



A meta-analysis of intensive family preservation programs: Placement prevention and improvement of family functioning

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ABSTRACT

The aims of the present study were, first, to establish the effect of brief, in-home intensive family preservation programs on prevention of out-of-home placement, family functioning, child behavior problems and social support and, second, to study moderators of these effects. The results of this meta-analytic study, consisting of 20 studies (31,369 participants), show that intensive family preservation programs had a medium and positive effect on family functioning ($d = .486$), but were generally not effective in preventing out-of-home placement. Intensive family preservation programs were effective in preventing placement for multi-problem families, but not for families experiencing abuse and neglect. Moreover, the effect on out-of-home placement proved to be moderated by client characteristics (sex and age of the child, parent age, number of children in the family, single-parenthood, non-white ethnicity), program characteristics (caseload), study characteristics (study design and study quality), and publication characteristics (publication type, publication year and journal impact factor). The discussion addresses implications for evaluation and practice.

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1. Introduction

Since the 1970s intensive family preservation programs are widely used for families in crisis experiencing imminent risk for out-of-home placement of a child (e.g. Al, Stams, Van der Laan, & Asscher, 2011; Lindsey, Martin, & Doh, 2002). The primary aim of these programs is preventing out-of-home placement. In order to do so, the programs focus on ending the crisis, improving family functioning and promoting the use of social support systems (e.g. Kinney, Haapala, & Booth, 1991). Although intensive family preservation programs carry different names, most programs are built on the Homebuilders model that was developed in Washington in 1974 (Kinney, Madsen, Fleming, & Haapala, 1977). Important characteristics of the Homebuilders model are: a quick start of the intervention (within 24 h after referral), small caseloads of social workers and short duration (4–6 weeks). The

intervention is intensive and flexible and offers both therapeutic services, for example, training new parenting skills, and concrete services, such as organizing financial support (Berry, 1997; Kinney et al., 1991; Ryan & Schuerman, 2004; Tully, 2008).

Intensive family preservation programs are largely grounded in crisis theory (e.g. Caplan, 1964; Rapoport, 1962). During a crisis, induced by a sudden disturbance of balance (Golan, 1987), family functioning is seriously disturbed and the families' usual coping mechanisms and social support systems are insufficient (e.g. Caplan, 1964). Crisis intervention aims to end the crisis and to provide the family with new forms of coping that diminishes the chance of a new crisis (Rapoport, 1970).

A few therapeutic approaches are common in interventions for families in crisis. The intervention focuses on the whole family in line with the system approach, which assumes that the behavior of individual family members can only be understood from the perspective of family interactions that influence system balance (Watzlawick, Beavin, & Jackson, 1967). In addition, the intervention uses a network approach, taking into account that the family is an open system, which is influenced by, for example, the school and the neighborhood (Bronfenbrenner, 1979). Other approaches adopted by intensive family preservation programs are the (empowering) competence approach and the solution focused approach. The competence approach

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is aimed at empowerment and fostering skills and strengths of clients (e.g. Graves & Shelton, 2007; Masterpasqua, 1989). The solution-focused approach, in line with the latter, considers the client as the major source of solutions and is aimed at setting goals that are self-concordant and maximize the use of the client's competencies (De Shazer & Berg, 1997; Gingerich, Kim, Stams, & Macdonald, 2011).

Family preservation gained popularity after introduction of the attachment theory by Bowlby in 1969. As separating children from their biological parents was thought to cause attachment problems in children (Bowlby, 1969), in-home intervention to improve family functioning became preferred over out-of-home placement, promoting cost-effectiveness as well (Lindsey et al., 2002). Despite the widespread confidence in intensive family preservation programs as the good alternative for out-of-home placement, the positive effects are far from evident. After the introduction of these interventions, many positive results were presented. Evaluation studies reported successful prevention of out-of-home placement, from 71% up to 93% prevention rates (Berry, 1992; Pecora, Fraser, Haapala, & Bartlomé, 1987; Reid, Kagan, & Schlosberg, 1988). However, the positive results were mainly found in studies that did not use control groups, and therefore no conclusions on effectiveness could be drawn (e.g. Lindsey et al., 2002).

In order to establish the effectiveness of intensive family preservation programs, several narrative reviews (Blythe, Salley, & Jayaratne, 1994; Fraser, Nelson, & Rivard, 1997; Lindsey et al., 2002; Littell & Schuerman, 1995; Tully, 2008) and two meta-analyses (Dagenais, Bégin, Bouchard, & Fortin, 2004; Miller, 2006) were completed, which all showed mixed results with respect to out-of-home placement. Some promising results concerning improvement of family functioning were presented, however, particularly in uncontrolled studies. Miller (2006) conducted a selective meta-analysis of intensive family preservation programs delivered in Washington State and concluded that only programs that adhere to the characteristics of the Homebuilders model were effective in preventing out-of-home placement and improving child and family functioning.

Not only the mixed results, but also a variety in target group, study design and outcome measures characterize the crisis intervention literature, which makes it difficult to draw definite conclusions about effectiveness. Intensive family preservation programs serve, for example, families experiencing abuse and neglect (Fernandez, 2004), families with substance abuse of parents (Forrester, Copello, Waissbein, & Pokhrel, 2008) and multi-problem families. Prevention of out-of-home placement has been the most often selected outcome measure, but many have argued that out-of-home placement should not be the sole outcome measure in evaluation studies, and that other outcome measures should be included too, such as family functioning (e.g. McCroskey & Meezan, 1997; Rossi, 1992; Thieman & Dail, 1992; Tully, 2008).

