

The preventive Mind-Spring Junior intervention for refugee families: an exploratory evaluation

Master's thesis
Anne Reuten (5484332)

Utrecht University
Arq Psychotrauma Expert Group
Centrum '45

Supervisors

Trudy Mooren
Carlijn van Es

Acknowledgements

Miranda Dabboui - Broersen
Petra Beurskens

Date: 13.05.2018
Word count: 4997



Utrecht University

Stichting Centrum'45

Summary

Since refugee families are at risk of developing psychopathological symptoms due to their distressing experiences, preventive interventions aimed at reinforcing resilience are of great value. Forasmuch as research about these interventions has remained limited, this explorative study primarily focused on the implementation, strengths and weaknesses, and effectiveness of the Dutch Mind-Spring Junior preventive intervention. Conducting research in this context can be challenging and therefore describing experienced barriers and providing recommendations regarding future studies was a second objective of this study. Both quantitative and qualitative instruments were used to answer these four research questions in a multifaceted approach. The intervention was implemented at two asylum seekers centers and one family location in the Netherlands. In total, 33 parents and 23 children took part in this study. Parents and children indicate to have learned a great deal of information and skills from the intervention, and changes have generalized into the home environment. However, these benefits are not reflected on standardized measures of psychosocial well-being and health-related quality of life. It is yet unclear what factors explain this differential effect, but at least the substantive aspects of the intervention suit parents' and children's needs. Moreover, trainers feel to have anticipated to participant's needs by following the natural course of the group. Their major improvement points are to enhance the manuals' structures and to improve logistics. Noticeable differences in implementation are the diversity in amount of provided training and differences in carried out activities among intervention sites. Furthermore, barriers as participant movability, dropout, overcharging, trust issues and social desirable responding were experienced, for which recommendations regarding future studies have been made. We have been able to contribute to the field by investigating the preventive Mind-Spring Junior intervention, and hope many others will follow.

Introduction

“Fifteen-year-old Iftu Omar* escaped Ethiopia because he feared for his life after his father was killed. He dreamt of a life without persecution and decided to flee to Yemen by boat. When asked about the danger he faced during the journey, his face had no expression and he said: it was a nightmare that you cannot wake up from, and it will never leave me” (United Nations High Commissioner for Refugees (UNHCR), 2017).

Unfortunately, Omar’s story (*name changed for privacy reasons) is one of many children. According to the UNHCR, 65.6 million people – of which half are children – have left their homes by the end of 2016, in order to escape war, persecution, and violence (VluchtelingenWerk Nederland, 2017). The life of refugees is characterized by distressing pre-migrant, migrant, and post-migrant factors (Hollifield, Warner, Krakow, & Westermeyer, 2018). This chronicity of stressful-related experiences are cumulative risk factors for developing psychopathology in both children and adults, such as symptoms of posttraumatic stress disorder, major depression, and generalized anxiety disorder (Bronstein, & Montgomery, 2011; Fazel, & Betancourt, 2017; Fazel, & Stein, 2002; Goosen, Stronks, & Kunst, 2014; Heptinstall, Sethna, & Taylor, 2004; Hollifield et al., 2018; Werkgroep Kind in AZC, 2014). Fortunately, most refugees are able to cope with these stressors due to great resilience (Arnetz, Rofa, Arnetz, Ventimiglia, & Jamil, 2013; Bronstein, & Montgomery, 2011). This resilience consists of a dynamic process in which protective factors offer a counterweight to the risk factors (Daud, af Klinteberg, & Rydelius, 2008; van Willigen, 2009).

Since resiliency buffers development of psychopathology, selective and indicated preventive interventions aimed at strengthening available or establishing new protective factors are of great value. One protective factor for reducing development of psychopathology in children are supportive family relations (Fazel, & Betancourt, 2017; Fazel, & Stein, 2002; Daud et al., 2009; van Willigen, 2009). Although literature has underlined the importance of these family level processes in shaping healthy child adjustment, these factors have received little attention in interventions for refugee children (Fazel, & Betancourt, 2017). One intervention that does focus on these family level processes is the Dutch preventive Mind-Spring Junior intervention (ARQ Psychotrauma Expert Group, 2017). This intervention is constructed of parallel modules for parents and their children and anticipates to their needs and worries (Vrienden van SAMAH, 2016). Mind-Spring Junior stems from the earlier developed Mind-Spring intervention for adult refugees – which received much positive feedback – and has been specifically tailored to an intervention for refugee families with

means of a needs assessment in 2015 (P. Sterk, personal communication, 7 May 2018; Vrienden van SAMAH, 2016).

The parallel modules for parents and children focuses upon different themes, and goals have been set for the intervention to accomplish (Sterk, 2017a, 2017b). Goals for the children's module include 1) recognition and expression of feelings; 2) awareness and acknowledgement of life changes and being in a tough situation; 3) exploration of personal strength; 4) changes in identity and development of a positive identity; and 5) reinforcement of self-esteem and empowerment. It is attempted to accomplish these goals by interactive psychoeducation in the form of group talks combined with activities. These goals reflect both their worries and needs, and indirectly some of the protective factors that contribute to resiliency (Vrienden van SAMAH, 2016). At an individual level these protective factors are self-esteem, being able to give meaning to events, emotional expression, and prosociality (Daud et al., 2008; van Willigen, 2009). As formerly mentioned, supportive family relations also contribute to children's resiliency, for example the way parents cope with stressful situations, have open communication and a goal-driven approach (Fazel, & Betancourt, 2017; Fazel, & Stein, 2002; Daud et al., 2009; van Willigen, 2009). Integrating these protective factors with needs explored in the needs assessment, the parental module primarily focuses on supporting the parental role. Central concepts in this module are awareness, parental styles, and self-evaluation of parental behavior. These parallel modules complement each other by providing homework assignments after each session, so children and parents are encouraged to put learned materials into practice. Ultimately, the program endeavors to prevent development or reduce presence of psychological symptoms in refugee families.

As few preventive intervention programs for refugee families currently exist (Fazel, & Betancourt, 2017; Horlings, & Hein, 2018), it is of significant value to assess Mind-Spring Junior's contribution to the available health care services. Former pilot studies have already shown that the intervention is welcomed positively by participants and trainers (Arq Psychotrauma Expert Group, 2017). To evaluate the intervention in a concise manner, both quantitative and qualitative instruments are used to answer four research questions. Firstly, it will be examined what experiences parents and children have about participation in the intervention, what they have learned, and what they think are points of improvement. Secondly, initial effectiveness of the intervention will be evaluated by assessing whether improvement is made in psychosocial well-being and quality of life of the child. Furthermore, it will be investigated whether participation of parent and child in the intervention influences this effect and if a dose-response effect of attended minutes to the training is present. Thirdly,

from trainers' points of perspective, implementation of the intervention is examined, and corresponding strengths and improvement points will be investigated. Consequently, differences in implementation among intervention sites are examined. Lastly, conducting high quality research in a refugee population can be obstructed by vulnerability, movability, and cultural factors (Fazel, & Betancourt, 2017). Hence, we will explore these barriers and make recommendations for future studies. In conclusion, current pilot study conducts an explorative evaluation that will use both quantitative and qualitative research methods to investigate multiple facets of the preventive Mind-Spring Junior intervention. This information is essential to benefit future implementation of this and similar interventions targeted at refugee families.

