talk Intervention (McGillion et al., 2017)

An intervention program targeted for parents of 12 months infants, focusing on parents' contingent talk. Contingent talk refers to a style of communication whereby the caregiver talks about what is in the infant's current focus of attention. The intervention program consists of a single home visit, in which contingent talk is introduced as a two-step process: noticing what your child is attending to; and talking to them about it. Caregivers are shown a short video identifying ways that 12- month old infants indicate what they are interested in, along with examples of contingent talk. After watching the video, the interventionist summarizes the main intervention message, and provides parents with a summary leaflet. Parents are then asked to set aside 15 minutes a day to practice contingent talk and are given a diary to record their practice each day. After 2 weeks, a phone call is supplemented to consolidate the intervention message and answer any questions. Following the intervention parents were engaged in significantly more contingent talk, regardless of their socio-economic status. Lower SES families in the intervention group also reported that their children produced significantly more words at 15 and 18 months, but not at the 24 months follow-up.

Infant Behavior Program (IBP; Bagner et al., 2016)

A home-based adaptation of the Child-Directed Interaction phase of PCIT (Nixon, Sweeney, Erickson, & Touyz, 2003) in high-risk 12- to 15-month-old infants. The program included 5-7 home visits of 1 to 1.5 hours. In the first teach session, the therapist teaches the parent(s) to follow their infant's lead in play by decreasing don't skills (i.e., commands, questions, and negative statements) and increasing do skills (i.e., PRIDE: Praising the infant, Reflecting the infant's speech, Imitating the infant's play, Describing the infant's behavior, and expressing Enjoyment in the play). Parents are also taught to direct the PRIDE skills to their infant's appropriate play and ignore disruptive behaviors (e.g., hitting, whining). At the start of each of the following sessions, parent skills are assessed during a 5-minute observation, and the therapist delivers feedback regarding the parents use of the skills. In addition to standard coaching practices, therapists incorporate strategies relevant for infants, as for example to repeat infant vocalizations and use non-verbal praising methods (e.g. clapping). Parents are instructed to practice the skills for 5 minutes each day with their infant and to document the frequency of practice. Infants receiving the intervention demonstrated a significantly higher number of observed different and total utterances at the 6-month follow-up compared to infants in standard care.

Parent-Directed Language Intervention (Suskind et al., 2016)

A parent-focused intervention aimed at enriching the quantitative and qualitative aspects of children's early home language environment. The intervention is designed for parents of 1.5-3 years old children and consisted of eight home visits supported by eight educational computer-based modules. Three key strategies were interwoven throughout the curriculum to enrich the child's home language environment, referred to as the '3TS': Talk More, Tune In, and Take Turns with your child. Taken as a whole, the eight-module sequence built a toolbox of strategies and identified everyday contexts that parents could use to create an enriched home language environment for their children. The intervention strongly emphasizes building parent knowledge of child language development. Consequently, the intervention focuses on teaching parents about the link between their own linguistic behavior and their child's early language development and eventual school readiness. During the home visits the interventionist videotapes and reviews himself performing the target activity with the child (e.g. using prompts instead of directives), and then videotapes and reviews the parent performing the same activity with the child. In addition, during each visit, a digital recording device is used to track the number of words a child is exposed to, along with the number of conversational turns the child takes with an adult. These measures are presented to the parents during the session and serve as a type of 'biofeedback', allowing parents to establish concrete goals and to monitor their progress towards achieving those goals.

Speech-Language Stimulation (India; Rajesh & Venkatesh, 2019)

The training program consists of three one-hour sessions that are delivered to the parents of 12 to 24 language-delayed infants during regular home visits routine. The first training session focuses on speech and language milestones and play development

until two years of age. During the first session, a 30-minute video recording of the parent interacting with the child is made in the natural environment of the children's homes. A manual with content of the training program is delivered to the parents, comprised of the three broad sections 1) speech-language milestones, 2) play development and 3) speech-language stimulation strategies. At the end of the session, parents are asked to fill worksheets identifying the child's level of understanding, speaking/communicating and play behavior by referring to the manual. The second session focuses on speech-language stimulation strategies in the contexts of free play and daily routines. The strategies are demonstrated by the interventionist, highlighting the importance of reciprocating exchanges and identifying meaningful communicative signals from children. The third session provides summary of the key points learned during the two prior sessions, followed by individualizing the strategies for each child. Feedback and suggestions on use of strategies are provided based on earlier video recording, and further queries raised by the parents are clarified.

Take 30 to Read to Me (Letourneau et al., 2015)

A newborn early intervention delivering literacy packages to the families of hospitalborn infants at birth. The packages contain books, information for parents encouraging reading and pre-literacy activities, and lists of community resources. Similar programs (**Born to Read** and **Read to Me!**) are reported as well. All these programs encourage reading and other literacy promoting activities (e.g. talking, singing, reciting rhymes and stories) in low socio-economics regions. Parents in the intervention group reported more enjoyment in—and attached greater importance to—reading to their children.

References

- Bagner, D. M., Garcia, D., & Hill, R. (2016). Direct and indirect effects of behavioral parent training on infant language production. *Behavior therapy*, *47*(2), 184-197.
- Duff, F. J., Reen, G., Plunkett, K., & Nation, K. (2015). Do infant vocabulary skills predict school-age language and literacy outcomes?. *Journal of Child Psychology and Psychiatry*, *56*(8), 848-856.
- Gibbard, D., Coglan, L., & MacDonald, J. (2004). Cost-effectiveness analysis of current practice and parent intervention for children under 3 years presenting with expressive language delay. *International Journal of Language & Communication Disorders*, *39*(2), 229-244.
- Goldfeld, S., Quach, J., Nicholls, R., Reilly, S., Ukoumunne, O. C., & Wake, M. (2012). Fouryear-old outcomes of a universal infant-toddler shared reading intervention: the Let's read trial. *Archives of pediatrics & adolescent medicine*, *166*(11), 1045-1052.
- Huebner, C. E., & Meltzoff, A. N. (2005). Intervention to change parent–child reading style:
 A comparison of instructional methods. *Journal of Applied Developmental Psychology*, 26(3), 296-313.
- Klass, P., Dreyer, B. P., & Mendelsohn, A. L. (2009). Reach out and read: literacy promotion in pediatric primary care. *Advances in pediatrics*, *56*(1), 11-27.
- Lawhon, T., & Cobb, J. B. (2002). Routines that build emergent literacy skills in infants, toddlers, and preschoolers. *Early Childhood Education Journal*, *30*(2), 113-118.
- Letourneau, N., Whitty, P., Watson, B., Phillips, J., Joschko, J., & Gillis, D. (2015). The influence of newborn early literacy intervention programs in three canadian provinces. *Issues in comprehensive pediatric nursing*, *38*(4), 245-265.
- McGillion, M., Pine, J. M., Herbert, J. S., & Matthews, D. (2017). A randomised controlled trial to test the effect of promoting caregiver contingent talk on language development in infants from diverse socioeconomic status backgrounds. *Journal of Child Psychology and Psychiatry*, *58*(10), 1122-1131.
- Needlman, R., Lone, Z., Chae, R., & Abdullah, N. (2018). Literacy Promotion Strategies Within Reach Out and Read: An Exploratory Study. *Clinical pediatrics*, 57(11), 1326-1331.
- Needlman, R., Toker, K. H., Dreyer, B. P., Klass, P., & Mendelsohn, A. L. (2005). Effectiveness of a primary care intervention to support reading aloud: a multicenter evaluation. *Ambulatory Pediatrics*, 5(4), 209-215.
- Niklas, F., & Schneider, W. (2013). Home literacy environment and the beginning of reading and spelling. *Contemporary educational psychology*, *38*(1), 40-50.

- Niklas, F., Cohrssen, C., & Tayler, C. (2016). Home learning environment and concept formation: A family intervention study with kindergarten children. *Early Childhood Education Journal*, 44(5), 419-427.
- Nixon, R. D. V., Sweeney, L., Erickson, D. B., & Touyz, S. W. (2003). Parent–child interaction therapy: A comparison of standard and abbreviated treatments for oppositional defiant preschoolers. Journal of Consulting and Clinical Psychology, 71, 251–260. <u>http://dx.doi.org/10.1037/0022-006X.71.2.251</u>
- Rajesh, V., & Venkatesh, L. (2019). Preliminary evaluation of a low-intensity parent training program on speech-language stimulation for children with language delay. *International journal of pediatric otorhinolaryngology*, *122*, 99-104.
- Roberts, J., Jurgens, J., & Burchinal, M. (2005). The role of home literacy practices in preschool children's language and emergent literacy skills. Journal of Speech, Language, and Hearing Research, 48, 345–359.
- Suskind, D. L., Leffel, K. R., Graf, E., Hernandez, M. W., Gunderson, E. A., Sapolich, S. G., Suskind, E., Leininger, L., Goldin-Meadow, S. & Levine, S. C. (2016). A parent-directed language intervention for children of low socioeconomic status: A randomized controlled pilot study. *Journal of child language*, 43(2), 366-406.
- Terrell, P., & Watson, M. (2018). Laying a firm foundation: Embedding evidence-based emergent literacy practices into early intervention and preschool environments. *Language, speech, and hearing services in schools, 49*(2), 148-164.
- Tichnor-Wagner, A., Garwood, J. D., Bratsch-Hines, M., & Vernon-Feagans, L. (2016). Home literacy environments and foundational literacy skills for struggling and nonstruggling readers in rural early elementary schools. *Learning Disabilities Research* & Practice, 31(1), 6-21.
- Wake, M., Tobin, S., Girolametto, L., Ukoumunne, O. C., Gold, L., Levickis, P., Sheehan, J., Goldfeld, S. & Reilly, S. (2011). Outcomes of population based language promotion for slow to talk toddlers at ages 2 and 3 years: Let's Learn Language cluster randomised controlled trial. *Bmj*, 343, d4741.
- Yew, S. G. K., & O'Kearney, R. (2013). Emotional and behavioural outcomes later in childhood and adolescence for children with specific language impairments: Metaanalyses of controlled prospective studies. *Journal of Child Psychology and Psychiatry*, 54(5), 516-524.

Emotion Regulation and Behavioral Difficulties

Background

Children's emotion regulation is a broad term, referring to a variety of psychological skills that develop gradually during the children's first years. When their emotional development is healthy, children learn to identify their feelings, cope with difficult emotions successfully, control their behavior, overcome urges, improve their executive function, perseverance skills, and more. The development of emotion regulation skills has long-term implications affecting school-readiness, social relations, and mental health. The lack of emotion regulation skills triggers behavioral difficulties, including externalization problems, such as oppositional defiant disorder, aggressiveness, delinquency, or antisocial personality disorders, as well as internalization problems, such as anxiety and depression. Studies show that the behavioral issues that appear at early ages continue throughout adulthood if they remain untreated, whereas early interventions have long-term benefits for the health of both children and parents (Nixon, 2002 ;Reynolds et al., 2002).

Although research outlines many factors that may influence the development of children's emotion regulation skills and behavioral problems, it is widely agreed that the most central and vital factor is the quality and the compatibility of parenting. Inadequate parenting has the most significant negative impact on the child when compared to other risk factors (Kiernan & Menash, 2011). The relatively high prevalence of children's behavioral problems indicates that many parents need help with coping with their children and supporting their emotional development. Strengthening the parenting abilities in this matter may help reduce behavioral issues, increase the children's emotional resilience, and prevent the development of mental health difficulties. Intervention and coaching programs for parents in this field include short-term interventions aimed at modifying the parenting practices to affect children's behaviors. Interventions may consist of behavioral strategies meant to increase desired behaviors and decrease undesired behaviors, emotional and sensitivity communication

exercises, or improving the parents' awareness and cognitive skills to allow them to cope with challenging parent-child interactions.

All the intervention programs included in this review are short-term programs (up to 12 meetings) that have been found effective for children under the age of 3, and their results have been tested as part of a randomized control trial (RTC) or a pre-post trial. Only studies that had been conducted in the last 15 years (starting in 2004) were included in this review. Part of the programs was aimed at reducing existing problems or to prevent problems among at-risk populations (with low socio-economic backgrounds or other risk factors), and some were planned to prevent the development of behavioral issues in the general population. Measures of efficacy of these programs, included parenting measures (such as discipline strategies and self-efficacy) and/or children's behavioral measures (such as an externalization/internalization scales of behavioral problems, adaptive behaviors).

Contents of interventions

The intervention programs included varied contents, aimed to improve parental skills in coping with their children's challenging behaviors and help them improve their emotional and behavioral regulation skills. The contents may be organized under several main themes:

- <u>Development</u>: Expectations that correspond with the developmental stage, coping with developmental disorders.
- <u>Environmental adjustment</u>: Establishing a predictable daily routine, adjusting the home environment to reduce conflict situations, addressing changes in the routine.
- Parent-child communication: Practicing active listening and child-focused communication, improving the parent's sensitivity and ability to identify the child's signals, self-reflection, describing emotions, and providing explanations concerning a parent's behavior.

- <u>Reinforcing the bond between parent and child</u>: Enhancing parental nurturing and warmth, enhancing awareness toward positive behaviors, and joint child-led and child-attuned playing.
- <u>Refraining from imposing violent discipline</u>: Providing information about the implications of using harsh or abusive punishment, practicing refraining from "negative" behaviors.
- 6) <u>Learning positive discipline</u>: Employing playfulness, and positive reinforcementencouragement, and praise, rewards and prizes.
- 7) Efficient boundary-setting: Preparing before non-routine activities or occasions, providing clear explanations of the rules and describing the consequences of breaking them, ignoring negative behaviors aimed at gaining attention, distractions, and employing timeouts.
- 8) <u>Giving instructions</u>: Practicing effective instruction-giving, providing choices, using reminders and hints, monitoring, and giving feedback.
- <u>Support</u>: Locating sources of support, constructing a community network, benefiting from rights; requesting community services, self-care, and parental welfare.
- 10) <u>Parental coordination</u>: Parental collaboration and mutual support.

Settings of interventions

<u>Home Visits</u> – A large part of the intervention programs was conducted using the format of home visits. This mode was used for interventions to enhance the parents' responsiveness and commitment to the treatment as it released the parents from the need to leave their homes and come to encounters. A different format could have caused many to drop out of the program. Moreover, intervention programs that included home visits allowed the practitioners a close examination of the home environment and, in this way, a consequent adjustment of the contents and strategies meant to be taught, thus benefiting the family.

<u>Parent groups</u> – An additional common type of intervention program was conducted using the format of parent groups, designed to create a framework of community support that would encourage people to stick to the program and create a discourse on the contents of the intervention between the formal encounters. This created opportunities for parents to receive encouragement from their peers to enhance their involvement, diminish the stigma, and reinforce their sense of connectedness with other parents who experience similar circumstances.

<u>Individual intervention</u> – A small part of the programs included personal encounters with the practitioners, outside the format of home visits. In these programs, a short and focused intervention was conducted with the parents, by undertaking a conversation or a dyadic encounter with both the parent and child within the context of the early age services. This provided an opportunity to discuss the specific goals of the joint effort.

<u>Independent learning programs</u> – Programs of this type include printed material or videos, which sometimes originated from the Internet. These programs are the least expensive and allow one to reach the most significant number of parents and families. Still, they do not provide opportunities for personal contact, which is considered a central factor in preventing high dropout rates. The program's participants reported a high degree of satisfaction due to the program flexibility and accessibility and convenience, its ability to adjust itself to address specific needs, and diminish the stigma.

Main strategies

There are several main techniques which were used in the intervention programs.

 Psychoeducation – Providing materials and guidance related to the theme of the intervention. These materials sometimes include readymade brochures, presentations, video guides, or information that is orally delivered by a practitioner. This technique transmits knowledge from the practitioner to the parents, concerning, for instance, their expectations regarding the child's age and developmental stage, deepening their understanding of children's needs and efficient or inefficient strategies of coping with them, instruction regarding special conditions (such as attention deficit disorders), etc.