Although the Homebuilders model, and family crisis intervention in a broader sense, is used for over forty years now, it is not possible to draw any conclusions about the effectiveness of family crisis interventions on the basis of the available meta-analyses and the reviews. Moreover, outcome measures other than prevention of out-of-home placement have been minimally addressed. Dagenais et al. (2004), in their meta-analysis of family crisis intervention, concluded that program impact on family functioning seems promising. This conclusion, however, was based on a qualitative analysis of differences between effect sizes of single evaluation studies instead of a quantitative analysis of overall mean-effect sizes and a test of moderators that may have an impact on effectiveness of family crisis intervention. It has, therefore, not been established what the overall effect of intensive family preservation programs is, and which factors moderate intervention effects. Examining moderators is important in order to be able to explain the mixed results that have been presented in the literature so far. Identifying factors that may account for the effectiveness of family crisis intervention may help tailoring interventions better to the needs of families that are targeted. Moderator analyses, for example,

may help identifying certain subgroups of clients that profit less or more of the intervention than others or certain program characteristics that especially contribute to therapeutic change.

The present meta-analytic study of controlled family preservation studies aims to address the effectiveness of intensive family preservation programs in terms of prevention of out-of-home placement, improved family functioning, social support and reduced child behavior problems by calculating the overall mean-effect sizes of these outcome measures. Additionally, potential moderators of the effects are examined. Client characteristics (child age, parent age, problem type, risk for placement, number of children in the family, and percentages of boys, non-white ethnicity and single parent families), program characteristics (duration, caseload and adherence to Homebuilders), study design characteristics (prospective/retrospective study design, follow-up time, study quality and randomization), and publication characteristics (publication type, publication year and journal impact factor) are addressed.

2. Method

2.1. Literature search

To find relevant intensive family preservation studies, the following databases were used: Web of Science, PiCarta, PsychINFO, Google and Google Scholar. Articles published in scientific journals, books and unpublished reports were found. The words used in the literature search were: 'crisis intervention', 'family preservation', 'family preservation services', 'Homebuilders', 'Families First', 'intensive family preservation services', 'family crisis', 'placement prevention', 'home-based services' and 'in-home services', also used in combination with 'evaluation', 'program evaluation', 'family' and 'effectiveness'.

Additionally, using the snowball method, reference lists of the program evaluations and the meta-analyses and reviews were inspected to find relevant studies. Not all studies that came across could be included, as some could not be traced. In such cases, an e-mail was sent to the author or organization involved and several studies could eventually be obtained. Furthermore, efforts were made to track down missing data from authors if necessary.

2.2. Inclusion criteria

The third and fourth authors of this article established whether studies met the inclusion criteria, while the first and second authors independently reviewed the decisions. Several inclusion criteria were used. First, the studies had to pertain to the evaluation of (an) intensive family preservation program(s). Second, the studies had to contain at least one of the following outcome measures: prevention of out-of-home placement, family functioning (e.g. parenting stress, parent-child interaction, or an integral measure), child behavior problems or social support. Third, only studies with a control group were included, in which the control group received treatment as usual (Weisz, Jensen-Doss, & Hawley, 2006). Studies with and without randomization were included. Studies that compared two interventions that were nearly identical, such as the same intervention at different locations (Hinckley & Ellis, 1985) or studies aiming to test incremental efficacy (Evans et al., 2003), reflecting achievement of the same treatment results with better efficiency in an experimental treatment condition compared with an established treatment condition (Lohr, Lilienfeld, Tolin, & Herbert, 1999), were not included. Eventually, 24 controlled studies were found, of which three studies were excluded (Bitonti, 2002; Evans et al., 2003; Hinckley & Ellis, 1985) because they did not meet the inclusion criteria. A fourth study (Miller, 2006) was excluded because the statistical information necessary for calculation of the effect size was missing.

Eventually we were able to address two outcome measures: placement prevention and family functioning. In the three studies that

contained measures of family functioning, predominantly parenting factors and family interactions were addressed. Two studies, those of Feldman (1991) and Meezan and McCroskey (1996) used validated instruments to assess family functioning: the Family Environment Scale (Moos & Moos, 1981) and the Family Assessment Form (McCroskey, Nishimoto, & Subramanian, 1991), respectively. The third study used a self-devised instrument to assess family functioning, with excellent internal consistency reliability. An overview of the 20 remaining studies used in the present meta-analysis can be found in Table 1.

2.3. Coding of moderators

All moderators, including the assessment of study quality, were coded by the third and fourth authors of this article, and were subsequently reviewed by the first and second authors. The few disagreements were resolved by means of consensus after discussion. Client characteristics, program characteristics, study characteristics and publication characteristics were scored in the selected studies using a coding scheme. The following client characteristics were coded: age of the child and parents, percentage of participants with an ethnic minority background, percentage of boys, percentage of single-parent families, number of children in the family, type of (targeted) problems (e.g. child abuse and neglect), and reported risk for placement of a child. Regarding program characteristics, the intended and actual duration of the intervention and the absolute size of the caseload were scored. Furthermore it was scored whether the program provided in the experimental condition was considered to be in accordance with the Homebuilders model given the program information that was reported in the study. For each study, additionally, the following study characteristics were scored: whether subjects were randomly assigned or matched, whether the study was prospective or retrospective, and whether the follow-up time was within a year after the end of the intervention or later. Also study quality was scored, using the checklist for measuring study quality, a 27 item instrument addressing internal validity, external validity and statistical validity (Downs & Black, 1998). Furthermore, publication characteristics were scored: the year and type of publication (published in a journal, in a book/report, or not published) and the impact factor of the journal in which the study had been published.