Methods

Participants

Participants from three Mind-Spring Junior interventions in the Netherlands, two refugee seekers centers in Den Helder and Utrecht and one family location in Amersfoort, were included in this study. Inclusion criteria of children for participation in the intervention were being 8 – 12 years old and to not attend special education. In total, 23 children ($M = 10.1$, $SD = 1.5$, 14 female) took part in this study. Exclusion criteria for parents were experiencing extreme psychiatric dysfunctioning, having no interest in investigating parental roles, and not being able to function in group settings. Contra-indications were assessed upon recruitment by the Gemeentelijke Gezondheidsdienst (GGD), which is the public health service, and in the training by the GGD Mind-Spring Junior trainer. In total, 33 parents ($M = 41.3$, $SD = 8.9$, 24 female) took part in this study.

Intervention

Mind-Spring Junior is constructed of two parallel modules, one for children and one for their parents. Both modules consist of eight sessions taking up to two hours. An overview of topics and goals per session is presented in Table 1 in Appendix A (Sterk, 2017a, 2017b). Every intervention group has to be homogeneous in native language, and an external interpreter translates between this native and Dutch language. Mind-Spring Junior is characterized by the principle 'in support of and made by refugees', which is actualized by training a former refugee into a cultural Mind-Spring trainer. That ensures cultural sensitiveness, because taught materials are discussed from a native and Dutch viewpoint. The intervention is offered

in collaboration with a professional from the GGD, who provides psycho-education, deepens theory, and is keen on early detection of clinical symptoms.

Materials

Qualitative.

To provide a qualitative evaluation of the intervention, focus groups of 30 minutes with parents and children were held. Diverse topics were addressed, but the main purpose was to assess how they had experienced the training, what they had learned, and what they thought were qualities and pitfalls of the intervention (see Appendices B and C).

To receive information from a trainer's perspective, semi-structured interviews were held with each trainer to receive comprehensive feedback on the total intervention, such as barriers, improvement points, and strengths (see Appendix D).

Quantitative.

To estimate the intervention effect on psychosocial well-being and skills, parents filled in the Strengths and Deficits Questionnaire (SDQ) for children between 4 – 17 years, which was presented in Arabic or Dari (Goodman, 1997; Youth in Mind, 2012). This questionnaire consists of 25 items on three-point Likert scales. In 2007, the Commissie Testaangelegenheden (COTAN) rated the criterion validity and norms of the questionnaire as insufficient, due to inadequate research and possible unrepresentative norms (NederlandsJeugdinstituut (NJI), 2017). However, according to a systematic review in 2010, the internal consistency, test-retest reliability, and inter-rater agreement are satisfactory (Stone, Otten, Engels, Vermulst, & Janssens, 2010).

Children filled out the Kid-KINDL for children aged between 7 – 13 years, in order to estimate the intervention effect on health-related quality of life (QoL) (Ravens-Sieberer, & Bullinger, 1998a; Ravens-Sieberer, & Bullinger, 1998b). This questionnaire consists of 24 items on five-point Likert scales, and was presented in Dutch since no Arabic or Dari version was available. No COTAN assessment was available for this questionnaire. However, research has proved satisfactory internal consistency, sensitivity, and factorial, convergent and discriminant validity (Ravens-Sieberer, & Bullinger, 2000).

Procedure

Several instances involved in monitoring and arranging adequate health for refugees, such as the GGD, JeugGezondheidsZorg (JGZ), GezondheidsCentrum Asielzoekers (GCA), and

Centraal Orgaan opvang Asielzoekers (COA) may request a demand to implement Mind-Spring Junior at a specific center. When the sufficient number of applicants is reached (eight), Arq Psychotrauma Expert Group coordinates the intervention.

Parents had to give signed consent for their participation in the study, as well for their child's. During the second or third session, and during the last session, parents filled in the SDQ and children the Kid-KINDL. The interpreter and cultural trainer helped with filling in informed consent forms and questionnaires. They provided verbal translation of Dutch materials, helped participants who had reading difficulties, and responded to questions about uncertainties with help of the researchers. In the last session, focus groups were held after completion of questionnaires with help of the interpreter and cultural trainer. Responses were directly recorded and no recordings were made in order protect anonymity. After the last session, interviews with trainers were held face-to-face or by telephone.

The Medical Research Ethics Committee (MREC) of the UMC Utrecht provided permission to carry out this study (MREC-protocol number 17-795/C).

Statistical Analyses

In order to organize and analyze the data from this mixed-design experiment IBM SPSS statistics version 24.0 (2016), MAXQDA 10 (2010), and Microsoft Excel (2010) were used.

Qualitative.

Responses from focus groups and interviews were analyzed with the three-phased coding method proposed by Boeije (2016) in MAXQDA 10. In this methodology, all relevant passages receive a code (open coding) and are hierarchically ordered (axial coding); eventually all constructs are integrated (selectively coding). Supervisors reviewed the codes after the coding process was completed in order to strive for intersubjectivity about interpretation.

Quantitative.

To investigate the intervention effect, pretests and posttests of the SDQ and Kid-KINDL were analyzed by means of *t* tests, ANOVAs, and correlations. To paint a picture of the effectiveness, Reliable Change Indexes (RCIs) were calculated as well (Jacobson, & Truax, 1991). A reliable change refers to a statistical change that occurs when the difference score between two measurement points is larger than the measurement error's difference score on the instrument. Participants were only included in analysis when they completed both

assessments and attended a minimum of four intervention sessions. Missing values were imputed by mean substitution.

Results

Qualitative

Focus group with parents (n = 20) and children (n = 18).

Experiences.

Both parents and children were enthusiastic about the intervention, and parents said it exceeded their expectations. Moreover, the majority of children was looking forward to the session every week. Several elements were especially important, such as being able to talk with and learn from others. The sessions functioned as an outlet for many parents, since they indicated to have many worries.

Effects.

Parents learned a great deal about upbringing and Dutch culture. This knowledge generalized to the way they act as a mum or dad. Examples are improved listening to their children, implementation of house rules, and improved communication. Hence, most children indicated things have changed at home. Parents would 'listen to them better, are sweeter in their communication, and become less angry'. There are still arguments at home, but because communication is improved, they are able to solve these better. Importantly, some parents said to explicitly discuss the intervention with their children, but as many say they do not. Other topics the children learned about are identity, emotions, having helping thoughts, taking care and fend for themselves, and to behave properly and respect others. However, there have been no or few changes in the atmosphere in the asylum center.