- 2) <u>Discussion</u> A discussion (either individually or in groups) enables an in-depth discourse regarding the program's topics. In the course of a discussion, parents introduce their unique knowledge about their child, which allows the facilitators to adjust the nature of the intervention to the family's specific needs.
- 3) <u>Observation and feedback</u> A primary technique that was used is feedback, based on observation and evaluation following a (live or filmed) interaction. This provides the opportunity to emphasize issues and skills that have improved, point out behaviors that require attention, and rehash the learning material, as well as having a discussion to bring about additional improvement.
- 4) <u>Videoclips</u> In the large part of the interventions, participants were shown videoclips that presented interactions between parent and child. These interactions included gross mistakes or demonstrations of desired parental behavior. Such examples provided opportunities to discuss the material being learned.
- <u>Role-playing</u> This is another tool that is used to demonstrate and practice the learning material, which allows one to experience real-time coping with challenging behaviors, observing real-life difficulties, and improving problem-solving skills.
- 6) <u>Home assignments</u> Many intervention programs included home assignments whose goal was practicing and accumulating experience between encounters, discussing difficulties that emerged while practicing at home, and implementing desired behaviors and reactions.

Staff training

Most of the programs were conducted by nurses or educators who work with babies and toddlers. A small part was conducted by mental health professionals, but we chose to include these programs as well since some of their components may be relevant. In one program, parents from the community functioned as facilitators of a parent group, motivated by the idea that this could enhance the parents' involvement and commitment. The scope of the training provided to the practitioners varied from short training sessions in concentrated one or two-day workshops to more extended training periods. In most of the cases, the intervention program included weekly individual or group supervision.

Dropout prevention

The interventions that we reviewed introduced a variety of techniques for preventing high dropout rates among parents participating in the program. These techniques include opting for a series of home visits, integrating an intervention in regular visits at the early childhood centers, and providing rewards for full participation in the program. The techniques that were found to be efficient included

- Initiating phone calls or texts between the encounters to increase the parents' involvement and encourage them to practice the acquired material.
- 2) Applying elements from the motivation theory in the course of an intervention.
- Meeting the practitioners beforehand and having a strong sense of personal involvement.
- 4) Using intervention contents that are individually tailored to parents' needs and worries and bearing in mind their ability to make choices.
- 5) Viewing parents as equal partners who are knowledgeable and experienced in dealing with their children. Having faith in their parental competence.
- Using culturally sensitive programs that relate to ethnic sensitivities, norms, and unique needs.
- Training and guiding the team comprehensively, especially in matters related to working with parents.
- 8) Adjusting the contents to encourage the participation of fathers in the program.

Program Name	Source	Setting	Population	Duration (in hours)	Main Techniques	Additional Components	Parent outcomes	Child outcomes
ParentWorks	Piotrowska et al., 2019	Internet	General	3 hours	Psychoeducation	High involvement of fathers	Some improvement	Some improvement
FCU	Dishion et al., 2014	Home visits	At-risk	12 hours	Discussion, observation, & feedback	Motivational interview	Some improvement	Some long-term improvement
VIPP-SD	Yagmur et al., 2014	Home visits	An ethnic minority	18 hours	Observation and feedback, videoclips, discussion	Sensitivity to ethnic- based concerns	Some improvement	Not checked
NFPP	Sonuga-barke et al., 2018	Home visits	Attention disorder	18 hours	Psychoeducation, observation & feedback	Children with attention difficulties	Not checked	Some improvement, limited effect
PCI	Lefever et al., 2017	Home visits	At-risk	10 hours	Discussion, observation & feedback		Some improvement	Some improvement
PCI-C	Lefever et al., 2017	Home visits	At-risk	10 hours	Discussion, observation & feedback, text messages, phone calls		Some improvement	Some long-term improvement
PC-CARE	Timmer et al., 2019	Personal intervention	Clinical	6 hours	Psychoeducation, discussion, observation & feedback, assignments	Conducted by psychologists	Some improvement	Some improvement
Primary Care Triple P	Turner & Sanders, 2006	Personal intervention	At-risk	2 hours	Videoclips, written material, discussion		Some improvement	Some improvement
Toddlers Without Tears	Bayer et al., 2010	Personal intervention + parent group	General	4.5 hours	Written material, discussion		No improvement	No improvement
Day-stay Service	Hayes et al., 2007	Personal Intervention + parent group	General	6 hours	Psychoeducation, observation & feedback	1-day workshop	Some improvement	Some improvement

Interventions for early childhood emotion regulation and behavioral difficulties

S-IY	Reedtz et al., 2011	Parent group	General	12 hours	Videoclips, discussion, role-playing, assignments		Some improvement	Some improvement, limited effect
IY	Sonuga-barke et al., 2018	Parent group	Attention disorder	30 hours	Videoclips, discussion, role-playing, assignments	Constructing a supportive network	Not checked	Improvement was observed - limited effect
PriCARE	Schilling et al., 2017	Parent group	General	9 hours	Videoclips, discussion, role-playing, written material, assignments	Conducted by psychologists	Improvement was observed	Some improvement (not for the clinical population)
PSC	Cartwright- Hatton et al., 2005	Parent group	At-risk	12 hours	Psychoeducation	Designed for internalization problems, as well	Improvement was observed	Improvement was observed
EPEC	Day et al., 2012	Parent group	At-risk	16 hours	Discussion, role- playing, assignments	Facilitators – parents from the community	Improvement was observed	Improvement was observed
Smalltalk	Hackworth et al., 2017	Parent group	At-risk	12-20 hours	Psychoeducation, observation & feedback, videoclips, written material	Separating the babies from the toddlers	No improvement was observed	Not checked
Smalltalk Plus	Hackworth et al., 2017	Parent group + Home visits	At-risk	18-26 hours	Psychoeducation, observation & feedback, videoclips, written material	Separating the babies from the toddlers	Improvement was observed (toddlers)	Not checked
PPEY	Gerber et al., 2016	Parent group	General	20-30 hours	Videoclips, discussion, role-playing, written material, assignments		Improvement was observed	Improvement was observed
СШТВ	Niccols, 2009	Parent group	General	16 hours	Videoclips, discussion, assignments		Improvement was observed	Improvement was observed
Tuning into Kids	Havigurst et al, 2009; Lauw et al., 2014	Parent group	General	12 hours	Role-play, discussion, practice, written materials, assignments	Emotional coaching for parents. Different modules for toddlers and fathers	Improvement was observed	Improvement was observed

intervention	Touchpoints	Brazelton, 1995; Soarez, 2016	Various settings	General	flexible	Psycho-education, observation and feedback, written material	Conceptual framework for critical points in child's development as an intervention	Improvement was observed	Improvement was observed
--------------	-------------	-------------------------------------	---------------------	---------	----------	---	--	-----------------------------	-----------------------------

ParentWorks (Piotrowska et al., 2019)

This intervention program is suitable for children ages 2-16 and meant to be used independently via the Internet. The program includes six interactive video presentations, five of which are obligatory, and one (dealing with parental conflict) is offered if needed. It also provides two extension modules, one dealing with quality time and playing, and the other with preparing the child to cope with bullying. Each module requires about 20-30 minutes, and the parent must wait a week between completing one module and opening the next. During the week, parents are required to perform assignments based on the learning material. The first module includes a motivational interview, aimed at promoting parental involvement in the program. The following modules deal with issues such as encouraging positive behaviors, responding to negative behaviors, coping with conflicts among siblings, and parental teamwork. The last module deals with strategies that sustain the change. The program is uniquely tailored to the needs of fathers, based on the limitations and requirements that a preliminary survey revealed, conducted by the developers of the program. The researchers reported about roughly 36% of fathers who completed the intervention. Another advantage of the program is that it requires no involvement of a moderator after the development stage. The program's website is https://parentworks.org.au/.

Family Check-Ups (FCU) (Dishion et al., 2014)

This intervention program is suitable for children ages 2-5. There is also a version that is suitable for toddlers (7 months to 2 years). The program deals with various aspects of family management (encouraging positive behavior, healthy boundarysetting, improving the bond and communication between parents and children), and relies on the elements of the motivational interview. At the first stage, three home visits are conducted, including an initial interview-focused encounter, a family evaluation encounter, and a feedback encounter. During the feedback encounter, the advisor (a) shares with family members the evaluation findings regarding their strengths and challenges, (b) conducts a discussion with the parents to strengthen their motivation to promote positive change, and (c) provides a list of available

resources and services that can support the process of change in the family. At the second stage, another yearly home visit is made, including 1 out of 12 possible structured encounters ("The Everyday Parenting Curriculum,") depending on the results of the family's evaluation and the patients' motivation. A major advantage of this program is its ability to attract parents who find it difficult to ask for help. Over 70% of the parents were involved in the program, and the dropout rates through the years were particularly low (participation rates had been 90% in the first year, then 85%, and then 77%, who also participated in the follow-up study that was conducted 5.5 years later). The intervention program was conducted by advisors who completed the FCU training program that includes a two-day workshop / an Internet course, a video documentation of their work, and participation in two feedback encounters, in which the training goals were achieved. Practitioners for whom this was the first year in the job were required to participate in group training. The program's website is <u>https://reachinstitute.asu.edu/family-check-up</u>.

Video-feedback Intervention to Promote Positive Parenting and Sensitive Discipline (VIPP-SD) (Yagmur et al., 2014)

This intervention program is suitable for the ages of 18 months to 3 years. It includes four structured home visits and two home visits for strengthening specific issues according to the individual's needs once every two weeks. The program is based on the bonding theory and focuses on developing parental sensitivity. The practitioners help parents to pay attention to their children's signals, interpret them correctly, and respond in the appropriate time and manner. Also, a discussion is conducted on how one can react sensitively in situations that require discipline to replace harmful and harsh disciplinarian strategies. In every home visit, the practitioners initiate fixed and structured interactions between the mother and child, in the course of which positive behaviors and efficient parenting strategies are reinforced. Visits are filmed, and practitioners select parts of the documented material to be used as feedback in the next intervention encounter, depending on the issues under discussion. Successful interactions are emphasized in the videotaped material in the course of the feedback encounters so that parents can observe their positive influence on the

child. In this research, which had been conducted in the Netherlands, there are detailed descriptions of adjustments that were made in the program for it to be successfully employed within the population of an ethnic (Turkish) minority: (1) The encounters were extended over a longer time so that a visit lasted between 2.5 and 3 hours. This made it possible to begin every visit with a social conversation, as is common in Turkish society. (2) Moderators (women) of Turkish background were selected and were guided to adapt their use of the various languages (Turkish, Dutch, or both) to that of the mothers. (3) All interactions and materials that were employed were modified and adjusted, so they become familiar to the families (for example, joint play with modeling clay instead of hand puppets). The program's moderators participated in a concentrated training program (spanning about four days). They also took part in a fixed, weekly group training, and additional individual training in the course of the program, as needed, during which video-feedback was given. The program's website is <u>https://tavistockandportman.nhs.uk/care-and-</u> treatment/treatments/video-feedback-intervention-promote-positive-parentingvipp/

New Forest Parenting Programme (NFPP) (Sonuga-barke et al., 2018)

This intervention program was made for parents of children aged 3-11 who have an attention deficit disorder. In the present research, this program was tested for children ages of 3-4.5. The program includes 12 home visits of about an hour and a half each once a week, and it consists of four domains: (1) Psychoeducation, focusing on attention deficit disorders, (2) Learning strategies that advance parenting and communication in ADHD contexts. (3) Reinforcing the bond between parent and child by utilizing play, (4) Attentiveness training through the use of structured games and other fitting opportunities. The encounters included parent training by using structured materials (brochures, DVDs, etc.), observing the interaction between parent and child, and providing individual feedback after the observation. The study compared the NFPP to the Incredible Years Program and found there is no advantage over that program regarding attentiveness and alleviating hyperactivity symptoms, although it was designed especially for children with attention disorders.

being similarly effective in improving the child's self-regulation capacities in the short term. Practitioner participated in a 21-hour structured training. Then, they received group training over the telephone: first, once a week and afterward, monthly. Likewise, a 3-hour individual supervision was given each month, in addition to two group meetings.

Parent-Child Interactions (PCI) (Lefever et al., 2017)

This intervention program is based on the PCI module, which is part of a broader intervention program called SafeCare, intended for children between the ages of 0-5. The module, which focuses on parent-child interactions, is designed for children between the ages of 1.5-5 years and includes about five home visits of about 1.5-2 hours every week. The module's goal is to reduce problematic behaviors and promote positive interactions. In the first encounter, mothers were asked to select 2-3 routine situations that they would like to improve. These situations became the focus of the home visits, which included explanation, discussion, demonstration, practice, and feedback, all centered around the ten PCI behaviors: prior preparation, explaining the activity, explaining the rules, explaining the consequences, allowing for choice, articulating one's behavior and actions, using positive interaction skills, ignoring minor negative behaviors, giving feedback, providing rewards, or showing the consequences. The practitioner demonstrated the PCI stages in the course of playing with the child and, later, the mother was asked to practice what was demonstrated. Following the activity, the practitioner provided feedback, and then additional practice was undertaken as needed until the participants mastered 80% of the stages that were learned. In the subsequent encounters, this pattern was repeated while focusing on a new daily routine. The last meeting consisted of giving feedback on the process, planning, and problem-solving, all related to the application of the PCI to new situations. In the PCI-C program, the home visits were accompanied by telephonic communication between practitioners and parents, including text messages, activity proposals, and reminders twice a day, with contents specially modified to suit the family and the current focus of the intervention. Also, a weekly conversation was conducted over the phone to encourage the practice of PCI behaviors during the week. The training of the practitioners includes a concentrated

4-day workshop and individual training. The website of the program (SafeCare) is https://safecare.publichealth.gsu.edu/

Parent-Child Care (PC-CARE) (Timmer et al., 2019)

This intervention program includes an assessment encounter and six dyadic encounters. It is designed for the ages of 1-10 years. In the course of the intervention, parents acquire PRIDE skills (Praise, Reflect, Imitate, Describe, and Enjoy). They improve their use of calming strategies and behavior management skills. In the course of each 1-hour encounter, the therapist briefly reviews the family's condition and the child's behavior in the last week (for 7 minutes), teaches new skills (10 minutes), conducts an observational evaluation (4 minutes), and then trains the parent to use the learned skills in interaction with the child (20 minutes). Then, feedback and a summary are offered (10 minutes). At the end of the encounter, the parent is asked to use these skills in the course of playing with the child for 5 minutes every day and document the playing, the use of learned skills, and the child's behavior on that day. In the present research, the therapists are psychologists, but the training is also designed for people from other professions who work with families (such as nurses and paramedical therapists). The training includes a concentrated 1-day workshop and then group training, as well as individual telephonic communication over 3-6 months, and the completion of qualification requirements. The program's website is <u>https://pcit.ucdavis.edu/pc-</u> care/

Primary Care Triple P (Turner & Sanders, 2006)

The Triple P (Positive Parenting Program) series includes a variety of intervention programs designed for parents of children of different ages with various medical and familial conditions. Thus, the programs offer five levels of intervention designed to provide support by professionals from various areas, depending on the need. The program within the current research is a particularly short preventive program (level 2), designed for children of ages 2-6, and includes 3-4 brief half-hour individual encounters. The program focuses on an issue selected by the parents concerning behavioral and developmental matters. The practitioner helps the parents by explaining the principles and strategies of positive parenting and provides them with materials about the issue they selected (brochures, tips, and videoclips that demonstrate problem-solving at the relevant age). At the first encounter, the goals of the intervention are chosen based on an evaluation that includes an interview and an observation. The way of monitoring the problem is decided as well. At the second encounter, a review of the initial problem is conducted, and a discussion takes place, based on observations and the parents' views regarding their child's behavior. Conclusions about the nature of the problem and a possible etiology are then drawn and shared, and they form a plan for parental coping. In the third encounter, the progress made by the family is examined, and they discuss possible obstacles in the implementation of the program. If necessary, a fourth encounter takes place 3-4 weeks later to evaluate progress, solve problems, and provide positive feedback and encouragement. The practitioners participate in a training program of about four days and a supervision of 2-3 hours each month. The program's website is https://www.triplep.net/glo-en/home/

Toddlers Without Tears (Bayer et al., 2010)

This intervention program is designed for babies at the ages of 6-15 months. It includes a brief 15-minute encounter for consultation (at the age of 8 months) and two group meetings of two hours each (at the ages of 12 and 15 months). At the first encounter, which took place at a routine visit at the Mother & Child Health Center, an instruction was given regarding the child's developmental stage and the coordination of expectations regarding the child's behavior in the following months. Parents were invited to a group encounter when the children were 12 months old, in which ways were discussed to develop a loving and sensitive relationship with their child and for the encouragement of desired behaviors. In particular, they discussed the need to plan reactions to predictable challenging situations. The faacilitators proposed alternatives to harsh discipline and discussed irrational beliefs that may be the basis of such a discipline. When the children were 15 months old, parents were invited to another group meeting where they discussed ways to manage unwanted behaviors, use strategies to ignore "light" misbehaving, and employ distraction techniques or timeouts for "severe" misbehaving. The program did not bring about a

change in parental discipline or child behavior in 3-year-olds. The nurses who moderated the program participated in a training program (whose length is not specified) and operated according to a structured protocol. The program's website is <u>https://www.rch.org.au/ccch/research-projects/toddlers-without-tears/</u>

Day-Stay Service (Hayes et al., 2017)

This intervention program offers a single 6-hour workshop for parents and children from the age of one month up to 4 years. The workshop addresses a variety of areas that are relevant for parents to young children, including interactions between parents and children, children's' development, behavior, and daily routine. 6-7 families whose children are of similar ages participate in a workshop, with each family being allotted its own "bedroom," and a shared space is assigned for lectures and discussion groups. In a personal encounter at the beginning of the day, the practitioner presents a therapeutic plan and identifies the family's strengths and challenges. Parents participate in group lessons wherein the practitioners provide demonstration and instruction to direct the parents' attention to their babies' signals. In the course of individual training, a team member works with each parent and child at the "bedroom" on applying the learned material in a way that corresponds with the personal needs of the family, using practice, live guidance, feedback, and reinforcement. No details are available on the training of the program's team. The program's website is <u>https://www.qec.org.au/families/day-</u> stay-services.