2.4. Calculation of effect sizes and analyses

Effect sizes (Cohen's *d*) were calculated for differences between the experimental and control group for each outcome measure. When several measures were used addressing family functioning, Cohen's *d* was calculated for each comparison between the experimental and control group. Subsequently, these effect sizes were combined into one mean effect size for family functioning per study. When studies reported differences at more than one measurement moment, the last measurement moment was chosen.

Cohen's *d* was calculated using the group mean scores and the standard deviations. If these were not reported, percentages, *t*-values, *F*-values, and *p*-values were used. For calculation, a computerized calculation program for effect sizes was used (Wilson, 2001). Effect sizes of *d* = .20, *d* = .50 and *d* = .80 reflect small, medium and large effects, respectively (Cohen, 1988, 1992).

After calculation of effect sizes for each study, overall effect sizes were calculated using SPSS macros of Lipsey and Wilson (2000). Effect sizes were calculated for prevention of out-of-home placement and family functioning, as scores on child behavior problems and social support were not available in the studies.

Moderator analyses were conducted to examine which factors were related to differences in intervention effects. These analyses only pertain to prevention of out-of-home placement, as the number of studies reporting on family functioning (*K* = 3) did not allow

Table 1
Overview of the 20 studies included in the meta-analyses and its client characteristics, program characteristics and study characteristics.

Study	N	N pp ^a	N FF ^b	Random (yes/no)	Homebuilders	Duration intervention (days)	Problem type	Boys (%)	Child age	Number of children	Single-parent family (%)	Non-white ethnicity (%)	Outcome measure		
													Placement prevention	Family functioning	Behavioral problems
AuClaire and Schwartz (1986)	113	-	-	No	No	37	Multi	50	14.3	2.2	53	29	●	-	-
Dennis-Small and Washburn (1986)	172	-	-	No	No	-	Abuse/neglect	-	-	3.0	-	47	●	-	-
Department of Health and Human Services (1) (2002)	349	-	-	Yes	Yes	-	Multi	-	-	3.0	43	45	●	-	-
Department of Health and Human Services (2) (2002)	442	-	-	Yes	Yes	-	Multi	-	-	3.0	34	43	●	-	-
Department of Health and Human Services (3) (2002)	147	-	-	Yes	Yes	-	Multi	-	-	3.0	49	85	●	-	-
Department of Health and Human Services (4) (2002)	353	-	-	Yes	No	-	Multi	-	-	3.0	50	85	●	-	-
Feldman (1991)	183	183	183	Yes	Yes	38	Multi	-	13.0	1.1	58	57	●	●	-
Forrester et al. (2008)	368	-	-	Yes	Yes	-	Substance abuse	-	7.0	3.2	46	-	●	-	-
Jones (1985)	142	-	-	Yes	No	570	Multi	61	8.0	3.2	66	-	●	-	-
Kirk and Griffith (2004)	26,264	-	-	No	No	-	Abuse/neglect	50	-	-	-	46	●	-	-
Lewis (2005)	-	150	150	Yes	No	-	Parenthood	75	10.4	-	-	28	●	●	●
Meezan and McCroskey (1996)	240	146	146	Yes	No	102	Abuse/neglect	-	10.0	3.5	40	78	●	-	-
Mitchell, Tovar and Knitzer (1989)	57	-	-	No	Yes	35	Multi	55	9.8	2.7	-	71	●	-	-
Pecora et al. (1991)	199	-	-	No	Yes	37	Multi	-	-	1.1	58	14	●	-	-
Schuerman, Rzepnicki and Littell (1994)	1564	-	-	Yes	Yes	108	Abuse/neglect	-	-	-	51	76	●	-	-
Szykula and Fleischman (1985)	48	-	-	Yes	No	-	Abuse/neglect	-	-	-	68	-	●	-	-
Walton (1997)	134	-	-	Yes	No	14	Multi	49	6.5	-	-	35.8	●	-	-
Willemis and Rubels (1981)	90	-	-	Yes	No	-	Abuse/neglect	-	-	-	-	-	●	-	-
Wood et al. (1988)	50	-	-	No	Yes	-	Multi	-	7.2	-	-	28	●	-	-
Yuan et al. (1990)	304	-	-	Yes	Yes	49	Multi	-	6.7	2.4	49	45	●	-	-

^a PP = placement prevention.

^b FF = family functioning.

moderator analyses. Each moderator category had to consist of least two studies (see Van den Dries, Juffer, Van Ijzendoorn, & Bakermans-Kranenburg, 2009, for a similar approach). The effect sizes within the moderator analyses were calculated using SPSS macros of Lipsey and Wilson (2000). The fixed effect model was used, testing significance based on the total number of participants, which allows greater statistical power, but limited generalizability if compared to the random effect model. Significance testing in random effect models is based on the total number of studies included in the meta-analysis, resulting in lower statistical power, but greater generalizability (Rosenthal, 1995).

Using Q-within statistics, the homogeneity of the total effect sizes was tested to establish whether heterogeneity between the studies existed and moderator analyses were appropriate in order to explain differences between studies. With categorical moderators ANOVA was used, in which significant Q-between statistics reflected differences in effect sizes between categories of a moderator. Regression analyses were used with continuous variables to detect associations between the coded moderator variables and the effect sizes.