Implications.

Teaching was described as clear and well understandable and no language barrier was experienced due to 'a good and fair interpreter'. Nobody was able to come up with a theme that was not important or difficult to understand. However, parents and children did mention some areas of improvement. Some parents wished to receive more training, to receive handouts, and to have more sessions per week instead of one. Lastly, a father suggested modular certificates should be created for parents who did not attend all sessions. One girl would have liked to talk individually with other children about how things are going and the

newly learned information. Furthermore, some children thought it would be fun to be more active and creative during the sessions.

Evaluation.

Besides these wishes for improvement, parents and children are rhapsodized about the intervention and its trainers, and score it a nine out of ten. Lastly, the importance of this intervention was underlined by many parents, by stating it should become mandatory.

Semi-structured interviews with trainers (n = 6).

Substantive aspects.

Tutoring. A crucial activity was the possibility to enter a dialogue. Hence, trainers noticed that a combination of tutoring and group discussions worked best for many parents. For children, linking theory to playful activities ensured best understanding of taught materials.

Themes. Important themes in the parental training were upbringing and Dutch culture, but also the fear of children being taken into custody and events described in media. For children, working with the Hero Book was an important activity since it functioned as the basis of learned materials.

Adherence to manual. Trainers followed the natural course of the group and did not carry out all elements described in the manuals, both wise because of too little time and because not all activities were judged as suitable. However, core of the session was always discussed and goals established by the intervention were yet completed.

Effects.

Trainers noticed intervention effects mainly because of the stories parents told about their adapted parenting style and better understanding of their children's behavior. Children have become better equipped to recognize and cope with issues, realized the importance of talking about feelings, and mainly received awareness about all subjects targeted in the intervention.

Barriers.

Homework. Homework was rarely assigned at one location, because it was experienced as an obstacle. At another site, homework was assigned, and translated into the native language by the cultural trainer. However, here a barrier was experienced in time, because there was too little time to review the assignments thoroughly.

Group composition. Bothersome to all trainers was the instability of group composition due to inflow, outflow, and a variance in attendance of participants. To increase loyalty, one trainer suggested parents should receive weekly reminders and be obligated to cancel sessions by telephone. Another suggestion was to have more sessions per week for a shorter amount of time, resulting in ‘less outflow, clearer group composition, and more safety resulting in getting to work more quickly’. Trainers at two locations experienced trouble in tutoring because of a cognitive gap among children, since inclusion criteria were not obeyed. Hence, trainers wish for a clear and strict group composition at the start of intervention, while strictly adhering to inclusion criteria.

Translation. Although external interpreters were complimented for their job, one Dutch GGZ-trainer mentioned it was hard to keep up with the group because ‘you are always one step behind’.

Collaboration. Collaboration and task division among trainers went well, but collaboration with COA was more troubled. Namely, trainers at two locations hope to make better arrangements about practicalities in the future, since these resulted in a loss of preparation time.

Time. Since all trainers experienced a time pressure, they would like to have more time in the sessions. Especially translating theory into practice required more time than was available. At one location, trainers said that ‘time was not too bad’, especially when parents and children arrived on time. That is why they suggested making doors open earlier. Two trainers said that 150 minutes of parental training and 90 minutes of children’s training would be good.

Improvement points.

Content. At one location children reported to receive little parental attention. Therefore, trainers think the intervention should become even more focused at improving child-parent communication. Possibly handouts could function as a lead for parent and child to start talking about the intervention.

Parental manual. Although content of the module is important and suiting the needs of parents, some trainers described the manual as chaotic and unorganized. Furthermore, the overlap in substantive aspects among sessions was experienced as bothersome. In order to improve the manual, every session should become focused at two main topics with brief and to the point descriptions.

Children's manual. Themes in the manual are suited to children's needs, but there are too many activities that do not fit time well, there is content related overlap among sessions, and theory need to become less complex and suitable to children's ages.

Protocol or overview. Three trainers view the manual as an overview of possible activities you can carry out instead of a strict protocol of activities that must be performed. The other trainers do see it as a protocol, but report that not all activities can be performed in practice; but two still want to keep the manual this way. One trainer wishes to maintain the manual as an overview, because it 'gives him the opportunity to anticipate to the moment'. The other three trainers prefer a protocol with activities that actually match within the given time.

See Appendices E, F, and G for a full description of these interviews.

Quantitative

The instability of group composition mentioned by trainers is demonstrated by only seventeen parents and five children having completed both assessments, while just as much other parents and children completed either pretest or posttest assessment.

Strengths and Deficits Questionnaire (SDQ).

A two-tailed paired-samples t test with dependent variable SDQ difference scores was conducted and revealed a non-significant intervention effect, with a difference of -2.467, $t(14) = -1.559$ and $p = .141$. Assumptions of normality and normality of difference scores were not violated. Scores implied that parents rated their child 'close to average' in psychosocial functioning before and after the intervention according to norms of the SDQ.

In order to investigate clinically relevant effects, RCI's were calculated. Overall, 46.67% ($n = 7$) of parents indicated improvement of their child's psychosocial well-being and 46.67% ($n = 7$) indicated no reliable change. Strikingly, six out of seven parents in Amersfoort indicated decline, although only one of these parents (6.67%) reported reliable decline.

To investigate whether participation of their child influenced the intervention effect, a two-tailed Mann-Whitney U test with dependent variable SDQ difference scores was conducted since assumptions of normality were violated. Results indicated that if the child participated in the intervention this significantly influenced the intervention effect, with $U =$

.000, $z = -2.603$, $p = .009$, and $r = .672$. If their child participated ($n = 12$), scores improved more than if they did not participate ($n = 3$).

In order to investigate presence of a dose-response effect of attended training, a one-sided bivariate Spearman correlation between SDQ difference scores and total minutes of attendance was calculated since the assumption of normality was violated. This correlation was not significant, with $r(15) = .165$ and $p = .278$.

To visualize the intervention effect, pretest and posttest scores of the SDQ are presented in Figure 1.