Child-Adult Relationship Enhancement in Primary Care (PriCARE) (Schilling et al., 2017)

This is a bonding-theory intervention program designed for the ages of 2-6 years and consisting of six 1.5-hour group meetings once a week. The first stage focuses on extending positive parental skills to increase attention to children's pro-social behaviors while ignoring mildly negative ones. This stage aims to improve the bond between parent and child and break the vicious circle of negative behaviors. In the
second stage, the participants learn techniques for issuing instructions to children, aiming to set age-appropriate boundaries and improve children's response. The program also includes an element for improving the family's ability to cope with stress. This element was included because the program was initially made for at-risk families that experienced high levels of stress; however, the program has been adjusted to meet the needs of the general population. The practitioners use videoclips and role-playing to help the parents to practice and reinforce their skills. Likewise, home assignments are given for practicing the acquired skills between the meetings. Text messages and reminders are sent before the meetings to encourage the parent's continued involvement in the program. The program facilitators must be professionals from the sphere of mental health, who undergo a 4-day training and receive weekly instruction by a psychologist in the course of the intervention program. The program's website is <u>https://www.chop.edu/centers-</u> programs/pricare-parenting-program

The Incredible Years (IY) (Reedtz et al., 2011, Sonuga-barke et al., 2018)

The Incredible Years series is a cluster of comprehensive intervention programs based on developmental theories that offer integrated and focused interventions for parents, teachers, and children. The programs were designed to work conjointly to advance emotional, social, and learning competencies and for preventing, reducing, and treating behavioral and emotional difficulties among young children. The series include structured programs for various age groups: babies (0-12 months), toddlers (1-3 years), preschool ages (3-5 years), and elementary school ages (6-12 years). The program for parents and toddlers includes the following topics: child-directed play, perseverance, social and emotional coaching, praise and encouragement, predictable routines, effective boundary-setting, alternatives to physical discipline, problem-solving for children, and support within the child's educational settings. The program is based on watching of structured videoclips as a group and discussing possible problem-solving through role-playing and doing house chores. Among other things, the program focuses on establishing a community network of support based on parent groups that were created in the course of the program. Two studies in the present survey examined the intervention programs for toddlers designed for parents. The first study examined the basic program, which includes 12 weekly group meetings of 2-2.5 hours each (Sonuga – barke et al., 2018). These meetings cover various issues, promoting positive discipline and strategies for coping with problematic behavior. The second study examined a shortened version (S-IY) of the basic program that included the first six meetings of the IY, which deal with promoting positive discipline only (Reedtz et al., 2011). The training of the IY program for toddlers includes a concentrated 3-day workshop. Group faciltators also participated in personal training meetings throughout the program. The program's website also features an intervention program that is adjusted to the routine visits at Primary Care settings ("Well-Baby Program"). The program's website is http://www.incredibleyears.com/

Parent Survival Course (PSC) (Cartwright-Hatton et al., 2005)

This intervention program is designed for the ages of 2-4.5 years. It includes eight 90-minute group meetings once a week. The program included providing positive attention through play, enhancing positive behavior by giving the children attention, specific praise, small but frequent rewards, giving instructions in a way that is most welcomed by children, ignoring inappropriate behaviors, and using timeout for dangerous behaviors. The program is CBT-based and includes psychoeducation regarding the thought-emotion-behavior cycle, and the learned contents are examined within this conceptual context. Thus, for example, the possibility that the child is behaving in a negative way to get attention is conceptualized as an alternative thought that could change the emotion that is evoked in the parent and, consequently, could also lead to a change in the parent's response. No details are available regarding the training of the practitioners.

Empowering Parents, Empowering Communities (EPEC) (Day et al., 2012)

This intervention program is designed for the ages of 2-11 years. It includes eight weekly 2-hour group meetings. The program is unique in that it trains parents from

the community to become group facilitators. Thus, it empowers the community and naturally creates a strong network of mutual support. The group meetings are structured and include information sharing, group discussions, demonstration, roleplaying, reflection, and feedback, as well as planning/reviewing home assignments. The program's goal is to improve parent/child relationships and interactions, reduce the children's problematic behaviors, and enhance the participants' confidence in their parental abilities. In the course of encounters, group discussions revolved around a variety of issues: a "good enough" parent as opposed to a "perfect" one, meeting the parents' needs in terms of their wellbeing, recognition, acceptance, their ability to express feelings with children, enjoy "quality time," and practice active listening. They also address their ability to use praise and refrain from labeling while describing behaviors, improve their understanding of children's behavior, set boundaries, use rewards, apply assertive yet unaggressive discipline, and cope with pressure. The training of parents who are interested in moderating groups is extensive, spanning 60 hours of training (over ten days), along with a weekly instruction that is given before each encounter. The program's website is https://www.rch.org.au/ccch/research-

projects/Empowering_Parents_Empowering_Communities/

Smalltalk (Hackworth et al., 2017)

This intervention program addresses the needs of babies (6-12 months) and toddlers (12-36 months) but has been found to be more efficient for parents to toddlers. The program includes six 2-hour group meetings in the babies' program and ten meetings in the toddlers' program. The program was constructed to bring about an improvement in behaviors that have been found to be linked to children's emotional and social development. In particular, the program is designed to enhance five behaviors of parental reaction (attuning oneself to a child, child-led conversation and play, listening and engaging in conversation, benefiting from moments that are suitable for learning, and a loving and gentle involvement); five strategies for creating an enriching home environment (reading books together, supporting the child's playing, learning through daily routine, taking advantage of community

resources, and monitoring the use of media). The program also addressed the elements of self-care, parental competence, and community support. The encounters included discussion, demonstration, videoclips, practicing, and providing feedback. The activity in the babies' group mainly involved psychoeducation, along with guided practicing and planning ways to apply the acquired material at home. The toddlers' group offered joint playing sessions for parents and children, wherein the practitioners taught, demonstrated, and practiced the learned material with the parents. Together, they also planned ways to apply the acquired strategies at home. In the **Smalltalk Plus** program, in addition to group meetings, six 1-hour home visits were provided on the day preceding the meeting. In these meetings, the participants watched videoclips together, which accompanied the individual training and the practice of the acquired strategies. Efficient results were only achieved in the toddlers' program that included home visits. Practitioners completed a training of 2 or 3 days (depending on the group), and also received a weekly supervision. The program's website is https://www.smalltalk.net.au/

Parent Plus Early Years (PPEY) (Gerber et al., 2016)

The Parent Plus series of intervention programs include seven structured programs designed for different ages and different medical and family conditions. The PPEY intervention program is designed for the ages of 6 months to 7 years and includes 8-12 weekly group meetings of 2.5-3 hours each. The program is accompanied by a video guide that presents some typical interactions of parents and children. It also includes up to 12 structured encounters that involve practicing and role-playing, discussions about videoclips, and home assignments for parents. Moreover, parents receive a detailed guide that contains weekly information and assignment pages. The goal of the program is to establish assertive and sensitive parenting. The topics discussed in the program are child-focused playing and communicating, as well as improving the parents' response, encouragement, praise, and support of the children. The topics also include encouraging cooperation and creating a routine and positive management of negative behavior and outbursts of rage while taking into consideration the child's developmental stage. Practitioners participated in a

concentrated 3-day training and also received weekly group supervision. The program's website is <u>https://www.parentsplus.ie/programmes-about/early-years-1-6-years/</u>

COPEing with Toddler Behavior (CWTB) (Niccols, 2009)

This intervention program is designed for parents and toddlers of the ages 12-36 months. It includes eight weekly group meetings of two hours each. The goal of the program is to solidify the parents' skills for coping with challenging behavior by improving the interaction between parent and child to prevent the development of a behavioral disorder. In the course of the encounters, parents will learn to employ an authoritative parenting style and foster a positive bond between parent and child. They will also educate themselves on the expectations that are appropriate for the child's developmental level, use planning to prevent challenging behavior by setting boundaries, redirecting, ignoring, and more. Encounters are comprised of a joint watching of videoclips showing parents making glaring mistakes while interacting with children, having discussions in small groups, and giving/reviewing home assignments. Practitioners participated in a 20-hour training program and also received weekly group instructions. For additional information, see: https://cbpp-pcpe.phac-aspc.gc.ca/ppractice/copeing-with-toddler-behaviour-cwtb/

Tuning into kids /toddlers (Havigurst et al, 2009; Lauw et al., 2014

This program was developed in the USA, at Gottman Institute and implemented and scale in Australia. The main focus of the program is strengthening parental skills as emotional coaches of the child to develop their emotion regulation capability. There are preschool and toddler (18-36 months) versions and it is designed as a prevention and promotion program for the general population. The emotional coaching of the child consists of five steps: being aware of children's emotions; viewing children's display of emotions as a time for intimacy and teaching; helping children to verbally label the emotions being experienced; empathising and validating children's emotional coaching is that children learn to reflect on their emotional experience and deal with it effectively when parents respond to moderate displays of emotion (not extreme ones) and in these occasions provide support and teach them coping strategies. The technique, similarly to mindfulness, focuses on identification and acceptance of the

emotional experience – rather than trying to change thoughts or behaviors. Parental validation, understanding and acceptance of the emotion helps the child to deal with it and prevents escalation. For parents to be able to practice theses parenting skills, they need to be emotionally available and regulated, therefore the program also addresses the parents' well-being, and the way his/her own history and experience shapes the way the feel, think and behave. The program trains parents in mindfulness and "pausing" techniques in responding to child's behaviors. The program is conducted in group setting, with six 2-hour meetings. Parents learn coaching skills through practice, simulation, written materials and psycho-education. Additional version of the program are a Dads tuning into Kids, and Tuning into Teens. More information available at: https://www.tuningintokids.org.au/.

Touchpoints (Brazelton, 1995; Suares, 2016)

Touchpoints is a conceptual developmental framework that guides work with families with young children. It is based on Brazelton's model referring to Touchpoints as periods during the first years of life during which children's spurts in development result in disruption in the family system. The succession of touchpoints in a child's development is like a map that can be identified and anticipated by both parents and providers. They are centered on caregiving themes that matter to parents (e.g. feeding, discipline), rather than traditional milestones. The child's negotiation of these touchpoints can be seen as a source of satisfaction and encouragement for the family system. Thirteen touchpoints have been noted in the first three years, beginning in pregnancy. Professionals can use these Touchpoints as a framework for each encounter with families. These potential disruptions provide a window of opportunity to establish and strengthen the partnership with the parents and support them in understanding the child's behavior as a way to communicate needs. The Touchpoints framework has been translated to books and guides for parents in a range of topics (e.g., discipline, toilet training), intervention programs for various professionals (education, health, community), in individual and group settings. There are also various training programs for professionals, with the basic training including communication and engagement with parents, providing anticipatory guidance and enhancing parent competence. One program, for example, was incorporated as an extension of well-baby visits at 12 and 18 months, and resulted in improvement in parenting measures and in the nurse-family relationship. For more information see: https://www.brazeltontouchpoints.org/.

References

Bayer J, Hiscock H, Ukoumunne O, Scalzo K, Wake M. Three-year-old outcome of a brief universal parenting intervention to prevent behaviour problems: randomised controlled trial. Arch Dis Child 2010; 95:187-192.

- Cartwright-Hatton, S., McNally, D., White, C., & Verduyn, C. (2005). Parenting skills training: an effective intervention for internalizing symptoms in younger children?. *Journal of Child and Adolescent Psychiatric Nursing*, *18*(2), 45-52.
- Day, C., Michelson, D., Thomson, S., Penney, C., & Draper, L. (2012). Evaluation of a peer led parenting intervention for disruptive behaviour problems in children: community based randomised controlled trial. *BMJ*, *344*, e1107.
- Dishion, T. J., Brennan, L. M., Shaw, D. S., McEachern, A. D., Wilson, M. N., & Jo, B. (2014). Prevention of problem behavior through annual family check-ups in early childhood: Intervention effects from home to early elementary school. *Journal of abnormal child psychology*, 42(3), 343-354.
- Gerber, S. J., Sharry, J., & Streek, A. (2016). Parent training: effectiveness of the Parents Plus Early Years programme in community preschool settings. *European Early Childhood Education Research Journal*, 24(4), 602-614.
- Hackworth, N. J., Berthelsen, D., Matthews, J., Westrupp, E. M., Cann, W., Ukoumunne, O. C., Bennetts, S.K., Phan, T., Scicluna, A., Trajanovska, M. & Yu, M. (2017). Impact of a brief group intervention to enhance parenting and the home learning environment for children aged 6–36 months: A cluster randomised controlled trial. *Prevention Science*, *18*(3), 337-349.
- Hayes, L., Matthews, J., Copley, A., & Welsh, D. (2007). A randomized controlled trial of a mother–infant or toddler parenting program: Demonstrating effectiveness in practice. *Journal of pediatric psychology*, *33*(5), 473-486.
- Kiernan, K., & Menash, F. (2011). Poverty, family resources and children's educational attainment: The mediating role of parenting. *British Educational Research Journal*, 37(2), pp.317-336.
- Lefever, J. E. B., Bigelow, K. M., Carta, J. J., Borkowski, J. G., Grandfield, E., McCune, L., Irvin, D.W.& Warren, S. F. (2017). Long-term impact of a cell phone–enhanced parenting intervention. *Child maltreatment*, 22(4), 305-314.
- 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.
- Nixon, R. D. V. (2002). Treatment of behaviour problems in pre-schoolers: A review of parent training programs. *Clinical Psychology Review*, 22, pp.525-546.
- Piotrowska, P.J., Tully, L.A., Collins, D.A., Sawrikar, V., Hawes, D., Kimonis, E.R., Lenroot, R.K., Moul, C., Anderson, V., Frick, P.J. and Dadds, M.R. (2019).
 ParentWorks: Evaluation of an Online, Father-Inclusive, Universal Parenting Intervention to Reduce Child Conduct Problems. *Child Psychiatry & Human Development*, 1-11.
- Reedtz, C., Handegård, B. H., & Mørch, W. T. (2011). Promoting positive parenting practices in primary pare: Outcomes and mechanisms of change in a randomized controlled risk reduction trial. *Scandinavian journal of psychology*, *52*(2), 131-137.

- Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2002). Age 21 costbenefit analysis of the Title I Chicago child-parent centers (Institute for Research on Poverty Discussion Paper 1245-02). Retrieved 19th November 2019, from <u>https://www.irp.wisc.edu/publications/dps/pdfs/ dp124502.pdf</u>
- Sonuga-Barke, E. J., Barton, J., Daley, D., Hutchings, J., Maishman, T., Raftery, J., Stanton, L., Laver-Bradbury, C., Chorozoglou, M., Coghill, D. & Little, L. (2018). A comparison of the clinical effectiveness and cost of specialised individually delivered parent training for preschool attention-deficit/hyperactivity disorder and a generic, group-based programme: a multi-centre, randomised controlled trial of the New Forest Parenting Programme versus Incredible Years. *European child & adolescent psychiatry*, 27(6), 797-809.
- Timmer, S. G., Hawk, B., Forte, L. A., Boys, D. K., & Urquiza, A. J. (2019). An Open Trial of Parent–Child Care (PC-CARE)-A 6-Week Dyadic Parenting Intervention for Children with Externalizing Behavior Problems. *Child Psychiatry & Human Development*, 50(1), 1-12.
- Turner, K. M., & Sanders, M. R. (2006). Help when it's needed first: a controlled evaluation of brief, preventive behavioral family intervention in a primary care setting. *Behavior therapy*, *37*(2), 131-142.

Yagmur, S., Mesman, J., Malda, M., Bakermans-Kranenburg, M. J., & Ekmekci, H.

(2014). Video-feedback intervention increases sensitive parenting in ethnic minority mothers: a randomized control trial. *Attachment & human development*, *16*(4), 37

Parent-child play and playfulness

Background

The ability to play is driven by an essential developmental need in children. Playing is non-verbal, enjoyable, and it intermingles cognitive, sensory, emotional, and social aspects. By playing, children explore and manipulate their environment, express their feelings, and develop connections and central roles. Based on its significance, the UN's Human Rights Council has even recognized playing as the fundamental right of every child. Numerous studies show that child-oriented playing, originating from his or her inner motivation and based on free choice, constitutes a central developmental tool that enables and encourages the acquisition of cognitive, emotional, and social competences (Bagnato, 2007). Studies have found that a child's involvement in playing is linked to cognitive development, the improvement of problem-solving abilities, and creativity (Russ, 2003). Other studies indicate the significance of the parents' involvement in their children's playing, which promotes complex social play and more advanced symbolization abilities. Children whose parents have played with them regularly demonstrated higher cognitive and linguistic skills and better emotion regulation (Roggman, Boyce, Cook, Christiansen & Jones, 2004).

Free play has many foes nowadays, including our busy, modern lifestyle, changes in the family structure, and prioritizing educational achievements over playtime (Ginsburg, 2007). There is a growing need for intervention programs that will help families support their children's playing, achieve a deep understanding of its importance, and integrate it successfully into modern daily life. Among other things, there is an increasing need for intervention programs that encourage active play in the context of promoting a healthy lifestyle and as an alternative to screen time. Even parents who understand the value of playing for children do not necessarily know the best ways to play with them (Parmar, Harkness & Super, 2008).

Intervention programs in the sphere of playing aim to inform parents about play and its importance, promote strategies that encourage playing among children and teach parents age-appropriate playing skills that they can help to develop in their children.

These programs endeavor to teach parents a variety of strategies that may assist them in promoting exploratory behaviors among babies and, later on, playfulness, the use of fantasy, pretending games, or active physical playing among toddlers.

Other than focusing on the significance of parental involvement, many intervention programs emphasize the importance of child-oriented playing. These programs teach parents to reduce their control and allow the child to lead the interaction. In these programs, the parents are directed to avoid giving instructions, commenting, asking questions, or using playtime for learning. Instead, the parents learn strategies to increase their attention to the playing, as well as their sensitivity to the child's signals, as a way to encourage joint play. Apart from developing children's playing abilities, these intervention programs promote parent/child interactions wherein the child constitutes an active agent who leads the interaction as the parent provides positive attention and responds to the child's signals. This type of joint play reinforces the bond between parent and child, increases children's responsiveness to their parents, and decreases behavioral problems.

All the intervention programs included in this review are short programs (up to 12 meetings) that were thought to be effective for children of up to 3 years of age, and whose results were tested as part of a randomized control trial (RTC) or a pre-post trial. Some programs were also tested by using qualitative analysis. We only examined studies that had been conducted in the last 15 years (starting in 2004). Some of the programs were designed to treat existing problems or to prevent problems in at-risk populations (due to low socio-economic backgrounds or other risk factors). Other programs intended to promote playing in the general population. Various measures were used to evaluate these programs. Parental measures included parental competence, comprehending the issue of playing and its link to social development, directive behavior in playing situations, responsiveness, and parental affection. The children's behavioral measures included the duration of playing, the quality of playing, level of cooperation during playing, responsiveness to the parent, TV watching time, social skills, and others. Measures pertaining to the quality of the parent/child interaction were included as well.

Intervention goals

Intervention programs that are focused on playing emphasize different aspects and, accordingly, set specific goals that they wish to promote. The various programs included in this review focused on three central goals:

- 1) Developing playing skills Programs that focused on this goal views playing as a developmental task and a significant stage, which is required for achieving various developmental skills at later stages. These programs emphasize the link between playing and learning and playing's significance in the context of advancing the child cognitively and emotionally and assisting him/her in acquiring various skills. In line with these goals, these programs address various stages in the development of play, beginning from exploratory behavior among babies to advanced imagination-based games among children. The programs focus on learning about playing and its significance, encouraging extended daily playing, and provide strategies to improve the child's playing skills based on parental assistance.
- 2) Encouraging child-oriented joint play These programs view playing as a central channel for parent/child interaction and focus on joint play and on developing the parents' ability to participate in child-oriented play while improving parental responsiveness and affection. In these programs, parental skills are the ones being emphasized, not the children's skills. Sometimes, children's emotional or behavioural improvement is also measured following improvements in the interactions.
- 3) Promoting active play and a healthy lifestyle These programs focus on certain types of games that enable physical activity and aim to encourage and support active play as an alternative to the extended screen time to which children are exposed even at young ages. In these programs, the parents' role is emphasized: parents who initiate shared time can encourage children to engage in active play and thus assist them in implementing an active and healthy lifestyle.

Contents of interventions

The intervention programs consisted of different contents according to their goals. The contents may be organized under several main themes:

- Development: Expectations that correspond with the developmental stage, and psychoeducation on the playing skills that are typical of each stage, so that a parent can be informed and thus make a correct assessment of the child's state.
- 2) The significance of playing: Psychoeducation about playing and its impact on children and the variety of cognitive, linguistic, emotional, and social competences that the child acquires through playing. The central goal of this component is changing the parents' attitudes about playing.
- 3) Reinforcing the bond between parent and child: Psychoeducation about the parents' central role in developing a child's ability to play, intending to increase parental involvement in playing. Encouraging and extending daily joint playtime, enhancing parental affection and nurturing, and enhancing attention to positive behaviors.
- 4) Parent/child communication: Practicing attentiveness and responsiveness to the child's playing, reducing over-instructive and directive behavior during joint play, and using positive and encouraging communication in the course of playing.
- 5) Parental reflectivity: Improving the parents' reflectiveness and mentalization skills through discussion, feedback, and mirroring after joint play, sometimes while watching videotaped scenes of the interaction.
- 6) Strategies for improving playing skills: Teaching and demonstrating a wide variety of strategies that a parent can use to expand and develop the child's playing and assist him or her in acquiring new skills. Strategies taught in these programs may include modeling, with the parent showing the children various options to play and pretend and encouraging them to imitate the parent's actions. Encouraging and guiding the playing by instructing or asking questions that hint at possible directions for the playing to develop. Expanding the children's playing to encourage them to advance in the chosen direction. Providing praise and reinforcement in response to new playing behaviors.
- 7) Becoming acquainted with diverse playing possibilities: Teaching and demonstrating different games that can be played together with the child, while considering the

developmental aspects that these games promote. Becoming acquainted with various domains of playing, as well as ideas for integrating play in the daily routine. Detailed lists of possible activities in the community involving the participation of the entire family.

Setting of interventions

- 1) Home visits A large part of the intervention programs used the format of home visits. This format was used in interventions to enhance the parents' responsiveness and commitment to the treatment as it released the parents from the need to leave their homes and attend sessions. A different format would have caused many to drop out of the program. A large part of the programs included a short intervention that was conducted in the course of routine home visits that are common in the country where the research was done. Thus, parents experienced joint play in the same environment where they were requested to practice and absorb the learned material. Hence, playing was brought into the house and conducted within a familiar environment.
- 2) Individual intervention A small part of the programs included a component of individual encounters with the practitioner outside the framework of home visits. These programs provided a brief and focused intervention with the parents, involving a conversation or a dyadic parent/child encounter in the context of early childhood services. This included a discussion about the specific goals of this effort.
- 3) Family intervention: One program included a configuration that was suitable for family intervention. This configuration adjusted the treatment to the entire set of family relationships instead of limiting it to the parent/child dyad.
- 4) Parent groups: Another type of intervention program used the format of parent groups. Using parent groups is customary in programs aiming to promote active play by creating shared community-oriented time and space, dedicated to learning and experiencing various physical games. Likewise, parent groups were utilized as a way to enhance learning from peers, who are "natural helpers," and to create a shared community discourse that goes beyond the intervention program.

5) Community activity: Several intervention programs used models that are based on community activities to promote various goals of play advancement. A unique intervention program offered a model of a broad community activity in which a variety of games were provided while explaining their rationale either through written material or team members who intermingled with the families and discussed the learned material. Another program provided a detailed manual to the variety of existing activities taking place in the community to encourage families to reduce the children's screen time and promote active play.

Main Strategies

The intervention programs in this area applied several main techniques.

- 1) Psychoeducation Providing materials and guidance about the intervention's contents to help the participants understand the rationale of the intervention program and the link between the learned contents and the program's goals. These materials include prepared brochures, presentations, filmed instructions, or knowledge transmitted orally by an instructor. In intervention programs in the area of playing, psychoeducation is mostly used to reinforce one's understanding of the importance and significance of playing to enhance the participants' commitment to the program and change the parents' attitudes.
- 2) Written material/prepared videoclips Programs using written materials or videoclips mainly do so to supply an organized manual regarding the variety of possible activities or transmit the playing instructions to the parents and clarifying them. In such cases, participants watched videoclips that demonstrated desired behaviors or followed the manual's written instructions.
- 3) Modeling In some of the programs, the playing instructions were demonstrated by the instructor, and sometimes the parent and instructor practiced together after the demonstration. In one program, the modeling was done through peer parents who played with their child on their own and thus provided a live demonstration of playing skills in the course of joint activity.

- 4) Live instruction In some programs, the practitioner actively intervened in the game and instructed the parent on following the playing's instructions accurately in the course of parent/child joint play.
- 5) Observation and feedback A central technique that was used was providing feedback after observing and evaluating an interaction (either live or filmed) while emphasizing contents and skills that have been improved, pointing out behaviors that require reinforcement, and repeating learned contents for further improvement.
- 6) Daily practice All the intervention programs included a component of daily practice wherein parents were required to play with their children for a given interval, based on the learned material.
- 7) Documentation In most of the programs, parents were asked to document their daily practice while considering sections related to the playing instructions. This was done to monitor their ability to follow instructions and complete the task as required, as well as to measure their level of commitment to the intervention program.
- 8) Discussion The discussion (either individually or in groups) enables a reflective discourse on the program's topics. The goal is to improve the ability to internalize the acquired material on the significance of playing and examine issues that arise in the course of playing. Discussions may include, for instance, observing joint play, reflecting on its results, asking questions about applying play instructions, or addressing the insights inspired by playing.

Intervention Programs for Early Childhood Play

Program	Source	Program's goal	Program's type	Population	Duration (in hours)	Central techniques	Unique components	Results
Active Families	Davidson et al., 2011	Active play and a healthy lifestyle	Community activity	General	-	Psychoeducation, written material	Using existing resources	Improvement was observed
Family Focused Active Play	Odwyer et al., 2012	Active play and a healthy lifestyle	Group meetings	General	About 6 hours	Psychoeducation, written material, live instruction, daily practice, and documentation		Improvement was observed
Dads Active Fun Time (DAFT)	Houghton et al., 2015	Active play/ encouraging child- oriented joint play	Group meetings	General	9 hours	Live instruction, discussion, daily practice, and documentation	Designed for fathers through encouraging active play	Partial improvement was observed
Child-Oriented Game	Broke et al., 2015; Kochanska et al., 2013	Encouraging child- oriented joint play	Individual intervention/ home visits	Low socio- economic	4 hours	Psychoeducation, written material, videoclips, observation and feedback, daily practice, and documentation		Long-term improvement was observed
Reflective Family Play (RFP)	Philipp 2012, Philipp et al., 2018	Encouraging child- oriented joint play	Family intervention	Low socio- economic	8-12 hours	Practice, observation and discussion, videoclips	A family model instead of a dyadic model	Improvement was observed
Mommy and Me Play Program (MMPP)	Wright 2015	Encouraging child- oriented joint play	Group meetings	Low socio- economic	8 hours	Psychoeducation, modeling, discussion	Peer learning	Improvement was observed
Parent Training (play)	Dempsey et al., 2013	Developing playing skills	Home visits	General	7 hours	Psychoeducation, written material, modeling, daily practice, discussion		Improvement was observed
Play for Success	Clearfield 2019	Developing playing skills	Home visits	Low socio- economic	3.5 hours	Written material, videoclips, modeling, daily practice	An early intervention designed for babies	Improvement was observed
Ultimate Block Party (UBP)	Grob et al., 2017	Developing playing skills	Community activity	General	5 hours	Written material, live instruction, discussion		Improvement was observed

Active Families (Davidson et al., 2011)

This intervention program is based on existing resources in the population, intended for the ages of 2-5. As part of the program, a special manual was put together, detailing the variety of planned activities in the community that include opportunities for active play. The manual included an extensive list of outdoor fun in parks and playgrounds, among others. This included maps indicating the specific location of each place, the time of the activities, contact information, costs, and available facilities. The back cover of the manual presented a community calendar of events, updated every two to three months, to encourage families to spend time outside (for example, in local family festivals). The authors developed winter and summer versions of the manual; the winter manual contained descriptions of diverse options for spending time indoors and outdoors. Combined into the manual was another type of information regarding the advantages of physical activity and reducing TV time, suggestions for activities that do not involve screens, as well as replies to potential questions. The manual was distributed through community clinics whose teams were instructed to (1) peruse the manual with the parents, (2) point out the program's goals, the advantages of physical activity, and the reduction of TV time, (3) present the maps to the parents and assist them in locating their own houses, and (4) direct their attention to the calendar of local events on the manual's back cover. It has been found that, following the intervention, more children spent at least one hour playing outdoors and spent less than two hours watching television each day.