2.5. Publication bias

Publication bias was examined by inspecting the distribution of each individual study's effect size on the horizontal axis against its sample size, standard error or precision (the reciprocal of the standard error) on the vertical axis. The distribution of effect sizes should be shaped as a funnel if no publication bias is present, since the more numerous studies with small sample sizes are expected to show a larger variation in the magnitude of effect sizes than the less numerous studies with large sample sizes. A violation of funnel plot symmetry reflects publication bias, that is, a selective inclusion of studies showing positive or negative outcomes (Sutton, Duval, Tweedie, Abrams, & Jones, 2000). Funnel plot asymmetry was tested by regressing the standard normal deviate, defined as the effect size divided by its standard error, against the estimate's precision (the inverse of the standard error), which largely depends on sample size (see Egger, Smith, Schneider, & Minder, 1997). If there is asymmetry, the regression line does not run through the origin and the intercept significantly deviates from zero.

3. Results

A total of 20 studies were included in the meta-analyses, with 31,369 participants. Sample sizes ranged from $n=47$ (Szykula & Fleischman, 1985) to $n=26,264$ (Kirk & Griffith, 2004). The overall effect size for family functioning, which was based on 3 studies ($n=479$ families), was $d=0.486$ ($z=10.541$, $p=.000$) reflecting a medium effect (95% confidence interval: 0.396 to 0.577). Using the calculation tool of Kraemer and Kupfer (2006) the clinical relevance of this effect was established in terms of the number needed to treat (5.953), indicating that six families must receive the intervention to generate an additional positive outcome in the experimental group relative to the comparison group.

The overall effect for prevention of out-of-home placement, which was based on 19 studies, containing 31,214 participants, was not significant ($d=0.003$; 95% confidence interval: $-0.008 < d < 0.015$). The number of studies allowed testing publication bias and homogeneity of the overall mean effect size. Possible publication bias was examined by testing funnel plot asymmetry. The standard normal deviate was regressed against the estimate's precision. As the intercept did not significantly deviate from zero ($t=1.309$, $p=.209$), there was no indication of funnel plot asymmetry and, therefore, no indication of publication bias. Because heterogeneity was found — $Q(19)=596.662$, $p<.001$, moderator analyses were conducted to explain differences.

3.1. Moderator analyses

A series of analyses of variance showed that several variables influenced the effect on prevention of out-of-home placement (see Tables 2 and 3). For multi-problem families, positive effects were found ($d=.154$), whereas for families experiencing abuse and neglect no effects were found ($d=-0.011$). Negative effects (more placements) were found for families without risk of out-of-home placement of a child ($d=-.295$), whereas no effects were found for families with such risk ($d=0.003$). Studies that were not published showed more negative effects ($d=-.056$) than journal publications

Table 2

The results of analyses of variance regarding the effects of client characteristics, program characteristics and study characteristics on placement prevention.

Moderator variables	N Number of participants	K Number of studies	d Effect size (fixed effects)	95% Confidence interval	Q statistic between studies	Q statistic within studies
Overall	31,219	19	0.003	−0.008 to 0.015		596.662***
Problem type					69.637***	
Abuse/neglect	28,378	6	−0.011	−0.023 to 0.000		112.894***
Multi-problem	2841	13	0.154***	0.117 to 0.191		414.130***
Risk for placement					28.383***	
Yes	30,521	16	0.003	−0.008 to 0.014		531.952***
No	330	2	−0.295***	−0.183 to 0.019		0.474
Based on Homebuilders					0.104	
Yes	3663	10	−0.002	−0.034 to 0.031		441.102***
No	27,556	9	0.004	−0.008 to 0.016		155.456***
Duration					2.900	
Shorter than two months	29,236	10	0.007	−0.005 to 0.018		502.888***
Longer than two months	382	2	−0.082	−0.183 to 0.019		35.758***
Publication type					6.270*	
Journal publication	27,104	6	0.008	−0.004 to 0.020		183.777***
Other than journal, e.g. book	2505	6	−0.004	−0.043 to 0.035		373.954***
Not published	1610	7	−0.056*	−0.105 to −0.007		23.661***
Prospective/retrospective					0.521	
Prospective	4813	17	0.013	−0.015 to 0.042		581.893***
Retrospective	26,406	2	0.002	−0.010 to 0.014		14.247***
Random assignment					208.505***	
Yes	3996	13	−0.084***	−0.115 to −0.053		215.536***
No: matched control group	26,314	2	0.001	−0.012 to 0.014		27.744***
No: non-matched control group	509	5	0.450***	0.385 to 0.516		144.876***
Follow-up measurement					0.003	
0–12 months	28,803	9	0.003	0.008 to .015		483.334***
> 12 months	2416	10	0.005	−0.036 to .045		113.325***

Note. * $p<.05$. *** $p<.001$.

Table 3

The results of the regression analyses regarding the effects of client characteristics, program characteristics and study characteristics on placement prevention.

Moderator variables	N Number of participants	K Number of studies	β	z	p
Percentage of boys	26,710	5	.299	2.914	.004
Child age	1591	9	-.166	-2.185	.029
Parent age	2367	10	.104	2.113	.035
Percentage of non-white ethnicity	30,571	15	-.574	-13.152	.000
Percentage of single parent families	4452	13	-.260	-5.647	.000
Number of children in the family	2870	12	-.238	-2.738	.006
Caseload	3119	10	-.313	-7.102	.000
Duration of the intervention	2936	9	-.009	-.189	.850
Year of publication	31,219	19	-.104	-2.536	.011
Study quality	31,219	19	-.316	-7.706	.000
Impact factor of the journal	28,668	7	-.785	-3.788	.000

($d = .008$) or book chapters/reports ($d = -.004$). Negative effects were also found in randomized controlled trials ($d = -.084$), whereas positive effects were found in quasi-experimental studies with a non-matched control group ($d = .450$). No effect was found in quasi-experimental studies with a matched control group ($d = .001$).