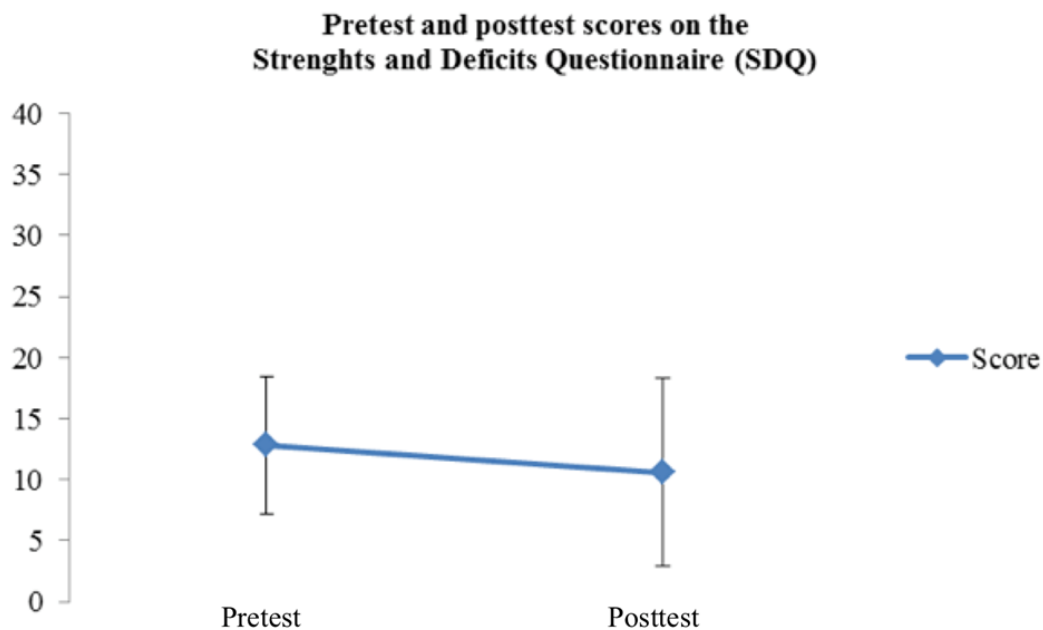


Figure 1. Mean pretest and posttest scores on the Strengths and Deficits Questionnaire (SDQ) with standard deviations.

Kid-KINDL.

A two-tailed paired samples t test with dependent variable Kid-KINDL difference scores revealed a non-significant intervention effect, with a difference of 12.29 and $t(4) = -2.005$, $p = .115$. Assumptions of normality and normality of difference scores were not violated. A two-tailed one sample t test indicated that pretest and posttest scores did not differentiate from the reference point for healthy children with $p = .155$ and $p = .344$ respectively.

RCI's showed that 60% ($N = 3$) improved in self-reported QoL, whilst 40% ($N = 2$) reported no change.

Although only one child had no parent taking part in the intervention, a two-tailed independent sample t test with dependent variable Kid-KINDL difference scores showed that

participation of a parent did not influence the intervention effect, with $t(3) = 2.001$ and $p = .139$.

Since the assumption of normality was violated, a one-sided bivariate Spearman correlation between Kid-KINDL difference scores and total minutes of attendance was calculated to investigate a dose-response effect. This effect was found, with $r(3) = .872$ and $p = .027$.

To visualize the intervention effect, pretest and posttest scores of the Kid-KINDL are presented in Figure 2.

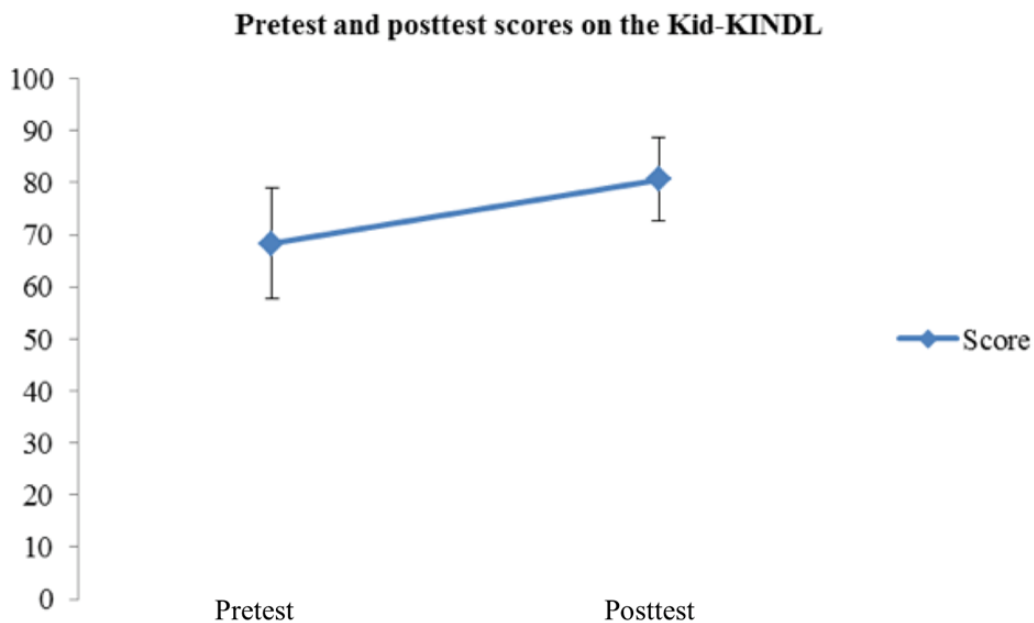


Figure 2. Mean pretest and posttest scores on the Kid-KINDL questionnaire with standard deviations.

Finally, in order to investigate level of correspondence between parents and children, a two-sided bivariate Pearson's correlation was calculated between SDQ and Kid-KINDL difference scores. The assumptions of normality, linearity and homoscedasticity were not violated. A non-significant correlation of $r(3) = .817$ with $p = .091$ was found, indicating that parents and children reports about the intervention effect did not accord.

Training time.

To investigate differences in implementation of the intervention, differences in the amount of minutes training among locations were calculated. Since assumptions of normality and homogeneity of variances were violated, a two-tailed one-way between groups ANOVA with

Welch's correction was performed, and revealed a significant effect with $F(2, 11.57) = 5.478$ and $p = .021$. Post hoc analyses with Games-Howell correction revealed that more training was provided in Amersfoort ($M = 117, SD = 10$) in comparison to Den Helder ($M = 66, SD = 44$).

Differences in the provided amount of children's training were also found with a two-tailed one-way between groups ANOVA, with $F(2, 24) = 5.487, p = .011$ and $\eta^2 = .457$. The assumption of normality was violated. Bonferroni post hoc analyses again showed that more training was provided in Amersfoort ($M = 108, SD = 53$) in comparison to Den Helder ($M = 51, SD = 29$).

Discussion

This explorative study investigated the preventive Mind-Spring Junior intervention in a twofold manner. Firstly, it was investigated what barriers are experienced while conducting research in this context and what recommendations can be made in regard to future studies. Next, experiences, implementation, strengths and weaknesses, and effectiveness of the intervention were explored, which shall be discussed first.