Family Focused Active Play (Odwyer et al., 2012)

This is an intervention program designed to promote active play among children of the ages 3-5. The intervention took place once every two weeks and included five meetings of 70 minutes each. A session typically consisted of 10 minutes for registration and examining the records of homework assignments; 20 minutes in which children played alone while parents participated in a group wherein psychoeducation was conducted on the significance of active play; and finally, 40 minutes were spent in a group with parents and children engaged together in active

play that the team moderated. In the first meeting, each family received a journal to selfmonitor their home activities, with detailed assignments for the next two weeks. The family brought the journal to every meeting, and the practitioner examined the documented activity, provided feedback along with prizes (e.g., a key chain, a DVD with dancing instructions), and outlined new assignments. Families that completed all the assignments and acquired the evaluation tools even received a voucher for shopping. The practitioner also supplied the families with various written materials containing multiple suggestions for outdoor activities and games, games that promote motoric development, lists of parks or local swimming pools, tips on setting rules for the appropriate use of screens, and more. Likewise, families received five text messages between meetings to encourage them to remain dedicated to the program when at home. In the course of the intervention, an electronic activity meter was used to measure the children's physical activity. Compared to the control group, it was found that the time children spent physically active had increased, and their time spent sitting decreased.

Dads Active Fun Time (DAFT) (Houghton et al., 2015)

This intervention program is designed for children between the ages of 3-5 and aimed at promoting their fathers' involvement through play that is based on active exercise. This was motivated by the fact that studies suggest that active play may encourage fathers to become more involved in intervention programs for parents. The program included 6 group meetings of 90 minutes each, divided into three stages: (1) 30 minutes of active play, directed by a team member who provides ideas for joint play and explains the principles of the issues that arise through playing, (2) downtime, including ideas for relaxed playing or artistic activities, (3) 30 minutes of new active play, followed by a reflective discussion on the material covered during the day. Each meeting dealt with a specific topic: The significance of the duration of time fathers spend with their children, the quality of the time, the availability and accessibility of the parent, positive parental authority, the use of personal examples, acquiring new skills, and expanding one's understanding of roughhousing with children. Although participation in the program did not increase the duration of time fathers spent with their children, it was found

that fathers who participated in the program felt an improvement in their parental control and expressed a much better understanding of their role and significance in terms of encouraging their children's active play.

Child-Oriented Game (Kochanska et al., 2013; Broke et al., 2015)

This intervention program is designed for the ages of 2-3.5 and includes components related to playing from evidence-based intervention programs for parents (especially Child's Game; McMahon and Forehand, 2003). The program focuses on encouraging child-oriented joint play and consists of individual training, followed by 8 short 30-minute meetings for playing. In the training meeting, the practitioner teaches the parent various playing strategies by using written material and demonstrating each of the strategies with videoclips. Then, the practitioner demonstrates the strategy and practices it with the parent. Finally, the child joins the meeting, and the parent practices the learned strategies while receiving feedback from the practitioner. The strategies that were taught include enhancing responsiveness, child-oriented playing, and providing positive feedback. Likewise, the parents learn what should be avoided in the course of joint play: forceful discipline, commenting and criticizing, and other behaviors that shift the control from the child to the parent while playing, such as loaded questions, proposals, instructions, and the attempt to teach while playing. After the training encounter, 4 play meetings were conducted in the laboratory and 4 at home. The sessions started with a review of the acquired skills and answering the parent's questions. Afterward, the joint play was observed, and in the end, the practitioner gave his/her feedback. Meetings were filmed for the sake of the research. In addition, parents were asked to practice the skills that were acquired during the joint play for 20 minutes every day and to document the practice and the duration of the game in a personal journal. Following the intervention, a long-term improvement was observed in the responsiveness and cooperation of children and the parent's use of force during play had diminished. However, no increase was observed in the parents' sense of competence.

Reflective Family Play (RFP) (Philipp 2012; Philipp et al., 2018)

This intervention program is based on previous models of dyadic treatment in the context of early childhood play, as well as family intervention models. Accordingly, the program is adjusted to the family set up and designed for an intervention that includes two parents of children at the ages of 0-6, as well as siblings, if needed, while relying on the principle of joint play and followed by a reflective discussion. The program incorporates 8-12 one-hour weekly meetings. The family receives toys that encourage imaginative play, and is asked to play for 15 minutes according to the following pattern, once the practitioner leaves the room: (a) Parent A plays with the children while parent B is present, (b) Parent B plays with the children while parent <u>A</u> is present, (c) The entire family plays together as the children lead the playing, (d) The parents discuss the playing and its significance amongst themselves in the children's presence. After 15 minutes, as the playing ends, the parents call the practitioner back to the room. At this stage, a joint discussion takes place in the children's presence about the playing and the transition between the stages. The parents are those who lead the discussion and raise issues that concerned them, while the practitioner mirrors the insights that arise from the discussion without disclosing his/her thoughts. In the course of the discussion, the parents select video clips that will be watched again and discussed. A qualitative analysis tested the results of the intervention program and found an improvement in parental cooperation, sibling relationships, and parental mentalization skills.

Mommy & Me Play Program (MMPP) (Wright, 2015)

This intervention program is designed for children of ages 3-5 and based on the principles of peer learning and community empowerment. In this program, dyadic mother/child pairs joined together to form a group of joint play. Before the intervention, one of the mothers in each pair was evaluated as having stronger playing skills (i.e., "the helper") and one as having weaker playing skills (i.e., "the helpee"). The mothers were not told how the pairs were formed. However, they were told that learning is done in pairs so that they can learn from each other. The program's facilitators conducted two first meetings the provided psychoeducation on the

issues of child development and the significance of early age playing, with the meetings consisting of 20 minutes of explanations and 40 minutes of group discussion. Afterward, 8 weekly half-hour play meetings took place, followed by a 15-minute short discussion of the two mothers. In the play encounters, mothers were directed "To help the children play together and see what they could learn from each other." The program's team did not issue any directives in the course of the game but did reinforce and emphasize positive play behaviors that they observed and helped when necessary. The team emphasized live mutual learning in the course of joint play, as well as natural and positive playing skills, such as responsiveness or supporting child-oriented playing. At the discussion stage, with the help of the practitioner, the mothers discussed the joint play: the parts that went well, what they would like to do next time, and what they learned from each other. The control group in the research participated in weekly group meetings parallel to the playing meetings, wherein the parents engaged in a free discussion, without learning any specific themes. The evaluation conducted after the intervention found an improvement in parental responsiveness and affection, especially among the "helpee" mothers, and the children exhibited fewer angry and aggressive behaviors.

Parent Training (Play) (Dempsey et al., 2013)

This intervention program is designed for the ages of 2-4 years and aimed at promoting and developing children's play skills, especially encouraging and elaborating imagination-based games. At the first stage, the team conducted an overall review of children's playing capacities. The next stage of the intervention was a first group meeting that included a lecture on the development of play and its importance. In that meeting, 4 strategies were taught for promoting play among children: using modeling, guidance through directives, expanding the playing, and providing positive reinforcement. The practitioner demonstrated playing strategies. Then, the parents used the strategies to practice with their children while the practitioner provided feedback. Parents also received printed training materials on the learned topics, including examples. The team defined goals for principle playing behaviors for each child according to their specific level, along with individual tips to promote these goals. Likewise,

parents were provided with the toys required for practicing playing, based on individually defined goals. Afterward, the parents were asked to play with their children daily while using the learned strategies for six weeks. The parents were asked to document their daily playing. A home visit was conducted once a week, incorporating a discussion about the daily home practice; questions were answered, and suggestions were made to improve children's playing behaviors. At the end of the program, the children's playing skills were reevaluated, and a significant improvement was found in the duration and level of children's imagination-based games.

Play for Success (Clearfield 2019)

This intervention program is designed for babies of the ages of 6-10 months. It intends to encourage exploratory behaviors in babies of low socio-economic families. The intervention program lasted two weeks and included a short daily playing practice for the duration of 10-15 minutes. While playing with the baby, the parents were asked to make sure that there were no distractions in the immediate environment (meaning, no cellphones or television sets). In the first research group, the parents were also asked to teach their babies two exploratory strategies while playing: using a finger to tap the rattle and using the rattle to create friction on the table. The parents were directed to demonstrate the two behaviors by making noticeable and clear gestures 3-4 times and then encouraging the baby to use the rattle himself/herself. If the babies did not use the rattle at all, the parents were asked to demonstrate the behavior a second time. In the second research group, parents were instructed to teach one new exploratory strategy every day so that each strategy was learned throughout two consecutive days. All in all, in this group, seven different strategies were learned: using the finger to tap, creating friction, squashing, rustling, hitting the table, turning an object around, and moving an object from one hand to another. In the control group, the parents were asked to encourage the baby to play with the rattle without giving specific instructions. The babies were checked before and after the intervention, and then again two weeks later. The team examined the generalization of exploratory behaviors to new toys, as well as the duration of the playing. A steady improvement in the length and depth of the exploration was found only in the first research group that included two strategies, but this concerned a variety of exploratory

behaviors and not only the two behaviors that had been learned. The practitioners received individual training as well and were given a guide and instructional films that provided a detailed description of the intervention.

Ultimate Block Party (UBP) (Grob et al., 2017)

This unique experiential intervention program is conducted within the framework of a singleday community activity, designed for children of ages 3-12. The intervention incorporated a variety of activities that illustrated various aspects of the link between playing and learning, intending to implement change in the parents' attitudes toward playing and its significance, and exposing them to a wide variety of play options. The intervention was conducted in a municipal park (Central Park, New York). It included 26 activities that revolved around 8 playing domains: adventure games, construction games, physical games, creative games, art, imagination-based games, technology, and language games. All the activities were planned to support various developmental aspects in children, based on existing research results. For each area of activity, written material was supplied to explain its rationale. A 75-page brochure that was also distributed to participants addressed the link between playing and learning, as well as the community activity in which they participated. Families walked around freely between activity locations and were able to choose the game they wanted to play. During that time in the park, the program's team talked to the parents about the significance of playing and its consequences. The entire program was designed to expose the participants to four central messages: (a) There is a multi-dimensional link between learning and playing, (b) Studies support the claim that play is a learning activity, (c) Playing has an essential role in the development of skills necessary for children to grow up to become socially productive adults, especially in a period of rapid changes such as our own, and (d) The period we live in presents numerous threats to playing. Still, these may be overcome by creating opportunities for playing in the community and at home. Such opportunities are independent of socio-economic conditions. Following the event, interviews were conducted with the parents who participated in the community activities, and a qualitative analysis was done to examine any changes in their

attitudes. A significant change in parents' attitudes was indeed observed as a consequence of participation in the single-day community activity, along with a more complex understanding of the link between playing and learning.

Bibliography

- Bagnato, S. J. (2007). *Authentic assessment for early childhood intervention: Best practices*. New York: The Guilford Press.
- Brock, R. L., Kochanska, G., O'Hara, M. W., & Grekin, R. S. (2015). Life satisfaction moderates the effectiveness of a play-based parenting intervention in low-income mothers and toddlers. *Journal of abnormal child psychology*, *43*(7), 1283-1294.
- Clearfield, M. W. (2019). Play for Success: An intervention to boost object exploration in infants from low-income households. *Infant Behavior and Development*, *55*, 112-122.
- Davison, K. K., Edmunds, L. S., Wyker, B. A., Young, L. M., Sarfoh, V. S., & Sekhobo, J. P. (2011). Feasibility of increasing childhood outdoor play and decreasing television viewing through a family-based intervention in WIC, New York State, 2007-2008. *Preventing chronic disease*, 8(3), A54-A54.
- Dempsey, J., Kelly-Vance, L., & Ryalls, B. (2013). The effect of a parent training program on children's play. *International journal of psychology: a biopsychosocial approach*, 2013, [Vol.] 13, p. 117-138.
- Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, *119*(1), 182-191.
- Grob, R., Schlesinger, M., Pace, A., Golinkoff, R. M., & Hirsh-Pasek, K. (2017). Playing with ideas: Evaluating the impact of the ultimate block party, a collective experiential intervention to enrich perceptions of play. *Child development*, *88*(5), 1419-1434.
- Houghton, L. J., O'Dwyer, M., Foweather, L., Watson, P., Alford, S., & Knowles, Z. R. (2015). An impact and feasibility evaluation of a six-week (nine hour) active play intervention on fathers' engagement with their preschool children: A feasibility study. *Early Child Development and Care*, 185(2), 244-266.
- Kochanska, G., Kim, S., Boldt, L. J., & Nordling, J. K. (2013). Promoting toddlers' positive socialemotional outcomes in low-income families: A play-based experimental study. *Journal of Clinical Child & Adolescent Psychology*, 42(5), 700-712.
- O'Dwyer, M. V., Fairclough, S. J., Knowles, Z., & Stratton, G. (2012). Effect of a family focused active play intervention on sedentary time and physical activity in preschool children. *International Journal of Behavioral Nutrition and Physical Activity*, *9*(1), 117.
- Parmar, P., Harkness, S., Super, C. M. (2008). Teacher or playmate? Asian immigrant and Euro-American parents' participation in their young children's daily activities. *Social Behavior* and Personality, 36 (2), 163–176. Doi:10.2224/sbp.2008.36.2.163.

Philipp, D. A. (2012). Reflective family play: A model for whole family intervention in the infant and preschool clinical population. *Infant Mental Health Journal*, *33*(6), 599-608.

- Philipp, D. A., Cordeiro, K., & Hayos, C. (2018). A case-series of reflective family play: therapeutic process, feasibility, and referral characteristics. *Journal of Child and Family Studies*, 27(10), 3117-3131.
- Roggman, L. A., Boyce, L. K., Cook, G. A., Christiansen, K., Jones, D. (2004). Playing with daddy: Social toy play, Early Head Start, and development outcomes. *Fathering*, 2 (1), 83–108. Doi:10.3149/fth.0201.83.
- Russ, S. W. (2003). Play and creativity: Developmental issues. *Scandinavian Journal of Educational Research*, 47 (3), 291–303. Doi:10.1080/00313830308594.
- Wright, L. G. (2015). The Mommy and Me Play Program: A Pilot Play Intervention for Low-Income, African American Preschool Families. *Journal of evidence-informed social work*, *12*(4), 349-368.

Parents' Subjective Well-Being

Background

The arrival of a new baby into the family is a major event and usually a happy one. However, it is accompanied by significant changes in the family unit that directly affect parents and their subjective well-being. The first year is usually the most challenging for parents, characterized by elevated stress and decreased well-being and marital satisfaction (Widaman & Schirtzinger, 1995). These difficulties continue, with parents of children up to the age of six report a heavy burden of daily tasks, difficulty in balancing between family and job, an increase in spousal conflict centered on the transition to parenthood and a drop in leisure time and time invested in each other (Claxton and Perry-Jenkins, 2008; Goldsteen and Ross, 1989; Nomaguchi, 2009; Nomaguchi and Milkie, 2003; Scharlach, 2001).

Various factors contribute to parental stress and well-being during the child's early years. These factors include physical changes in sleep and nutrition and body changes in women following pregnancy and birth. Psychological factors include a discrepancy between expectations and reality, feelings of guilt and failure, or unprocessed feelings of ambivalence toward parenthood. Moreover, many parents struggle to manage with the intensity of transition to parenthood which involves limited spontaneity and independence along with financial and social changes. Transitioning from a pair to a tiresome challenges the marital relationship, and the resources and time to invest in the relationship are more limited with a baby.

Changes in the modern society pose further challenges on young parents. Loosening of the extended family unit and the communal structures, along with lack of authority leave the parents with less support and more isolation, more responsibilities and less sense of competence. In addition, life expenses increases, as well materialistic demands creating economic stress. Balancing family and career has also become more challenging, with smartphones and extended work hours; especially for women who are expected to invest in their careers but without reducing the family burden.

Due to these many challenges and difficulties, the first years of a child's life can often be a source of stress for young parents who may experience anxiety and depression as well as worry and feelings of incompetence. These problems also have an effect on parent-child interactions, as parents who experience distress, are liable to be less positive interactions with their children, stricter discipline and over-punishing, and perhaps even negligence or violence. These behaviors have implications for children's mental health, resulting in behavioral and social difficulties, anxiety and depression (Goodman and Gotlib, 2002; Black et al., 2007). The effect is bi-directional, such that parents' behavior has an effect on the child and then the child's behavior affects the parent, creating a vicious cycle that is hard to stop (O'connor, 2002).