Continuous moderators were tested by means of regression analyses. Higher percentages of boys ($b = .377$) and older parental age ($b = .104$) were associated with larger effect sizes, indicating less out-of-home placements after intervention. Older child age ($b = -.166$), higher percentages of non-white ethnicity ($b = -.574$), more single-parent families ($b = -.260$), and a larger number of children in the family ($b = -.238$) were associated with smaller effect sizes, indicating more out-of-home placement after intervention. Placement prevention was negatively associated with higher caseloads ($b = -.313$). Furthermore, the magnitude of effect sizes was negatively associated with better study quality ($b = -.316$). Finally, higher impact factors ($b = -.785$) and more recent studies ($b = -.104$, $p = .011$) yielded smaller effect sizes.

4. Discussion

The results of this meta-analytic study show that intensive family preservation programs did have a medium and positive effect on family functioning, but were generally not effective in preventing out-of-home placement. Due to a limited number of studies examining family functioning, moderator effects were examined for out-of-home placement only. These moderator analyses revealed that the effect of intensive family preservation programs was moderated by sex and age of the child, parent age, number of children in the family, single-parenthood, non-white ethnicity, and caseload of the social workers, but not by adherence to the Homebuilders model and intervention duration. In addition, study characteristics (study design and study quality), and publication characteristics (publication type, publication year and journal impact factor) were found to be associated with placement prevention outcomes.

The finding that intensive family preservation programs were found to be effective for multi-problem families, but not for families experiencing abuse and neglect can be explained as follows. In the latter case, out-of-home placement may simply be unavoidable (see also Schuerman, Rzepnicki, & Littell, 1994), whereas out-of-home placement may be prevented in multi-problem families where risk of placement is relatively low compared to families experiencing maltreatment.

Most of the client characteristics that were found to be negatively associated with effectiveness of intensive family preservation programs are common risk factors for child maltreatment (Belsky, 1993).

Notably, a 17-year prospective longitudinal study by Brown, Cohen, Johnson, and Salzinger (1998) showed that non-white ethnicity, young maternal age, large family size and single parenthood increase the likelihood of child abuse and neglect with odds ratios ranging from 1.63 to 2.63. As such, the fact that these client characteristics are risk factors for child abuse and neglect is in line with the finding of this meta-analysis that intensive family preservation programs do not appear to reduce the number of out-of-home placements in families experiencing child abuse and neglect. Although non-white ethnicity, young maternal age, large family size and single parenthood are also factors that could increase the risk for problematic child rearing per se and are often features of multi-problem families, these client characteristics may in particular signal risk for abuse and neglect in families that are referred for intensive family preservation.

In the present meta-analytic study, although it was based on only two studies, it was found that the intervention resulted in more placements in families 'without' imminent risk of out-of-home placement. This may be due to risks that were not acknowledged before, that were detected as a consequence of the intensive intervention, and which eventually led to out-of-home placement. This explanation suggests that risk assessment is problematic, a conclusion that has been drawn before (e.g. Berry, 1991; Lindsey et al., 2002; Rossi, 1992; Thieman & Dail, 1992; White & Walsh, 2006). It is possible that neither the interventions nor the studies that assumed risk for placement were accurate in establishing such risk. Out-of-home placement cannot be prevented if it was not considered a risk in the first place, just as it cannot be prevented when in-home intervention is insufficient to prevent (reoccurrence of) abuse and neglect. Although intensive family preservation programs were designed to serve only those families with the highest, immediate risk for placement (Norman, 1985; Kinney, Haapala, Booth, & Leavitt, 1990), a much wider range of risks invokes referral to these programs in practice varying from actual abuse and neglect to the occurrence of general risk factors (Berry, 1991).

Intensive family preservation programs were less effective for older children. The intervention may come too late in case that problems remain undetected for years and, after escalation, become more difficult to treat. There is a vast body of research showing that, although with rather small effects, the best chance of changing the lives of children is by means of early intervention (Deković et al., 2011). It may also be an explanation that the impact of the family on (disruptive) behavior of children has been shown to decrease with age (e.g., Van der Put et al., 2011) due to, for instance, genetic and peer influences that become stronger with increasing age (Harris, 1995; Plomin, DeFries, McClearn, & McGuffin, 2001).

Our meta-analysis showed that intensive family preservation programs proved to be less effective for girls than for boys. This finding is in line with Dunn, Culhane, and Taussig's (2010) study to the extent that it is more difficult to prevent out-of-home placement in girls, because staying at home may pose more risks for girls than for boys. Their study of children's experiences of out-of-home care showed that girls were more likely than boys to report that their lives would have been worse had they remained with their families of origin.

Three program characteristics were addressed in the present meta-analysis: caseload size, adherence to the Homebuilders model and intervention duration. The negative association between caseload size and effect suggests that more intensive help facilitates positive intervention effects, as a smaller caseload would allow social workers to spend more time per family. The effect of intensive family preservation programs was not found to be moderated by adherence to the Homebuilders model, contrasting the findings of the selective meta-analysis of Miller (2006). However, the information on adherence that studies reported in their program description was limited. Because some studies reported that the Homebuilders approach was used without providing any additional information, it remains

uncertain whether program integrity was examined or assumed in these studies. It is therefore possible that defining characteristics varied in practice. More research addressing the impact of program delivery differences would be valuable.

Intervention duration was reported in nearly half of the studies, showing considerable variation among studies. It did not moderate the effect of intensive family preservation programs. It is possible that intensity is more important than duration. Macleod and Nelson (2000) found no impact of duration and intensity on the effects of intensive family preservation programs in their meta-analytic review of programs for the promotion of family wellness and prevention of child maltreatment, but showed that generally longer interventions were more effective in reducing child maltreatment. The briefness of intensive family preservation programs is based on the assumption of the time-limitedness of a crisis state (e.g. Callahan, 1994; Golan, 1987), but many families experience persisting problems and need aftercare (e.g. Rapoport, 1962). Therefore, the possibility of eventual family preservation may also depend on the availability, use and intensity of aftercare services (see also Staudt, Scheuler-Whittaker, & Hinterlong, 2001).