All parents and children indicate to have profited from the intervention, since they have learned new information and skills. This knowledge reflects the goals established by Mind-Spring Junior and some of the protective factors that buffer development of psychopathological symptoms, such as self-esteem, emotional expression, and improved family communication (Daud et al., 2008; Fazel, & Betancourt, 2017; Fazel, & Stein, 2002; van Willigen, 2009; Vrienden van SAMAH, 2016). Participants are able to generalize learned materials into the home environment, although this intervention effect seems to be variable. Namely, some children say things have changed for the better at home, but others say that nothing has changed. It is yet unclear what factors predict this differential effect. That is, although several improvement points were mentioned, the content of the intervention matched their needs. Furthermore, no intervention effect was found on measures of psychosocial well-being and quality of life. However, a dose-response effect for the children's module was found, indicating that the more training the child attended, the more benefit it obtained. This may explain why some children did show reliable changes in psychosocial well-being and quality of life. Interestingly, the intervention effect was not influenced by whether the child's parent did or did not participate in the parental module. However, parents underlined the importance and necessity of this intervention, and most parents would like to receive more training.

According to trainers, most points for improvement are in adapting the modules' manuals. Suggestions are to improve structure and to create brief and to the point descriptions. Since a pressure in time prohibited trainers from tutoring all elements, a question raised whether the manual should be transferred into a strict protocol. Three trainers prefer such a protocol of activities that match the given space of time, but the other three trainers want to self-select activities in order to anticipate to needs of the group. Next to the time pressure, an unstable group composition was experienced as troublesome. Consequently, trainers advice to make doors open earlier and to make sure group composition is established at the start of intervention. Despite these issues, trainers indicate to have accomplished the goals established by the intervention and that the content match participants' needs. However, there should be more focus at ways of improving child-parent communication.

The intervention appeared to be implemented somewhat differentially among intervention sites, for example in amount of provided training. Furthermore, trainers did not carry out all elements described in the manual, what prohibits universal implementation of the program. On the other hand, trainers made these choices to follow the natural course of the group, to anticipate to participants' needs, and because of a time pressure in the sessions. All intervention sites noticed a lack of adherence to inclusion criteria and trainers at two locations mentioned a complex collaboration with COA.

As mentioned before, conducting high quality research in this context can be troubled (Fazel et al., 2017). Consequently, barriers and limitations were experienced, and suggestions for future studies are made when possible. A major issue is the high variability in attendance, inflow, and outflow of participants during the intervention, what prohibits generalization of the results. Secondly, overcharging is at risk. One reason why few children completed both assessments was that a change in questionnaires had to be made due to overcharging. Furthermore, several analphabetic parents stopped participating after pretest assessment. Another issue is that although the interpreter and cultural trainer could help some participants, others got help from kind fellow participants. This may have stimulated similar responding what minimized individual differences. Others may have filled in questionnaires without help and answered incorrectly. Hence, it is advised to simplify questionnaires or to fill in questionnaires frontal. Thirdly, having to write personal names and signatures for informed consent forms and linking pretest to posttest assessments may have made parents uncomfortable. On top of that, parents mentioned to be afraid their children would be placed into custody. These factors may have further strengthened the potential social-desirability bias cultural minorities are prone to (Linnenbank, & Speelman-Tjoeng, 2009). It is suggested to

take much time to explain informed consent forms and to use other methods for linking pretest with posttest assessments. A final limitation is that all trainers implemented Mind-Spring Junior for the first time. More experienced trainers may be needed to make valid judgments about what changes are needed to benefit this intervention.

This study has been able to contribute to the currently limited availability of studies about preventive intervention for refugee families (Horlings & Hein, 2018). A first step has been made in evaluating the preventive Mind-Spring Junior intervention by using qualitative and quantitative instruments. Although participants and trainers are enthusiastic about its beneficial effects, it remains unclear what contribution this intervention has in preventing development of psychopathology. Benefits are not reflected on standardized measures of psychosocial well-being and quality of life, and factors that are essential to provide beneficial effects are not yet identified. Accordingly, current study points out this domain of research is in its infancy and that many questions about these interventions remain unanswered. The domain would profit from longitudinal designed studies that use both quantitative and qualitative instruments to shed light on the effects of preventive interventions. Moreover, it is essential to explore what factors are essential in order to provide parents and children with benefit. We have been able to contribute to this development by investigating the preventive Mind-Spring Junior intervention, and hope many others will follow.

References

- Arnetz, J., Rofa, Y., Arnetz, B., Ventimiglia, M., & Jamil, H. (2013). Resilience as a protective factor against the development of psychopathology among refugees. *The Journal of nervous and mental disease*, 201(3), 167. doi:10.1097/NMD.0b013e3182848afe
- Arq Psychotrauma Expert Group (2017). *Mind-Spring Junior methodiek en effect*. Retrieved from <http://www.mind-spring.org/junior/images/MSfiles2015/Junior/Mind-Spring-Junior-methodiek-en-effect-2017.pdf> on 06-10-2017.
- Boeije, H. (2016). *Analyseren in kwalitatief onderzoek. Denken en doen*. Amsterdam, The Netherlands: Boom Uitgeverij.
- Bronstein, I., & Montgomery, P. (2011). Psychological distress in refugee children: a systematic review. *Clinical child and family psychology review*, 14(1), 44-56. doi:10.1007/s10567-010-0081-0
- Daud, A., af Klinteberg, B., & Rydelius, P. A. (2008). Resilience and vulnerability among refugee children of traumatized and non-traumatized parents. *Child and Adolescent Psychiatry and Mental Health*, 2(1), 7. doi:10.1186/1753-2000-2-7
- Fazel, M., & Stein, A. (2002). The mental health of refugee children. *Archives of disease in childhood*, 87(5), 366-370. doi:10.1136/adc.87.5.366
- Fazel, M., & Betancourt, T. S. (2017). Preventive mental health interventions for refugee children and adolescents in high-income settings. *The Lancet Child & Adolescent Health*. doi:10.1016/S2352-4642(17)30147-5
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of child psychology and psychiatry*, 38(5), 581-586. doi: 10.1111/j.1469-7610.1997.tb01545.x
- Goosen, S., Stronks, K., & Kunst, A.E., (2014). Frequent relocations between asylum-seeker centers are associated with mental distress in asylum-seeking children: a longitudinal medical record study. *International Journal of Epidemiology*, 43(1), 94–104. doi:10.1093/ije/dyt233
- Heptinstall, E., Sethna, V., & Taylor, E. (2004). PTSD and depression in refugee children. *European child & adolescent psychiatry*, 13(6), 373-380. doi:10.1007/s00787-004-0422-y
- Hollifield, M., Warner, T. D., Krakow, B., & Westermeyer, J. (2018). Mental Health Effects of Stress over the Life Span of Refugees. *Journal of Clinical Medicine*, 7(2), 25. doi:10.3390/jcm7020025