There are a variety of risk factors that can exacerbate parental stress. These include lack of social support and isolation, socio-economic difficulties, limited access to services, low mental resources, marital conflict, as well as factors related to the child himself, such as premature birth, difficulties in sleeping and regulation and behavioral problems (Umberson, Prudrovska and Reczek, 2010). Although challenging, after a period of adaptation parenting can be a source for a sense of meaning, satisfaction, fulfillment and growth, and enhance the family and marital coherence. Social and marital support, as well as knowledge and realistic expectations of the child's development contribute to the stress reduction and successful transitions, and lead to enjoyment of the relationship with the child. To this end, various intervention programs that focus on parental stress and well-being have been developed, and their goals is to strengthen resilience and build support networks, to learn how to manage mental distress (stress, anxiety, depression). Other programs focus specifically on parenting competence, dealing with child's difficulties that have strong effect on parental well-being (e.g. sleeping and behavioral problems), anticipatory guidance and parent-child relationship.

All of the intervention programs included in this review are short-term (up to 14 sessions) and designed to reduces the symptoms of parental mental distress and/or improve parent competence. Their results were evaluated by means of randomized controlled trials (RCT) or semi-experimental frameworks. The survey only includes studies carried out during the past 16 years (since 2004). Some of the programs were designed for prevention (among either risk populations or the general population) while others were designed to deal with problems that already exist (postpartum depression, mental stress, etc.). The metrics for evaluating the programs included symptoms of mental stress and parental capability and in some cases also indexes of the children's behavior (such as behavioral problems).

Contents of interventions

The intervention programs had a number of different goals: to improve the parental feeling of capability; to provide practical tools for handling day-to-day situations and dealing with a child's challenging behavior; to create a social support network; and to normalize mental distress situations. The content of the programs can be organized into a number of main categories:

- Stress management cognitive and behavioral strategies for emotion regulation and stress management (e.g. relaxation techniques, breathing exercise, mindfulness, challenging negative thoughts).
- Anticipatory guidance helping parents to develop realistic expectations adjusted to the stage of development, supporting transitional phases in parenthood and resolving discrepancies between expectations and reality.
- 3. Parental competence- informing and supporting parents to learn parental skills (feeding, soothing, health habits and routine).

- 4. Reinforcing positive parenting focus on the various skills required for parenthood, dealing with challenging situations and parental empowerment, reduction in overly-strict discipline.
- Parent-child interaction encouragement of joint parent-child activities in order to create positive experiences and a close connection; increasing parental attention and nurturing.
- 6. Self-care creation of enjoyable and added-value experiences for parents, focusing on rewarding experiences for the parents themselves in order to strengthen positive emotions.
- Strengthening couple relationship effects of birth on the relationship, communication skills, conflict management, co-parenting, preserving intimacy in the relationship and enhancing parental involvement in childcare.
- 8. Support identification of sources of support in the community, creation of a social network, referral for assistance in the neighborhood.

Setting of interventions

Parent groups – Many programs included parent groups with the goal of creating a social support network. The parent groups facilitated discussion and learning from the experiences of others, providing advice and strengthening the feeling of capability, as well as encouragement to persevere in the program. Another advantage is to provide a solution to a large number of individuals with a minimal amount of manpower.

Programs for self-learning – Programs of this type usually included a designated site where sessions were uploaded and which usually also included a forum for questions and answers managed by health professionals and a forum for advice and sharing of information. These programs hoped to overcome the common barriers encountered in requests for assistance in the community – stigma, lack of time and difficulty finding a babysitter. Participants chose a time convenient for them in order to participate in a session or they read the learning material, and accordingly additional sessions were opened once a week. Part of the program also included telephone calls to provide support, which encouraged a more personal connection. Reminders were sent by email or sms to participants in some of the programs in order to discourage dropping out.

Telephone conversations – Some of the programs included telephone conversations as part of the intervention and one program was even based solely on telephone support. By means of conversations with professionals or trained volunteers, the parents could get advice on issues that concerned them, they could obtain guidance in how to solve some problem they faced, they could be referred to other services in the community that could assist them, and their parental skills were reinforced, as was their feeling of parental capability.

Individual sessions – Programs based on individual intervention included work with health professionals, which provided the parents with information and psychoeducation. Sometimes

the assistance focused on parent-child interaction, feedback on the interactions and the provision of tools in order to deal with various situations and strengthen parental skills.

Main strategies

There are a number of techniques used by the intervention programs:

- Psychoeducation One of the main techniques used is the provision of material and instruction relating to the purpose of the intervention. The material is likely to include prepared booklets, slide presentations or information conveyed orally by the instructor. This technique includes the communication of knowledge to a parent, such as the adjustment of expectations to the age of the child and the stage of its development, the depending of knowledge about children's needs and which strategies are efficient in meeting them.
- 2) Discussion Discussion (whether one-on-one or in a group; face-to-face, in a designated forum or by telephone) facilitates an in-depth discussion the program's topics and assistance in specific areas that are of interest to the parents. The parents contribute their unique knowledge of children to the discussion and benefit from professional knowledge in areas that concern them or in which they are encountering difficulties. This also makes it possible to fine-tune the intervention material to suit the specific needs of the families.
- 3) Observation and feedback Feedback following observation and evaluation of the interaction (whether live or filmed), with emphasis on subjects and skills in which there has been improvement, the designation of behaviors that need strengthening and a review of the material learned and a discussion with the goal of achieving additional improvement.
- 4) Joint activity with the children Some of the programs includes time for joint activity with the children in order to provide a place for enjoyable interaction and the reinforcement of the parent-child connection, and also in order to provide ideas for potential activities the parents can engage in at home. In some of the programs, the joint activity took place in a group as part of the intervention time and in others it was part of the home assignments.
- 5) Home assignments Many of the intervention programs included homework assignments whose goal was to practice and apply what has been learned, to develop a discussion of the problems that arose during the homework assignments and to facilitate the assimilation of desirable responses and behaviors.
- 6) Behavioral activation A large proportion of the programs (and primarily those for reducing symptoms of postpartum depression) included a component of behavioral activation, in which the parents were encouraged to initiate enjoyable activities for themselves in order to reduce feelings of depression and to strengthen positive feelings.

Staff training

Most of the programs were facilitated by nurses or midwives, while some were facilitated by pediatricians, as well as volunteers and first-degree students. A small proportion were given by mental health professionals; however, we chose to present these programs since they have components that are likely to be relevant. The scope of training provided to the intervention program facilitators varied, from a few hours in a designated workshop to a course of several days. The scope of training was not specified by all the programs.

Dropout prevention

The interventions surveyed used a variety of techniques to discourage parents from dropping out of the programs, including the following:

- 1) Use of telephone conversations or SMSs between sessions in order to improve the involvement of the parents and to encourage them to practice what was learned.
- 2) Modification of the intervention contents to suit the concerns and needs of the parents; the parents' ability to choose.
- 3) The use of the Internet to convey information and in order to consult with other group members or with the professionals.
- 4) Holding the sessions as part of regular visits to an infant care clinic.

Name of the program	Source	Main target	Type of program	Population	Duration (in hours)	Main technique	Other components	Outcomes
Mindfulness- based intervention	Perez- Blasco	Parental well-being	Parent groups	General	16 hours (8 sessions)	Mindful Space	Focus on nursing mothers.	Improvement was observed
Working Out Dads	Giallo et al., 2018	Parental well-being	Parent groups (fathers)	General	9 hours (6 90m meetings)	Psycho-education, exercise	Focus on mental health of the fathers	Improvement was observed (partial)
Bringing Baby Home	Shapiro et al., 2005; 2011; 2015	Parental well-being	Parent groups	General	10 hours	Psycho-education, discussion, role- play	Prenatal, couple relationship, co- parenting fatherhood	Improvement was observed
ROSE (Reach Out, Stay strong, Essentials for new mothers)	Zlotnick et al., 2015	Parental well-being	Parent groups + individual sessions	At risk (post- partum depression)	~ 7 hours	Psycho-education, inter-personal skills		Improvement was observed
Work-place Triple-P	Sanders et al, 2011	Parental well-being and parenting skills	Parent groups + individual phone calls in workplace	General	8-10 hours	Psycho-education, discussion, role- play, modelling, home tasks, relaxation	Emphasis on work-life balance and working parents	Improvement was observed
Postnatal Support Program	Osman, 2014	Parental well-being	Self- learning +hotline	General	20 minutes	Psychoeducation, hotline	First parents	Improvement was observed
Mom Mood Booster (MMB)	Danaher et al., 2013	Parental well-being	Internet	General	6 Internet session (~5 hours).	Personal coaching CBT	Telephone conversations	Improvement was observed
Postnatal psychoeducation program	Shorey et al., 2014	Parental well-being	Home visits and follow-up conversations.	General (new parents)	3 hours	Instruction book; follow-up conversations.		Improvement was observed
Home-Based Supportive- Educational Counseling	Navidian et al. 2017	Parental well-being	Self-learning	General	3 hours	Psycho-education, discussion, technical help	Firs-born children	Improvement was observed

Intervention programs to improve parents' subject well-being

Nurse-community health worker program	Roman et al 2007; 2009	Parental well-being	Home visits	At-risk	~ 5 hours, flexible	Psycho-education, discussion, technical help	Prenatal into first year	Partial improvement was observed
Supportive Parenting Intervention	van Grieken et al., 2019	Parental well-being	Home visits	At-risk	9 hours (6 90-minute meetings)	Discussion	Combined fixed and flexible components	No improvement
Prevention program for sleep and cry problems	Hiscock et al., 2015	Parenting skills	Parent groups + telephone support + self- learning	General	~ two hours + telephone calls	Videos, information booklet, discussion and consultation.		Improvement was observed (parent and some child outcomes)
Video interaction project	Cates et al., 2016	Parenting skills	Individual	At risk (low SES)	45 minutes -visit to infant health clinic	Interaction filming, learning material, information booklets		Improvement was observed
Neonatal Behavior Observation (NBO)	Nugent 2007	Parenting skills	Individual	General	1 – 3 hours	Observation and feedback, modelling, psycho- education	Shared observation on baby's behavior to improve parental understanding of cues	Improvement was observed (parent and some child outcomes)
Mellow Parenting	Levi et al., 2019	Parenting skills	Parent groups	At-risk	14 sessions (~ 63 hours)	Parents groups, parent-child activity, parenting workshop.		Improvement was observed (parent and child)
Intensive skills- based intervention	Hayes et al., 2008	Parenting skills	Parent groups	General (per parent request)	6 hours	Modelling, practicing and lectures		Improvement was observed (parent and child)
Touchpoints	Soares, 2016	Parenting skills	Varied settings	General, at risk	flexible	Psychoeducation anticipatory guidance, observation, discussion, modelling	Framework of intervention in critical developmental points	Improvement was observed (parent and child)

Universal prevention	Hiscock et al., 2008	Parenting skills	Parent groups	General	~ 4 hours (3 meetings)	Information sheets, psychoeducation group meetings		No improvement
Urban Parenthood	Salonen et al., 2008; 2010	Parenting skills	Internet	General	Not stated	Psycho-education, group forums, Q & A forum with experts	Use of intervention elements according to the parent's needs.	No improvement
SMART Moms Program	Le et al., 2011;	Post- partum depression	Parent groups	At-risk	6-12 hours	Psycho-education, discussion, home tasks		Improvement was observed
MUMentum postnatal	Loughnan et al. 2019	Post- partum depression	Internet, self learning	At risk	~3 hours	Psycho-education, relaxation, homework, behavioural activation, self- monitoring	Contents delivered through animated movies	Improvement was observed
Netmums	O'Mahen et al. <i>,</i> 2013	Post- partum depression	Internet	Postpartum depression	Up to 7.5 hours (11 sessions of 40 minutes each)	Behavioral activation, presentations and multimedia; home tasks.		Improvement was observed
Parents interacting with infants	Boyd et al., 2019	Post- partum depression	Internet	Postpartum depression	8 weeks	Slide presentations, video, exercises		Improvement in parental competence, depression
Parents interacting with infants	Boyd et al., 2019	Post- partum depression	Parent groups	Postpartum depression	8 weeks	Psychoeducation		No improvement
Mothers Helping Mothers with Postpartum Depression	Dennis et al., 2003; 2009	Post- partum depression	Telephone conversations	Postpartum depression and population at risk	Flexible to meet needs	According to needs	Volunteer mothers	Some improvement was observed
Home-Start	Barnes et al., 2009	Post- partum depression	Home visits	At-risk (low SES)	Flexible to meet needs	According to needs- childcare, joint outings	The volunteers are parents.	No improvement

Mindfulness-based Intervention (Perez-Blasco et al., 2013)

The program is intended to raise the feeling of capability and to reduce symptoms of anxiety, depression and stress among nursing mothers. It is based on mindfulness-based stress reduction, mindfulness-based cognitive therapy and mindful self-compassion programs, with changes and modifications in the organization of the sessions (duration, setting, etc.) and content. The intervention lasts for 8 weeks, and there is a two-hour meeting each week. The sessions were held with the babies. Each session consisted of the following components: a review of the previous week's assignments, a short 10-minute moderated meditation, a presentation and discussion of the main themes in practicing mindfulness in the context of parenthood and parenting experiences and assignments for the coming week.

Working Out Dads (Gialoo et al., 2018)

This program is was intended to improve subjective well-being and to raise the feeling of parental capability among fathers of children aged 0-4. The intervention included six 90-minute group sessions, each of which includes an hour of psychoeducation given by a health professional and 30 minutes of physical training in a group led by a certified trainer. The meetings are held in a gym during the evening hours in order to overcome men's barriers to using health services (long work hours, stigma, etc.). In addition to the sessions, the fathers received weekly messages ("Pay attention to how your child is playing and investigating the world. This week, participate in and enjoy this experience. Enjoy being present. You are doing excellent work.") during the program and for four weeks subsequently, with the goal of involving the fathers in the content of the program, to encourage the use of the strategies learned in the program and to strengthen presence. There was a 25 percent dropout rate during the program, where the drop-outs had higher stress levels than the baseline.

Bringing Baby Home (Shapiro et al. 2005;2011;2015)

This program is a two-day (10 hour) workshop developed in the Gottman Institute for expectant and new parents. The workshop is delivered by trained practitioners (nurse, doctor, mental health or educators). The workshop focused on four goals: (a) maintaining and strengthening couples' intimacy, (b) changing conflict patterns so they became more constructive, (c) facilitating father involvement in the family, and (d) promoting positive parenting and co-parenting to facilitate optimal infant development. The workshop includes presentations, video-clips, role-play and practice. This 15-year-old program has several versions, some including ongoing group meetings (12 meetings over 6 months) or an online/video course. Participants are recruited through birth preparation classes in hospitals, communities and social media. The workshops usually take place in the hospital were the birth preparation classes are held, during the weekend. There are structured training courses and a manual for facilitators. The program was shown to improve various parental well-being and parenting measures. For more information:

https://www.gottman.com/professionals/training/bringing-baby-home/.

Reach Out, Stand strong, Essentials for new mothers (ROSE) (Zlotnick et al., 2015)

This intervention, which is based on interpersonal psychotherapy (IPT), involved small groups of 2-5 women during their pregnancy (week 20 to 35). This is a structured program that includes psychoeducation and IPT skills, whose goal is to improve interpersonal

relations and to build up a social support network. The program includes roleplaying and home assignments with feedback. The program includes four 90-minute weekly group meetings and an individual maintenance meeting of 50 minutes during the two weeks after birth. The intervention is focused on role changes as a result of birth with emphasis on the transition to motherhood, development of a support system, development of efficient communication skills in order to manage conflicts within relationships during the pregnancy and birth periods, setting goals and becoming familiar with psychosocial resources for new mothers. The professionals that carried out the intervention were a registered nurse and two first-degree holders. Their training included "dummy interventions" because the intervention was highly structured. The dropout rate from the program was 16 percent (about 5 percent dropped out during the program and about 11 percent did not show up for the evaluations at the conclusion of the intervention).