An important quality aspect of intervention studies is the research design. The results revealed that in studies with non-matched comparison groups a positive effect on out-of-home placement was reported, whereas negative effects were found in randomized controlled trials and no effects in studies with matched control groups. The finding of less effect in the more rigorous studies is in accordance with the finding that better study quality was related to less effect. Our study findings are in line with studies showing that randomized controlled trials are usually associated with smaller effect sizes (Dagenais et al., 2004; Latimer, 2001; Lindsey et al., 2002; Littell, 2005; Littell & Schuerman, 1995). This highlights the importance of careful interpretation of positive results presented in studies without randomization, especially in case of evaluation of complex interventions with a heterogeneous target group, because the risk of spurious findings increases when not all relevant variables can be controlled (Weisburd, 2010).

Studies with better study quality, most recently published research, and studies published in higher impact journals showed less effects on placement prevention. It is plausible to suggest that the negative association between journal ratings and effect sizes indicates that higher impact journal tend to only publish the more robust studies that, as our meta-analysis showed, yield smaller effect sizes. A post-hoc analysis showed a trend ($r = .31$, $p = .094$), indicating a positive association between more recent studies and study quality, which supports a similar line of reasoning. It can be concluded that not only the overall lack of effects that was found in this meta-analysis, but also the findings of the moderator analyses indicate that intensive family preservation programs do not prevent out-of-home placement for at least part of its target group.

4.1. The lack of positive effect on placement prevention and its implications

For over forty years we are relying on intensive family preservation programs as the appropriate alternative for separating children from their parents when a crisis occurs. It now seems that these programs generally do not achieve their goal of preventing out-of-home placement. It may be questioned, however, whether out-of-home placement should always be regarded as a failure of crisis intervention. There are cases (e.g., child maltreatment) in which placement is the only acceptable outcome from a child protection perspective. In other cases, out-of-home care can be a temporary solution. Respite care, for instance, has been presented previously as a helpful intervention for some families in crisis (e.g. Boothroyd, Kuppinger, Evans, Armstrong, & Radigan, 1998; Cowen, 1998; Dougherty, Yu, Edgar, Day, & Wade, 2002). Therefore, in research, different types of out-of-home care deserve attention, as some studies distinguished between social

network care versus residential and foster care, only considering the latter as out-of-home placement (Mitchell, Tovar, & Knitzer, 1989), whereas other studies did not specify the type of placement (Szykula & Fleischman, 1985). In the present study it was not possible to test the type of out-of-home care as a moderator due to a lack of information in the studies.

4.2. The positive effect on family functioning and its implications

The present meta-analysis showed a positive effect on family functioning, confirming remarks in previous (narrative) reviews that intensive family preservation programs could be especially promising regarding improvement of family functioning (e.g. Dagenais et al., 2004; Tully, 2008). For the current meta-analysis only three studies were available that addressed family functioning. However, the three studies were randomized controlled trials and above that, all three studies contained a substantial number of participants, ranging from 146 to 183. Two studies used validated instruments and one study used a self-devised instrument with satisfactory psychometric properties to assess family functioning. As these features are indicative of study quality, the results can be interpreted with optimism about intensive family preservation programs being able to improve family functioning. It should be noted, however, that family functioning was a global measure of parenting factors and family interactions in this meta-analysis. More studies are needed to examine the effects of intensive family preservation on distinct features of family functioning, such as family cohesion, parenting stress, relationships between parents and particular parenting styles.

In striving for keeping families together and creating a safer environment for children, improving family functioning may be seen as an essential intervention aim. Based on our findings and the earlier remarks on outcome measures, it is advisable to address family functioning in future research, especially in controlled studies that to date have primarily focused on out-of-home placement. By including family functioning variables and assessing various aspects of family functioning it will also be possible to analyze what mediates and moderates effects of intensive family preservation interventions.

4.3. Limitations

Several limitations of the present study can be identified. First, due to a lack of information in many of the studies included, a limited number of outcome measures and factors associated with effect could be addressed. Some potential moderators of intervention effects could therefore not be analyzed, such as the actual intensity of the intervention or the kind of therapeutic approach. In addition, to test the moderators child sex and intervention duration, data from less than half of the studies were available. Second, for the factors that were scored, the number of the studies per category differed and therefore, in a few cases, a particular category consisted of only two studies. Results of the moderator analyses should therefore be interpreted with caution. Only 20 studies were included in this meta-analysis, which limits the statistical power. However, to secure adequate statistical power, the fixed instead of the random effect model was used. Post-hoc analyses using the random effect model were conducted in order to examine whether results were very different from the fixed effect model results, but this proved not to be the case. Effect sizes were generally of the same magnitude in the random effect model. Moderators that proved to be significant in the fixed effect model, however, mostly failed to reach significance in the random effect model due to lack of statistical power. Third, as the studies that were included in the meta-analysis did not report on social support and only one study reported on child behavior problems, meta-analyses and moderator analyses regarding these outcome measures could not be carried out. Fourth, as all studies that were included but one were from the United States, more controlled studies from other

continents are required to assure that the results can be generalized to other parts of the world.