- Horlings, A., & Hein, I. (2018). Psychiatric screening and interventions for minor refugees in Europe: an overview of approaches and tools. *European journal of pediatrics*, 1-7. doi:10.1007/s00431-017-3027-4
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: a statistical approach to defining meaningful change in psychotherapy research. *Journal of consulting and clinical psychology*, 59(1), 12.
- Leary, T. (2004). Interpersonal diagnosis of personality. A functional theory and methodology for personality evaluation. Eugene, United States of America: Wipf and Stock
- Linnenbank, P., & Speelman-Tjoeng, I., (2009). *Culturele diversiteit en assessment. Verschillende mensen gelijke kansen*. Assen, The Netherlands: Koninklijke Van Gorcum.
- NederlandsJeugdinstituut, NJI (2017). *Strengths and Difficulties Questionnaire (SDQ)*. Retrieved from [http://nji.nl/nl/Databank/Databank-Instrumenten/Zoek-een-instrument/Strengths-and-Difficulties-Questionnaire-\(SDQ\)](http://nji.nl/nl/Databank/Databank-Instrumenten/Zoek-een-instrument/Strengths-and-Difficulties-Questionnaire-(SDQ)) on 06-10-2017.
- Ravens-Sieberer, U., & Bullinger, M. (1998). Assessing health-related quality of life in chronically ill children with the German KINDL: first psychometric and content analytical results. *Quality of life research*, 7(5), 399-407. doi:10.1023/A:1008853819715
- Ravens-Sieberer, U. & Bullinger, M. (1998b). News from the KINDL-Questionnaire – A new version for adolescents. *Quality of Life Research*, 7, 653.
- Ravens-Sieberer, U., & Bullinger, M. (2000). KINDL^R. *Questionnaire for measuring health-related quality of life in children and adolescents. Manual, revised version*. Retrieved from <https://www.kindl.org/english/manual/> on 06-01-18.
- Sterk, P. (2017a). Draaiboek voor training Mind-Spring Junior V3.0.
- Sterk, P. (2017b). Handboek Mind-Spring opgroeien in twee culturen V7.0.
- Stone, L. L., Otten, R., Engels, R. C., Vermulst, A. A., & Janssens, J. M. (2010). Psychometric properties of the parent and teacher versions of the strengths and difficulties questionnaire for 4-to 12-year-olds: a review. *Clinical child and family psychology review*, 13(3), 254-274. doi:10.1007/s10567-010-0071-2
- United Nations High Commissioner for Refugees (UNHCR, 2017). *Iftu Omar's Journey, Yemen*. Retrieved from <http://stories.unhcr.org/iftu-omars-journey-yemen-p60124.html> on 06-10-2017.
- van Willigen, L. H. M. (2009). Zorg voor gevluchte kinderen. *Bijblijven*, 25(4), 23-30. doi:10.1007/BF03087641

- VluchtelingenWerk Nederland (2017). *Vluchtelingen in getallen 2017*. Retrieved from <https://www.vluchtelingenwerk.nl/sites/public/u152/Vluchtelingeningetallen2017compleet-1.pdf> on 06-10-2017.
- Vrienden van SAMAH (2016). *Het gaat wel goed, maar ik heb hoofdpijn. Asielzoekerskinderen en hun ouders over omgaan met stress op het asielzoekerscentrum en de gezinslocatie*. Retrieved from <http://vriendenvansamah.nl/wp-content/uploads/2016/06/Rapport-het-gaat-goed-maar-ik-heb-wel-hoofdpijn-Printversie.pdf> on 06-10-2017.
- Werkgroep Kind in AZC (2014). Hier is hier in één woord gewoon...stom! Onderzoek naar het welzijn en perspectief van kinderen en jongeren in gezinslocaties. Retrieved from http://www.kind-in-azc.nl/docs/rapport_gezinslocaties.pdf on 10-10-2017.
- Youth in Mind (2012). *Strengths and Deficits Questionnaire*. Retrieved from <http://www.sdqinfo.com> on 06-10-2017.

Appendix A

Session topics and goals of Mind-Spring Junior

Table A1

Overview of session topics and goals per module of the preventive Mind-Spring Junior intervention.

Sessio n	Module children	Module parents
1	Introduction: acquaintance of participants and topics of the intervention.	Culture-specific upbringing: learning about upbringing choices and upbringing dilemmas between cultures.
2	Identity: learning about acquiring or retrieving a positive identity.	Parental roles and active listening: learning about different parental roles with means of Leary's Rose ¹ .
3	Hero book: discovering qualities, talents and opportunities.	Parental styles: discovering differences between the 'we'-culture and 'I'-culture.
4	Stress: learning about stress and how to cope with it.	Trusting versus mistrusting: learning about the effects of letting go versus (over)protection.
5	Normal reaction to an abnormal situation: learning about symptoms that are normal to develop after distressing experiences.	Parental identity: learning about parental identity, and effects of reinforcement and punishment.
6	Emotion: learning to cope with emotions using Cognitive Behavioral Therapy (CBT).	Getting out of your own way: exploring the effects of parental roles by using CBT.
7	Support: learning to find support and to use it.	Specifics: runners, pushers, lover boys, addiction.
8	Evaluation: evaluating and ceremony of graduation.	Evaluation: evaluating and ceremony of graduation.

¹ See Leary, T. (2004). *Interpersonal diagnosis of personality. A functional theory and methodology for personality evaluation*. Eugene, United States of America: Wipf and Stock Publishers.

Appendix B

Questions asked in focus groups with parents

1. How was it to participate in this training?

➔ Additional questions:

– Did the training meet your expectations? Why/Why Not?

2. What subjects in this training were most important for you?

➔ Additional questions

– Can you describe why that subject was important for you?

– Did the training meet with what you wanted to gain knowledge about?

– Was the explanation of all subjects clear to you?

– Would you recommend the training to someone else? Why/Why not?

3. Were there any subjects that were difficult to understand?

➔ Additional questions

– Can you give an example of a subject that you thought was difficult to understand?

– Were there subjects in this training that were not useful?

– Was it difficult to understand the trainers because of a language barrier?

4. Did the training change something in your acting as a mum or dad?

➔ Additional questions

– Can you give an example of something that has changed in your way of acting as a parent?

– Do you use elements taught in the training in your parenting, for example setting house rules, active listening, or punishment and reward?

5. Did the training change something in the atmosphere at home?

➔ Additional questions

– Answer yes: in what way do you notice something has changed?

– Answer no: do you have any idea why nothing has changed?

– Do you and your children talk and listen differently to each other because of the training?

– Do you and your children talk about what you have both learned in the training?

6. If you were allowed to change something about the training, what would that be?

➔ Additional questions

– If you could rate the training, what score would you give?