Workplace Triple-P (Sanders et al; 2011)

Triple P is a tiered, multilevel system of intervention that can be tailored to the needs of individual families. It is conducted in various settings, for high and low risk groups, in different countries. Workplace Triple P is a variant of Triple P, designed to meet the unique needs of working parents and conducted in workplaces. It has two primary distinguishing features. The first is application of positive parenting methods to transition times (i.e., before and after work). This involves parents developing predictable morning routines, strategies to promote children's independence and use of effective discipline methods to manage common problems. The second feature involves parents learning strategies to manage stress and distressing emotions. The intervention is conducted in group settings, with 6-12 participants, for four 2-hour meetings, followed by four phone consultations. Parents also received written materials. Meetings include presentations, video-clips, demonstrations, role-play, individual goal-setting and homework.

Postnatal support program (Osman, 2014)

In the report documenting this program, combinations of two interventions to reduce postpartum stress in first-time mothers were examined: a 20-minute psycho-education video, describing common stressors in the post-partum period and a 24-hour telephone support hotline. The study examined the two intervention, separately and combined. Recruitment took place at the hospital shortly after birth. The video was designed to help parents during the transition to parenthood and provide honest information about the expected difficulties, normalizing difficult feelings and reassuring that it is a common and transient experience. The film targeted both mothers and fathers and addressed the main stressors such as sleep deprivation, postpartum blues and depression, breastfeeding difficulties, return to work, postpartum sexuality and body changes. The material included presentations by two physicians and testimonials from parents. Actors representing first-time mothers were included to provide humor about the stressors. The intent of the hotline is to provide immediate reliable answers to concerns that a mother might have. It was assumed that women may be comforted by simply knowing that there is an available service, this will reduce stress regardless of whether they access the hotline or not. The hotline staff included professionals and volunteers who were trained according to algorithms related to breastfeeding, colic, postpartum blues/ depression, and normal newborn care. Both

programs demonstrated reduction in parental stress, with better outcomes for the combination of the two.

Mom Mood Booster (MMB) (Danaher et al., 2013)

This is an intervention program aimed at reducing symptoms of depression among mothers during the first nine months after birth. The programs included 6 online sessions, where each session is opened one week after the completion of the previous one. The order of the sessions is as follows: 1) start; 2) mood management; 3) increasing enjoyable experiences; 4) management of negative thoughts; 5) reinforcing positive thoughts; 6) planning for the future. At the beginning of each session there is a video clip that presents the goals of the session. The participants could watch a new session each week or alternatively take a break of one week between one session and the next, as they saw fit. The telephone calls were timed according to the progress of the parent through the sessions, such that the program was completed within 6 to 12 weeks, with 6-12 telephone personal telephone conversations. The program includes a number of features that were intended to increase the participants' participation and to achieve behavioral change. For example: every day the participants are encouraged to rate their mood and to write down the enjoyable experiences that had that day. Furthermore, there is a possibility of writing a personal log, to watch video clips and animations and to take advantage of a library with relevant articles on communication skills, finding support, stress management, time management, problem solving, sleep and baby care, the baby's needs and relations with one's spouse. The program also included a private forum for the participants in which they could communicate, get advice and give advice. Automatic emails were sent to participants in order to increase response and participation in the program and also in order to encourage them to complete the questionnaires. The personal trainers that were responsible for the telephone calls were first-degree research assistants or psychology researchers who had been trained in the intervention material, in their function as coaches (as opposed to caregivers/advisors) and in their responsibility for information gathering. The coaching included an explanation of the program's sites, a video conference that included reviewing the coaches' guide (which included scripts for each conversation, information on the coach's responsibility for information gathering, etc.) and a discussion of the coach's function and the rationale for the telephone conversations. The program included three complementary sites: 1) a personal coaching portal that allows the coach to monitor the progress of each participant; 2) a site for support of the spouse, which is meant to provide the spouse with information on postpartum depression and a review of the MMB program; and 3) an administrative site for the research team. About 87 percent of the participants took part in all six of the sessions.

Postnatal Psychoeducation Program (Shorey et al. 2014)

The intervention is aimed at first-time mothers with the goal of increasing the feelings of capability and social support and reducing postpartum depression. The program included a home visit to provide 90 minutes of psychoeducation in the participant's home. It also related to physical and psychological challenges after birth, the importance of family dynamics and ways of increasing capability and getting help. The husbands and significant others were invited to participate in the psychoeducation session in order to raise their awareness of the mother's needs. The session is given during the first two weeks after birth.

After the home session, the mothers receive a booklet with information that was taught during the session. There are also three telephone calls of about 30 minutes each, for the purpose of monitoring, on a weekly basis and up to 6 weeks after birth. During the conversations, the mothers discuss the pressures they are experiencing and the questions that arose after the home session. The intervention is carried out by midwives.

Home-Based Supportive-Educational Counseling (Navidian et al., 2017)

This program is designed for the general population, aiming to reduces post-natal stress. It includes three individual meetings, the first takes place as part of the routine visit at the maternal-child health clinic during which two additional home-visits are scheduled. The rational of the program is addressing three main stressors – multiple roles and tasks, physical changes and social support. These topics are discussed – with emphasis not only on raising awareness by psychoeducation but also to empower and develop coping strategies. The program showed significant improvement in stress measures of the participating women.

Nurse-Community Health Worker Program (Roman et al. 2007; 2009)

A home-visiting program for high-risk mothers, from pregnancy through the first year after birth. This program is based on the ecological model for identification stressors and resources for support. The intervention is delivered by nurses and community workers. The community workers are members of the community, with high-school education who are recruited to the program and undergo a training workshop, covering communication skills, and coaching skills. There are defined roles for the nurse and the worker, where the nurse is responsible for the initial assessment of the family and health status of the family, planning the intervention, guiding and mentoring the worker and ongoing monitoring. Most of the meetings are with the community worker and take place at the home, with addition phone support. Contents of meetings include engaging and establishing a supportive, trusting relationship, identifying supports and assisting in reaching services, stress management, healthy habits, enhancing parental sensitivity and improved parent-child relationship and encouraging social connections. The frequency of meeting varies according to family's needs, usually twice a month during pregnancy, weekly after birth and gradually decreasing as needed. The nurse and community workers have regular monitoring and supervision meetings.

Supportive Parenting Intervention (Grieken et al., 2019)

This is an intervention program whose goal is to reduce stress among parents who are at risk of developing parenting stress (which is measured by the IPARAN questionnaire – Instrument for identification of Parents at Risk of developing child Abuse and Neglect). There are a number of risk factors for parental stress and a parent who is considered to be at risk if he is characterized by one of the following: a lack of social support, single parent, parenting at a relatively young age, adverse childhood experiences, feelings of depression, abuse of alcohol or drugs, ambivalent feelings toward parenting, a tendency to easily become angry or irritable, a sexual abuse experience, a preference for using physical punishment, and parenting of a premature baby or a baby with a low birth weight. The intervention includes six 90-minute home visits over a period of 18 months starting from birth (the standard schedule of visits is 1.5, 3, 6, 9, 12 and 18 months, although there can be more frequent visits early in life at the expense of later visits, according to the parents' preference). A home visit consists of a fixed component and a flexible component. The fixed component includes

a discussion of various topics and also the empowerment of the parents by means of improving parental skills, a discussion of expectations of parenthood and providing advice about how to improve the parents' social network. The flexible component is centered on the client. The subjects discussed are chosen by the parents and can include issues of empowerment or problems relating to parenthood. The focus of the home visit is to improvement interaction between parent and child, a discussion of the parents' expectations of parenthood, dealing with the parents' childhood experiences and creating a basis of social support for the family. The program uses child health care nurses to make the visits and they must have experience of at least three years in the child health system and training in Supportive Parenting Intervention.

Prevention program for sleep and cry problems and postnatal depression (Hiscock et al.,

2014)

This intervention program was intended to prevent sleep and cry problems among babies. As part of the program, the parents received a 27-page information booklet and a 23-minute video, as well as the possibility of telephone consultation when the baby is 6 to 8 weeks old and a 90-miniute parent group when the baby is 12 weeks old. The booklet contained information on normal baby sleep patterns, cry patterns, strategies for encouraging selfcalming and encouraging the parents' investment in themselves. The video contained similar information and included parents discussing techniques for calming and a baby's signs of fatigue and also a demonstration of calming techniques. The telephone conversations and the parents group focused on encouraging the parents to discuss sleep and cry problems and to develop a management program suited to each family (such as establishing a sleep routine) in order to deal with these problems. The telephone conversations and parents group were facilitated by professionals from the health and mental health sector (nurses and psychologists) with a background in baby care and were based on a script that underwent standardization. The parents group was based on an instruction book published by Cook et al. (2012). The team that carried out the telephone conversation and the parents group met on a weekly basis with a pediatrician and clinical psychologist in order to monitor the assimilation of what was taught in the intervention and to deal with problems that arose.

Video Interaction Project (Cates et al., 2016)

This program is intended to reduce levels of parental stress among families with a low socioeconomic status. The programs includes 45-minute sessions on the day of visits at an infant medical clinic. The interventionist meets the family individually and provides personal relations-based intervention, in an attempt to create a long-term connection between the interventionist and the family. During the sessions, the interventionist focuses on support for verbal and response interactions in various contexts – imagination games, reading together and day-to-day routine, with the goal of reinforcing the development of the child and his preparedness for school. The program includes the following components:

a. Filming of mother-child interactions: Interactions of 5-10 minutes between the mother and the child, which are suggested by the interventionist according to the stage of development, are filmed and then watched by the mother and the

interventionist who provides comments on the interactions between the mother and child. The interventionist attempts to strengthen positive interactions and to suggest additional places in which there is an opportunity for interaction. The mother receives a copy of the filmed intervention at the end of the session in order to reinforce the assimilation of these activities at home and also to enable her to share the experience with the rest of her family.

- b. Provision of learning material: Developmentally appropriate learning material is provided to the families in order to take home. The learning material is chosen so as to encourage cognitive and language stimulation in the child.
- c. Pamphlets: The interventionist encourages the mothers to use the written pamphlets which they go over with her during each visit. Each pamphlet contains suggests for interactions with the child by way of playing, reading together and day-to-day routine.

Neonatal Behavior Observation (NBO, Brazelton & Nugent, 1995; Howthorne 2004; Nugent

2007)

The aim of this intervention is to improve caregiver-infant interaction at the behavioral level with a specific focus on caregiver responsiveness during the earliest days and months of the infant's life. The Brazelton Neonatal Behavioral Assessment Scale (NBAS), along with its shorter clinical variation, the Newborn Behavioral Observations (NBO) system, developed as a way of assessing a newborn's neurological functioning and ability to participate actively in interaction which is used as an intervention to support caregivers in understanding their infants' behavior. The NBAS and NBO direct the caregiver's attention toward the infant's behavior; address the caregiver's awareness and understanding of newborn infants as unique individuals whose behaviors can be understood as meaningful communication of needs, wants, abilities, challenges, and preferences; and model contingent responses to these behaviors. The NBO is shorter than the NBAS and can be used with healthy, full-term infants from a few hours after birth to three months postpartum. The administration can take place at home, hospital or clinic and administration is flexibly tailored to each caregiverinfant dyad. NBo can be administered by various health professionals who undergo a twoday training. It is emphasized that this is not an examination of the baby, but a partnership between the practitioner and the parent of observing, learning, and generating a shared understanding of the baby's unique behavioral profile and it's needs - "giving the baby a voice". The observation is active and interactive and is concluded with developing a plan to promote a positive parent-infant bond. As such, the program strengthens no only the parent-child bond but also the relationship with the practitioner. It is recommended that families participate in sessions anywhere from one to three or more times, a greater number of sessions, spread over the first two to three months, provides a more detailed picture of the infant during a period of development. The systems are widely used in research and clinical practice, and included in national guidelines, and demonstrated positive effects on parents and infants, in numerous studies. For more information see:

http://www.childrenshospital.org/research/centers-departmental-programs/brazeltoninstitute/nbo.

Mellow Parenting (Levi et al., 2019; the information is taken primarily from the program's

site)

This program is aimed at providing a solution to families at risk who have complex needs. There are a number of programs and this study focuses on families with children aged 0 to 18 months (Mellow Babies) and aged 19 months to 4-5 years (Mellow Toddlers). The program includes 14 weekly 4.5-hour sessions, which includes a parent group, in which parents share their childhood experiences and the way in which these experiences influence their relations with their own children, with the goal of strengthening the relationship between parents and children. Use is made of cheap materials so that the parents can organize similar activities at home. In the third part of the day, there is a parent workshop in which parents watch video clips of themselves with their children and use them in order to improve parenting skills, to get feedback from a group of peers and to think about new ways of communicating with their children. The program's site:

https://www.mellowparenting.org/

Intensive Skills-Based Intervention (Hayes et al., 2008)

The program takes place in a day center to which parents can independently come to if they are concerned about childcare issues. The duration of the course is 6 days and includes both group and individual activity. At the beginning of the day, each family (up to 6 families a day) receive a "bedroom" with a child's bed, and a staff members works with the mother on a treatment program that takes into account her strongpoints and her capabilities together with the needs that can be met during the day. The therapeutic day deals with parental wellbeing, parent-child interaction, child development, child behavior, playing confidence, feeding, calming and sleep and scheduling. The group sessions include modelling and practice of parental response to the baby's cues and also discussions led by a maternal health nurse on calming, sleep difficulties, nursing, milk substitutes, weaning and the transition to solids, reading the child's cues, understanding challenging behaviors and the mother taking care of herself. The program also includes sleep intervention, which is composed of calming techniques and a timed assessment with calming, although the intervention was fine-tuned to the sleep needs and goals of each family. As part of the individual work, a member of the staff worked with the parents in the "bedroom" using behavioral strategies, exercises, instruction, modelling, feedback and reinforcement in understanding the baby's cues. The program's site: http://www.gec.org.au/day-service.htm

Touchpoints (Brazelton, 1995; Suares, 2016)

Touchpoints is a conceptual developmental framework that guides work with families with young children. It is based on Brazelton's model referring to Touchpoints as periods during the first years of life during which children's spurts in development result in disruption in the family system. The succession of touchpoints in a child's development is like a map that can be identified and anticipated by both parents and providers. They are centered on caregiving themes that matter to parents (e.g. feeding, discipline), rather than traditional milestones. The child's negotiation of these touchpoints can be seen as a source of satisfaction and encouragement for the family system. Thirteen touchpoints have been noted in the first

three years, beginning in pregnancy. Professionals can use these Touchpoints as a framework for each encounter with families. These potential disruptions provide a window of opportunity to establish and strengthen the partnership with the parents and support them in understanding the child's behavior as a way to communicate needs. The Touchpoints framework has been translated to books and guides for parents in a range of topics (e.g., discipline, toilet training), intervention programs for various professionals (education, health, community), in individual and group settings. There are also various training programs for professionals, with the basic training including communication and engagement with parents, providing anticipatory guidance and enhancing parent competence. One program, for example, was incorporated as an extension of well-baby visits at 12 and 18 months, and resulted in improvement in parenting measures and in the nurse-family relationship. For more information see: https://www.brazeltontouchpoints.org/.