4.4. Conclusion

This meta-analysis showed intensive family preservation programs to be effective in improving family functioning. However, which factors moderate the effects of family preservation programs on family functioning could not be demonstrated. With respect to prevention of out-of-home placement, intensive family preservation programs were generally not effective, and sometimes even counter-productive for at least part of the target group. Out-of-home placement apparently cannot be prevented for all families referred to intensive family preservation programs. Although a broad range of 'at risk' families are served by these interventions, it seems that only a small group within that spectrum of risks benefits in the intended way. The results of this meta-analytic study raise the question whether the families that are targeted by intensive family preservation programs, those with imminent risk of out-of-home placement of a child, are the families that in fact are and should be selected for this kind of treatment. It may be necessary to not only focus on placement prevention, but also on other relevant outcomes, for example crisis change, safety change and improvement of family functioning. If the focus is shifted from risk for placement to family crisis, out-of-home (respite) care can be part of the intervention for some of the participating families.

References^{*}

- Al, C. M., Stams, G. J., Van der Laan, P. H., & Asscher, J. J. (2011). The role of crisis in family crisis intervention: Do crisis experience and crisis change matter? *Children and Youth Services Review*, 33, 991–999.
- *AuClaire, P., & Schwartz, Ira M. (1986). *An evaluation of the effectiveness of intensive home-based services as an alternative to placement for adolescents and their families*. Minneapolis: University of Minnesota, Hubert H. Humphrey Institute of Public Affairs.
- Belsky, J. (1993). Etiology of child maltreatment: A developmental–ecological analysis. *Psychological Bulletin*, 114, 413–434.
- Berry, M. (1991). The assessment of imminence of risk of placement: Lessons from a family preservation program. *Children and Youth Services Review*, 13, 239–256.
- Berry, M. (1992). An evaluation of family preservation services: Fitting agency services to family needs. *Journal of the National Association of Social Workers*, 37, 314–321.
- Berry, M. (1997). *The family at risk*. University of South Carolina Press.
- Bitonti, C. (2002). Formative evaluation in family preservation: Lessons from Nevada. *Children and Youth Services Review*, 24, 653–672.
- Blythe, B. J., Salley, M. P., & Jayaratne, S. (1994). A review of intensive family preservation services research. *Social Work Research*, 18, 213–224.
- Boothroyd, R. A., Kuppinger, A. D., Evans, M. E., Armstrong, M. I., & Radigan, M. (1998). Understanding respite care use by families of children receiving short-term, in-home psychiatric emergency services. *Journal of Child and Family Services*, 7, 353–376.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1: Attachment*. London: Hogarth Press.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Brown, J., Cohen, P., Johnson, J. G., & Salzinger, S. (1998). A longitudinal analysis of risk factors for child maltreatment: Findings of a 17-year prospective study of officially recorded and self reported child abuse and neglect. *Child Abuse & Neglect*, 22, 1065–1078.
- Callahan, J. (1994). Defining crisis and emergency. *Crisis*, 15, 164–171.
- Caplan, G. (1964). *Principles of preventive psychiatry*. New York: Basic Books.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (second ed.). New Jersey: Lawrence Erlbaum Associates.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155–159.
- Cowen, P. S. (1998). Crisis childcare: An intervention for at risk families. *Issues in Comprehensive Pediatric Nursing*, 21, 147–158.
- Dagenais, C., Bégin, J., Bouchard, C., & Fortin, D. (2004). Impact of intensive family support programs: A synthesis of evaluation studies. *Children and Youth Services Review*, 26, 249–263.
- De Shazer, S., & Berg, I. K. (1997). "What works?" Remarks on research aspects of solution-focused brief therapy. *Journal of Family Therapy*, 19, 121–124.
- Deković, M., Slagt, M. I., Asscher, J. J., Boendermaker, L., Eichelsheim, V. I., & Prinzie, P. (2011). Effects of early prevention programs on adult criminal offending: A meta-analysis. *Clinical Psychology Review*, 31, 532–544.
- *Dennis-Small, L., & Washburn, K. (1986). *Family-centered, home-based intervention project for protective services clients. Innovations in protective services. Final report*. Texas Department of Human Services.
- *Department of Health and Human Services (2002). *Evaluation of family preservation and reunification program: Executive summary*. Department of Health and Human Services.
- Dougherty, S., Yu, E., Edgar, M., Day, P., & Wade, C. (2002). *Planned and crisis respite for families with children: Results of a collaborative study*. Child Welfare League of America and the ARCH National Respite Network and Resource Center Retrieved May 19, 2011, from http://www.archrespite.org/images/ARCH/Planned_and_Crisis_respite.pdf
- Downs, S. H., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology and Community Health*, 52, 377–384.
- Dunn, D. M., Culhane, S. E., & Taussig, H. N. (2010). Children's appraisals of their experiences in out-of-home care. *Children and Youth Services Review*, 32, 1324–1330.
- Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Biases in meta-analysis detected by a simple graphical test. *British Medical Journal*, 315, 629–634.
- Evans, M. E., Boothroyd, R. A., Armstrong, M. I., Greenbaum, P. E., Brown, E. C., & Kuppinger, A. D. (2003). An experimental study of the effectiveness of intensive in-home crisis services for children and their families: Program outcomes. *Journal of Emotional and Behavioral Disorders*, 11, 92–102.
- *Feldman, L. H. (1991). Evaluating the impact of intensive family preservation services in New Jersey. In K. Wells, & D. E. Biegel (Eds.), *Family preservation services: Research and evaluation*. Newbury Park, CA: Sage.
- Fernandez, E. (2004). Effective interventions to promote child and family wellness: A study of outcomes of intervention through Children's Family Centres. *Child and Family Social Work*, 9, 91–104.
- *Forrester, D., Copello, A., Waissbein, C., & Pokhrel, S. (2008). Evaluation of an intensive family preservation service for families affected by parental substance misuse. *Child Abuse Review*, 17, 410–426.
- Fraser, M. W., Nelson, K. E., & Rivard, J. C. (1997). Effectiveness of family preservation services. *Social Work Research*, 21, 138–153.
- Gingerich, W. J., Kim, J. S., Stams, G. J., & Macdonald, A. J. (2011). Solution-focused brief therapy outcome research. In C. Franklin, T. Trepper, W. J. Gingerich, & E. McCollum (Eds.), *Solution-focused brief therapy: From practice to evidence-informed practice* (pp. 95–111). New York: Oxford University Press.
- Golan, N. (1987). Crisis intervention. In A. Minahan (Ed.), (18th ed.). *Encyclopedia of social work*, Vol. 1. (pp. 360–372). Washington DC: National Association of Social Workers.
- Graves, K. N., & Shelton, T. L. (2007). Family empowerment as a mediator between family-centered systems of care and changes in child functioning: Identifying an important mechanism of change. *Journal of Child and Family Studies*, 16, 556–566.
- Harris, J. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review*, 102, 458–489.
- Hinckley, E. C., & Ellis, W. F. (1985). An effective alternative to residential placement: Home-based services. *Journal of Clinical Child Psychology*, 14, 209–213.
- *Jones, M. A. (1985). *A second chance for families. Five years later: Follow-up of a program to prevent foster care*. NY: Research Center Child Welfare League of America.
- Kinney, J., Haapala, D., & Booth, C. (1991). *Keeping families together: The Homebuilders model*. Hawthorne, NY: Aldine de Gruyter.
- Kinney, J. M., Haapala, D. A., Booth, D., & Leavitt, S. (1990). The Homebuilders model. In J. K. Whittaker, J. M. Kinney, E. M. Tracy, & C. Booth (Eds.), *Reaching high risk families: Intensive family preservation services in human services* (pp. 31–64). Hawthorne, NY: Aldine de Gruyter.
- Kinney, J. M., Madsen, B., Fleming, T., & Haapala, D. A. (1977). Homebuilders: Keeping families together. *Journal of Consulting and Clinical Psychology*, 45, 667–673.
- *Kirk, R. S., & Griffith, D. P. (2004). Intensive family preservation services: Demonstrating placement prevention using event history analysis. *Social Work Research*, 28, 5–16.
- Kraemer, H. C., & Kupfer, D. J. (2006). Size of treatment effects and their importance to clinical research and practice. *Biological Psychiatry*, 59, 990–996.
- Latimer, J. (2001). A meta-analytic examination of youth delinquency, family treatment, and recidivism. *Canadian Journal of Criminology*, 43, 237–253.
- *Lewis, R. E. (2005). The effectiveness of Families First services: An experimental study. *Children and Youth Services Review*, 27, 499–509.
- Lindsey, D., Martin, S., & Doh, J. (2002). The failure of intensive casework services to reduce foster care placements: An examination of family preservation studies. *Children and Youth Services Review*, 24, 743–775.
- Lipsey, M. W., & Wilson, D. B. (2000). *Practical meta-analysis*, Vol. 49. London: Sage publications.
- Littell, J. H. (2005). Lessons from a systematic review of effects of multisystemic therapy. *Children and Youth Services Review*, 27, 445–463.
- Littell, J. H., & Schuerman, J. R. (1995). A synthesis of research on family preservation and family reunification programs. Retrieved February 12, 2011, from <http://aspe.hhs.gov/hsp/cyp/fplrtrev.htm>
- Lohr, J. M., Lilienfeld, S. O., Tolin, D. F., & Herbert, J. D. (1999). Eye movement desensitization and reprocessing: An analysis of specific versus nonspecific treatment factors. *Journal of Anxiety Disorders*, 13, 185–207.
- Macleod, J., & Nelson, G. (2000). Programs for the promotion of family wellness and the prevention of child maltreatment: A meta-analytic review. *Child Abuse & Neglect*, 24, 1127–1149.
- Masterpasqua, F. (1989). A competence paradigm for psychological practice. *The American Psychologist*, 44, 1366–1371.
- McCroskey, J., & Meezan, W. (1997). *Family preservation & family functioning*. Washington: Child Welfare League of America.