Appendix C

Questions asked in focus groups with children

1. How was it to participate in this training?
2. What was the most fun thing you did in this training?
➔ Additional questions:
 - Can you give an example of the thing you found most fun?
 - Why was this the most fun thing?
3. What was the least fun thing you did in this training?
➔ Additional questions:
 - Can you give an example of the thing you found least fun?
 - Why was this the least fun thing?
4. What have you learned in this training?
➔ Additional questions:
 - Can you give an example of something you have learned in this training?
 - If you think back to the training, what can you remember of it?
5. Do you and your parents talk and listen differently to each other because of the training?
➔ Additional questions:
 - Answer yes: can you give an example of something that has changed?
 - Answer no: do you have any idea why nothing has changed?
 - Has the ambience at home changed because you and your parents participated in this training?
 - Do you and your parents talk about what you have both learned in the training?
6. Did the training change something in how you talk with your friends and other children at the center?
➔ Additional questions:
 - Answer yes: can you give an example of something that has changed?
 - Answer no: do you have any idea why nothing has changed?
 - Does bullying take place at the center, and has it changed because of the training?
 - What do you think of interacting with children from another country?
7. Can you think of something that could make the training better?
➔ Additional questions:
 - If you could rate the training, what score would you give?

Appendix D

Questions asked in semi-structured interviews with trainers

Children's module

1. What activities contribute most to accomplishing goals of the training?
2. Did you perform all elements described in the manual?
➔ Answer no:
 - What was the reason you did not perform all elements?
 - Do you think goals of the sessions have yet been accomplished?
 - The elements you did not perform, would you have wanted to perform them if you have had more time, or do you think those elements were not suitable anyway?
 - Did you make specific selections of elements you were going to perform and elements you were not going to perform?
3. What suggestions for improvement of this training would you give?
4. What barriers did you experience in this training?
5. How was the atmosphere and growth process in this training?
6. Did you notice a difference in the state of children at the start and end of training?
7. How was the collaboration and distribution of tasks between you and the other trainer?
8. Do you have wishes for the future of this training?

Parental module

1. What activities contribute most to accomplishing goals of the training?
2. Did you perform all elements described in the manual?
➔ Answer no:
 - What was the reason you did not perform all elements?
 - Do you think goals of the sessions have yet been accomplished?
 - The elements you did not perform, would you have wanted to perform them if you have had more time, or do you think those elements were not suitable anyway?
 - Did you make specific selections of elements you were going to perform and elements you were not going to perform?
3. What suggestions for improvement of this training would you give?
4. What barriers did you experience in this training?
5. How was the atmosphere and growth process in this training?
6. Did you notice a difference in the state of parents at the start and end of training?

7. How was the collaboration and distribution of tasks between you and the other trainer?
8. Do you have wishes for the future of this training?

At the end of conversation

I noticed that trainers from all locations struggled with time issues. May it be true that the manuals currently serve as an overview of possible elements you could perform in the sessions, instead of a strict protocol with elements that need to be carried out in the sessions, or do you have a different view about this?

➔ Answer agrees with suggestion:

- What would be better: leaving the manual this way and view it as an overview of possible elements you could execute or create a strict protocol with elements that need to be carried out in the training?
- Since there is a bottleneck in time, would it be better to extend length of the sessions or to reduce the number of activities?

➔ Answer does not agree with suggestion:

- Could you explain your view about it?

Appendix E

Responses from focus groups with parents (n = 20)

Experiences

Striking was the great gratitude parents showed for existence of this intervention. They had been able to learn a great deal, specifically about upbringing and Dutch culture, and to work on self-development. The intervention exceeded their expectations. Teaching was described as clear and well understandable and no language barrier was experienced due to ‘a good and fair translator’.

Important elements

Themes. Important themes were upbringing, active listening, the G-scheme, and parental-identity. One father mentioned he has realized that problems are not only created by his children, but also because of his parental behavior. Furthermore, discussing the fear of children being placed into custody was important, although it was not part of the curriculum. Nobody was able to come up with a theme that was not important or difficult to understand.

Culture. The theme of culture was mentioned that frequently it deserves to be highlighted. Parents indicated to have many conflicts with their children because of cultural differences, but that as a result of the intervention, they are now able to discuss those differences. They now realize that every culture has their good and bad, and that they would like to create a balance between their native and Dutch culture.

Discussion. An essential activity in the intervention was being able to talk and learn from ‘fellow sufferers’ and trainers. Parents recognized and acknowledged each other’s problems and feelings, and there were no taboo topics. In this way, the intervention functioned as an outlet for many parents, ‘making things lighten up’.

Worries. Namely, parents indicated to have many current problems, and that the intervention serves as a distractor from ‘our bad position’. They say it is hard to cope with constant uncertainties for many years. Consequently, they can not give their full attention to their children, and need these programs badly.

Putting the intervention into practice

Implementation. Parents convincingly indicated to have put learned materials into practice, especially active listening. They have also implemented house rules, and focus more on rewarding their children instead of punishing them. After questioning whether parents

explicitly discuss the intervention with their children, some parents say they do, but as many parents say they do not.

Effects. Implementation of the intervention has brought many changes into the home environment, for example in the way of acting as a mum or dad. Parents see that changes in their behavior project onto their children's. Subsequently, the ambience has improved; there is less fighting, less shouting and being angry, and more communication.

Evaluation

Improvement points. Some parents wished to receive more training, to learn more about the Netherlands and to get psycho-education about their personal issues. Furthermore, they would like to receive handouts to use as a memory device in everyday life. Several parents wished to have received more sessions per week instead of one. One mother said the intervention should not only focus on children in the age range of eight to twelve years old, because she would have liked to learn about the behavior of all of her children. Lastly, a father suggested modular certificates should be created for parents who did not attend all sessions.

Final score. Besides these wishes for improvement, parents are rhapsodized about the intervention and its trainers, and score it a nine out of ten.

Importance. The importance of this intervention was underlined by many, stating it should become mandatory. One mother says she is hopeful to contribute to the intervention herself one day.

Appendix F

Responses from focus groups with children (n = 18)

Experiences

Most children experienced the intervention as fun and described it as well. One boy explicitly mentioned it was a good thing to be in the training. Several children said they were looking forward to the session every week, and that it is a pity the intervention stops.

Fun elements. Although many said everything about the intervention was fun, specifics were the Hero Book; the acquaintance game; and a role-play about consoling. Especially the first session – in which all children were present – and the last session – the graduation – were seen as most fun sessions.

Unpleasant elements. The outflow of participants was experienced as unfortunate, and two children said it was boring at times. One girl said that it was quite hard to talk about oneself. However, two other children mentioned it was fun to talk about themselves. An issue that was regarded as irritating by all children was the obnoxious behavior of some during the sessions.

Learned elements. Children told to have learned about many subjects, specifically about identity, emotions, having helping thoughts, taking care and fend for themselves, and how to behave properly and respect others.

Effects

Home environment. Hence, most children indicated things have changed at home. Parents would ‘listen to them better, are sweeter in their communication, and become less angry’. There are also more house rules, and examples are given about bedtime, pocket money and phone usage. There are still arguments at home, but because communication is improved, they are able to solve these better. However, some children mentioned that nothing has changed.