Universal Prevention (Hiscock et al., 2008)

The goal of this intervention is to reduce behavioral problems among children, to reduce overly strict disciplining and strengthen parental nurture and to reduce symptoms of depression and anxiety among mothers. Furthermore, the participants receive information on normative child development in order to create realistic expectations. The intervention include 3 sessions whose goal is to change parental behaviors that constitute a risk factor for behavioral problems among children: unreasonable expectations, overly strict discipline and lack of parental nurture. The first session involves a routine visit to the child health clinic at the age of 8 months, during which the mothers receive information sheets on a normative child's behavioral, motor and social development during the subsequent 12 months, as well as the ways in which to encourage language development. At the age of 12 months, there is a two-hour group meeting with the parents, during which there is discussion of ways to develop warm and sensitive relations with the infant, as well as to encourage desirable behavior. The meeting deals with the need to prepare ahead of time for situations in which it is likely that the infant will behave in an undesirable manner and suggestions for alternatives to "irrational beliefs" of parents which can lead to overly strict discipline. At the age of 15 months, the parents participate in another group meeting of two hours which includes a discussion of ways to manage non-desirable behavior in children. As part of the session, the parents are encouraged to find alternatives to hitting and shouting – to identify problematic behaviors as "low priority" (which call for strategies of planned ignoring, distraction and logical choices) or "high priority" (which call for strategies that can be used in "quiet time"). The sessions are given by a nurse and an expert in parent group facilitating. The nurses provided instruction of a total of 3 hours (30 minutes before the meeting at the age of 8 months and 2.5 hours before the meeting at the ages of 12 and 15 months), which were given by a pediatrician and a child psychologist. The coaching included didactic learning, role playing, and filmed vignettes of proper parental response to common behaviors in children. About 93 percent of the participants attended the meeting at the age of 8 months, 67 percent attended the meeting at age of 12 months and 56 percent attended the meeting at the age of 15 months. About 49 percent of the participants attended both the 12-month and 15-month meetings.

Urban Parenting (Salonen et al., 2008; 2010)

This Internet-based intervention is intended for parents after birth (the intervention can be started also during the pregnancy), with the goal of increasing the subjective well-being of families with babies and supporting parents by increasing parental satisfaction and the feeling of capability. As part of the intervention, the parents get access to an Internet site with information on parenting, nursing and baby care. In addition, they can participate in a forum of peers and a question and answer forum with professionals (nurses and mid-wives). The material offered on the site includes information on tasks related to parent-child interactions in day-to-day situations, sensitivity to the baby's signs and needs and information on responses that encourage growth and flourishing. The parents participating in the intervention can chose which tools to use according to their needs.

SMART moms (Le et al., 2011)

An intervention program also called Mothers and Babies Course/ Health and Mood project. This is a group intervention, developed over a decade which is implemented in different languages and variations. It is designed for expectant women, from low socio-economic background who are at risk for post-partum depression. The goal of the program is prevention of depression, therefore it is labelled as a course – similar to birth preparation – and not as a clinical intervention. The course is based on principles of CBT, social learning, and attachment theory. The contents of the course cover the following: parent-child bonding, sensitive parenting, parental well-being; stress management (breathing exercise, mindfulness, etc); self-monitoring of mood and harmful thoughts, self-care, problem solving, communication skills and getting help. The course includes presentations, video-clips, role-play and home assignments. The course has been translated and culturally adapted to various languages and has demonstrated positive effects on subjective and objective measures of maternal stress.

MUMentum postnatal (Loughnan et al. 2019)

An internet-based program for women with elevated depression or anxiety during 12 months post-partum. The program is based on CBT principles, and was adapted to unique needs of new mothers (there is also a pre-natal program). The program includes three modules, spread over a six-week period. The intervention includes information about post-natal depression and anxiety, identification of symptoms, self-monitoring, self-care, stress management and relaxation, getting help, working with negative thoughts, problem solving, coping with anxiety and avoidance behaviors, assertive communication, activity planning and relapse prevention. The program is delivered in an illustrated comic-style story, with two fictional women experiencing postpartum anxiety and depression symptoms. Participants followed the characters' experiences of learning how to self-manage their symptoms using CBT skills. Each lesson consisted of a set of slides showing the characters' stories and describing specific CBT skills; a lesson summary and homework; and a range of additional resources. Participants were encouraged to complete one lesson every one-to two weeks, for a total treatment period of up to six weeks. All lessons were accessed sequentially via an online system, with a 5-day lockout period between lessons.

Netmums (O'Mahen et al., 2013)

The program was developed for mothers suffering from postpartum depression, with the goal of treating and reducing its symptoms. The treatment focuses on helping the mother to create experiences that are of value even in a situation with multiple unexpected demands. The program includes 11 weekly 40-minute Internet sessions. The program can be completed in a period of 15 weeks. The programs included slide presentations, with a different topic each week (a list of topics appears in the article, which includes self-monitoring, behavioral analysis and understanding the role of avoidance, alternative behaviors, etc.). The participants received weekly emails that included a reminder and links to material on the net and homework assignments. The program also includes a forum that is overseen by health experts and in which a participant can get advice from the other participants. The women also received answers to questions regarding treatment and assistance in doing the homework assignments.

Parents Interacting with Infants (Boyd et al., 2019)

The program includes 8 sessions that are divided according to topic: psychoeducation on depression and behavioral activation, baby temperament, playing, feeding, safety, sleep, parent-child interaction and reading. Each session included an introduction to a topic that was conveyed by means of a slide presentation, an accompanying video if there was one, questions that invite the participants to share previous experiences, an exercise to increase understanding of the topic, follow-up questions on what was learned in the exercise and a summary of the material taught. The content of each meeting was uploaded to a confidential Facebook group in three parts over the course of a week in order to allow the participants to read the material, to practice and to submit comments/responses to questions posed by the facilitator of the program. The program had high participation rates (83 percent on average).

**As part of the research, a similar intervention was carried out in groups (which achieved less positive results). In the parent groups, the topics were identical and included 8 sessions, which consisted of moderated dyadic mother-baby activity, summing up and homework. The intervention included a meal, therapeutic services for the child and transportation in order to encourage participation. In addition, reminders were sent out each week by telephone/sms for the upcoming meeting. The material was sent to mothers who missed a session. Nonetheless, there was a low rate of response that ranged from 0 to 33 percent (average participation of 3 percent).

Mothers Helping Mothers with Postpartum Depression (Dennis et al., 2003; 2009)

This intervention program is aimed at new mothers suffering from postpartum depression. The volunteer coordinator pairs a new mother to a volunteer and the volunteer makes contact with her at the frequency necessary for the support she needs. The volunteers were experienced mothers who had recovered from postpartum depression. They were trained for the program in a 4-hour volunteer training session, which focuses on developing telephone support, as well as problem-solving ability and the ability to refer mothers for professional help. The volunteers received a guide book that describes the professional services to which they can refer mothers and theoretical information on the support of a peer group, how to develop a relationship, skills and techniques for efficient telephone support and general information on postpartum depression.

Home-Start (Barnes et al., 2009)

This intervention program is intended to reduce symptoms of postpartum depression and includes home sessions with volunteers. The parents and volunteers decide together on the frequency and duration of the meetings and how long the support will continue, according to the needs expressed. The sessions include various activities, such as providing company, help in caring for the child or with household chores, making trips together and giving parenting advice. The volunteer's training is comprised of 10 half-day sessions.

Bibliography

- Barnes, J. S. R. M. K., Senior, R., & MacPherson, K. (2009). The utility of volunteer home-visiting support to prevent maternal depression in the first year of life. *Child: care, health and development*, 35(6), 807-816.
- Black, M. M., Baqui, A. H., Zaman, K., McNary, S. W., Le, K., Arifeen, S. E., ... & Black, R. E. (2007).
 Depressive symptoms among rural Bangladeshi mothers: implications for infant development. *Journal of Child Psychology and Psychiatry*, 48(8), 764-772.
- Boyd, R. C., Price, J., Mogul, M., Yates, T., & Guevara, J. P. (2019). Pilot RCT of a social media parenting intervention for postpartum mothers with depression symptoms. *Journal of reproductive and infant psychology*, *37*(3), 290-301.
- Brazelton, T. B., & Nugent, J. K. (1995). Neonatal behavioral assessment scale (No. 137). Cambridge University Press.
- Cates, C. B., Weisleder, A., Dreyer, B. P., Johnson, S. B., Vlahovicova, K., Ledesma, J., & Mendelsohn, A.
 L. (2016). Leveraging healthcare to promote responsive parenting: impacts of the Video Interaction Project on parenting stress. *Journal of child and family studies*, *25*(3), 827-835.
- Claxton, A., & Perry-Jenkins, M. (2008). No fun anymore: Leisure and marital quality across the transition to parenthood. *Journal of Marriage and Family*, 70(1), 28-43.
- Danaher, B. G., Milgrom, J., Seeley, J. R., Stuart, S., Schembri, C., Tyler, M. S., ... & Lewinsohn, P. (2013).
 MomMoodBooster web-based intervention for postpartum depression: feasibility trial results. *Journal of medical Internet research*, *15*(11), e242.
- Dennis, C. L. (2003). The effect of peer support on postpartum depression: a pilot randomized controlled trial. *The Canadian Journal of Psychiatry*, *48*(2), 115-124.

- Dennis, C. L., Hodnett, E., Kenton, L., Weston, J., Zupancic, J., Stewart, D. E., & Kiss, A. (2009). Effect of peer support on prevention of postnatal depression among high risk women: multisite randomised controlled trial. *Bmj*, *338*, a3064.
- Giallo, R., Evans, K., & Williams, L. A. (2018). A pilot evaluation of 'Working Out Dads': promoting father mental health and parental self-efficacy. *Journal of reproductive and infant psychology*, 36(4), 421-433.
- Goodman, S. H., & Gotlib, I. H. (2002). Children of depressed parents: Mechanisms of risk and implications for treatment. *Washington, DC*.
- Hayes, L., Matthews, J., Copley, A., & Welsh, D. (2008). A randomized controlled trial of a mother– infant or toddler parenting program: Demonstrating effectiveness in practice. *Journal of pediatric psychology*, 33(5), 473-486.
- Hiscock, H., Bayer, J. K., Price, A., Ukoumunne, O. C., Rogers, S., & Wake, M. (2008). Universal parenting programme to prevent early childhood behavioural problems: cluster randomised trial. *Bmj*, *336*(7639), 318-321.
- Hiscock, H., Cook, F., Bayer, J., Le, H. N., Mensah, F., Cann, W., ... & St James-Roberts, I. (2014). Preventing early infant sleep and crying problems and postnatal depression: a randomized trial. *Pediatrics*, 133(2), e346-e354.
- Le, H. N., Perry, D. F., & Stuart, E. A. (2011). Randomized controlled trial of a preventive intervention for perinatal depression in high-risk Latinas. *Journal of consulting and clinical psychology*, 79(2), 135.
- Levi, D., Ibrahim, R., Malcolm, R., & MacBeth, A. (2019). Mellow Babies and Mellow Toddlers: Effects on maternal mental health of a group-based parenting intervention for at-risk families with young children. *Journal of affective disorders*, *246*, 820-827.
- Loughnan, S. A., Butler, C., Sie, A. A., Grierson, A. B., Chen, A. Z., Hobbs, M. J., ... & Gemmill, A. W. (2019). A randomised controlled trial of MUMentum postnatal': Internet-delivered cognitive behavioural therapy for anxiety and depression in postpartum women. *Behaviour research and therapy*, 116, 94.
- Morawska, A., & Sanders, M. R. (2006). Self-administered behavioral family intervention for parents of toddlers: Part I. Efficacy. *Journal of consulting and clinical psychology*, *74*(1), 10.
- Navidian, A., Safarzadeh, A., & Koochakzai, M. (2017). The Effect of Home-Based Supportive-Educational Counseling on Primigravidas' Postpartum Stress.
- Nomaguchi, K. M. (2009). Change in work-family conflict among employed parents between 1977 and 1997. *Journal of Marriage and Family*, *71*(1), 15-32.
- Nomaguchi, K. M., & Milkie, M. A. (2003). Costs and rewards of children: The effects of becoming a parent on adults' lives. *Journal of marriage and family*, *65*(2), 356-374.

- Nugent, J. K., Keefer, C. H., Minear, S., Johnson, L. C., & Blanchard, Y. (2007). Understanding newborn behavior and early relationships: The Newborn Behavioral Observations (NBO) system handbook. Paul H Brookes Publishing.
- O'Connor, T. G. (2002). Annotation: The effects' of parenting reconsidered: findings, challenges, and applications. *Journal of Child Psychology and Psychiatry*, *43*(5), 555-572.
- O'Mahen, H. A., Woodford, J., McGinley, J., Warren, F. C., Richards, D. A., Lynch, T. R., & Taylor, R. S.
 (2013). Internet-based behavioral activation—Treatment for postnatal depression (Netmums): A randomized controlled trial. *Journal of affective disorders*, *150*(3), 814-822.
- Perez-Blasco, J., Viguer, P., & Rodrigo, M. F. (2013). Effects of a mindfulness-based intervention on psychological distress, well-being, and maternal self-efficacy in breast-feeding mothers: results of a pilot study. Archives of women's mental health, 16(3), 227-236.
- Roman, L. A., Gardiner, J. C., Lindsay, J. K., Moore, J. S., Luo, Z., Baer, L. J., ... & Paneth, N. (2009). Alleviating perinatal depressive symptoms and stress: a nurse-community health worker randomized trial. *Archives of women's mental health*, 12(6), 379.
- Roman, L. A., Lindsay, J. K., Moore, J. S., Duthie, P. A., Peck, C., Barton, L. R., ... & Baer, L. J. (2007). Addressing mental health and stress in Medicaid-insured pregnant women using a nursecommunity health worker home visiting team. *Public Health Nursing*, 24(3), 239-248.
- Salonen, A. H., Kaunonen, M., Åstedt-Kurki, P., Järvenpää, A. L., & Tarkka, M. T. (2008). Development of an internet-based intervention for parents of infants. *Journal of Advanced Nursing*, *64*(1), 60-72.
- Salonen, A. H., Kaunonen, M., Åstedt-Kurki, P., Järvenpää, A. L., Isoaho, H., & Tarkka, M. T. (2011).
 Effectiveness of an internet-based intervention enhancing Finnish parents' parenting satisfaction and parenting self-efficacy during the postpartum period. *Midwifery*, 27(6), 832-841.
- Sanders, M. R., Stallman, H. M., & McHale, M. (2011). Workplace Triple P: A controlled evaluation of a parenting intervention for working parents. Journal of Family Psychology, 25(4), 581.
- Shapiro, A. F., & Gottman, J. M. (2005). Effects on marriage of a psycho-communicative-educational intervention with couples undergoing the transition to parenthood, evaluation at 1-year post intervention. The Journal of Family Communication, 5(1), 1-24.
- Shapiro, A. F., Gottman, J. M., & Fink, B. C. (2015). Short-term change in couples' conflict following a transition to parenthood intervention. Couple and Family Psychology: Research and Practice, 4(4), 239.
- Shapiro, A. F., Nahm, E. Y., Gottman, J. M., & Content, K. (2011). Bringing baby home together: Examining the impact of a couple-focused intervention on the dynamics within family play. American Journal of Orthopsychiatry, 81(3), 337.

- Shorey, S., Chan, S. W. C., Chong, Y. S., & He, H. G. (2015). A randomized controlled trial of the effectiveness of a postnatal psychoeducation programme on self-efficacy, social support and postnatal depression among primiparas. *Journal of advanced nursing*, *71*(6), 1260-1273.
- Soares, H. (2016). 'Touchpoints' by nurses: impact on maternal representations, child development, quality of mother-infant interaction, and mothers' perception of the quality of relationships with nurses. Nursing children and young people, 28(4), 51-51.
- Symon, B., Bammann, M., Crichton, G., Lowings, C., & Tucsok, J. (2012). Reducing postnatal depression, anxiety and stress using an infant sleep intervention. *BMJ open*, *2*(5), e001662.
- Umberson, D., Pudrovska, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: A life course perspective. *Journal of Marriage and Family*, *72*(3), 612-629.
- van Grieken, A., Horrevorts, E., Mieloo, C. L., Bannink, R., Bouwmeester-Landweer, M. B., Hafkamp-de Groen, E., ... & Raat, H. (2019). A Controlled Trial in Community Pediatrics to Empower Parents Who Are at Risk for Parenting Stress: The Supportive Parenting Intervention. *International journal of environmental research and public health*, *16*(22), 4508.
- 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.