Asylum center. There have been no or few changes in the atmosphere in the asylum center. At two of three locations bullying still takes place; at the other location, bullying was already not that frequent.

Evaluation

Improvement points. One girl wants to talk individually with other children about how things are going and the newly learned information. Furthermore, some children think it would be fun to be more active and creative.

Final score. The children are full of praise about the intervention, and give a score of 9 out of 10.

Appendix G

Responses from semi-structured interviews with trainers (n = 6)

Substantive aspects

Tutoring. A crucial activity was the possibility to enter a dialogue. Parents were longing to talk about their issues in a safe environment. Hence, trainers noticed that a combination of tutoring and group discussions worked best for many parents. For children, linking theory to playful activities ensured best understanding of taught materials.

Themes. Trainers mentioned several specific important themes in the parental training, such as active listening, so-called 'I'-messages, punishment and reward strategies, and explanation of Dutch culture. Themes discussed in the intervention that were not described in the manual were fear of children being taken into custody, laws and customs in the Netherlands, and events described in media. For children working with the Hero Book was an important activity, since it formed the foundation of learned materials. Furthermore, letting children think about their heroes ensured self-awareness and self-esteem.

Homework. Homework was rarely assigned at one location, because it was experienced as an obstacle. At one location, homework was assigned, and translated into the native language by the cultural Mind-Spring Junior trainer. However, here a barrier was experienced in time, because there was too little time to review the assignments thoroughly.

Parent-child communication. At one location children reported to receive little parental attention. Therefore, trainers think the intervention should become more focused at improving child-parent communication. One trainer made the suggestion that handouts could function as a lead for parent and child to start talking about the intervention.

Adherence to manual. Trainers followed the natural course of the group and did not carry out all elements described in the manuals, both wise because of too little time and because not all activities were judged as suitable. However, core of the session was always discussed and goals established by the manual could yet be completed.

Participants

Attitude. Parents were described as motivated, involved, enthusiastic, interested, and self-aware. Children were proactive, but sometimes acted disrupting. However, their behavior improved during the course of the intervention. Sometimes parents and children were too late for the sessions and at two locations sessions had to be cancelled since no one showed up. Yet, trainers still noticed parents and children thought the intervention was important.

Atmosphere. The ambience in the parental group was described as sociable, nice, good, constructive and safe. Although there were no taboos for discussion, there was some tension and fear at the beginning of the training, but this vanished quickly. The atmosphere in the children's group was more diverse, mostly because of the obnoxious behavior of some children. Minor conflicts among the children occurred, but the atmosphere grew during the intervention and was eventually described as 'nice, fun, and safe'.

Group composition. Bothersome to all trainers was the instability of group composition due to inflow, outflow, and a variance in attendance of participants. To increase loyalty, one trainer suggested parents should receive weekly reminders and be obligated to cancel sessions by telephone. Furthermore, the issue raised whether the intervention should be implemented at the relatively chaotic refugee asylum centers, or if more stability and benefit would be obtained when it is implemented after the asylum procedure has completed. Trainers at two locations experienced trouble in tutoring because of a cognitive gap between the youngest and oldest children. This can be explained because a child who attended special education and children younger and older than 8 – 12 years old took part in the intervention. Hence, trainers wish for a clear and strict group composition at the start of intervention, while strictly adhering to inclusion criteria.

Effects

Trainers noticed effects of the intervention mainly because of stories parents told within the sessions. Parents would have changed their parenting style, resulting in less conflicts and frustrations at home. Children have become better equipped to recognize and cope with their issues, realized the importance of talking about feelings, and mainly received awareness about all subjects targeted in the intervention.

Collaborations

Trainers. There was a nice, good, outstanding and natural collaboration between trainers. One trainer reported that the combination of her as a female cultural trainer and a male Dutch GGZ-trainer worked very well. At two locations the traditional task division was abided: the cultural trainer laid the foundation of the session and the GGZ-trainer provided deepening. At the other site a task division was made in which one trainer primarily tutored the parental module and the other the children's module.

Centraal Orgaan opvang Asielzoekers (COA). Although there was a good collaboration among trainers, collaboration with COA was worse. Namely, trainers at two

locations hope to make better arrangements about practicalities in the future. These practical issues – such as making coffee and tea, and arranging the classroom – resulted in a loss of time that trainers needed to prepare the session.

Preparation

Two trainers mentioned that collecting all materials necessary in the sessions, such as copies for assignments, games, magazines, and attributes takes much time. More trainers felt a pressure in time for their content related preparations of the sessions.

Translation

Although external interpreters were complimented for their job, one Dutch GGZ-trainer mentioned it was hard to keep up with the group because ‘you are always one step behind’. This made it hard to deliver input, especially in the children’s sessions, because communication was very rapid.

Logistics

Time. Since all trainers experienced a time pressure, they would like to have more time in the sessions. Especially translating theory into practice required more time than was available. At one location, trainers said that ‘time was not too bad’, especially when parents and children arrived on time. That is why they suggested making doors open earlier. Two trainers said that 2,5 hours of parental training and 1,5 hours of children’s training would be good.

Sessions. It was also suggested to have more sessions per week for a shorter amount of time, resulting in ‘less outflow, clearer group composition, and more safety resulting in getting to work more quickly’. Furthermore, since children were often tired from their day at school, suggestions were made to carry out their training during school-hours and not at the center. One trainer wondered whether the children’s module should be extended with few sessions, because ‘by the time children become trusted and start talking about their issues, the intervention stops’.

Manuals

Parental manual. Three trainers reported this manual to be ‘well, clear and nice’, but the other three trainers described it as ‘chaotic and unorganized’. Furthermore, the overlap in elements among sessions was experienced as bothersome and should be removed. However,

content related aspects were described as important, well, and suiting the needs of parents. In order to improve the manual, every session should become focused at two main topics with 'brief and to the point' descriptions. Corresponding figures need to become clearer. There should be made worksheets for easy copying, and handouts for the participants to receive. One trainer concluded that there should be no major changes in the content of the manual, but that it should become more organized.

Children's manual. Although opinions are more positive about this manual, there were still some points for improvement. Examples are that there are too many activities that do not fit time well, there is overlap among the sessions, and that explanation needs to become less complex and age appropriate. However, the chosen themes are suited to children's needs.

Protocol or overview. Three trainers view the manual as an overview of possible activities you can carry out instead of a strict protocol of activities that must be performed. The other trainers do see it as a protocol, but report that not all activities can be performed in practice; but two still want to keep the manual this way. One trainer wishes to maintain the manual as an overview, because it 'gives him the opportunity to anticipate to the moment'. The other three trainers prefer a protocol with activities that actually match within the given time.