^{*} Studies that were part of the statistical analyses in the meta-analytic study.

- McCroskey, J., Nishimoto, R., & Subramanian, K. (1991). Assessment in family support programs: Initial reliability and validity testing of the family assessment form. *Child Welfare*, 70, 19–34.
- *Meezan, W., & McCroskey, J. (1996, winter). Improving family functioning through family preservation services: Results of the Los Angeles experiment. *Family Preservation Journal*, 9–29.
- Miller, M. (2006). *Intensive family preservation programs: Program fidelity influences effectiveness — Revised*. Washington: Washington State Institute for Public Policy Retrieved June 26, 2010, from <http://www.wsipp.wa.gov/rptfiles/06-02-3901.pdf>
- *Mitchell, C., Tovar, P., & Knitzer, J. (1989). *The Bronx homebuilders program: An evaluation of the first 45 families*. New York: Bank Street College of Education.
- Moos, R. H., & Moos, B. S. (1981). *Family environment scale manual*. Palo Alto, CA: Consulting Psychological Press.
- Norman, A. (1985). *Keeping families together: The case for family preservation*. New York: Edna McConnell Clark Foundation.
- *Pecora, P. J., Fraser, M. W., & Haapala, D. A. (1991). Client outcomes and issues for program design. In Kathleen Wells, & David E. Biegel (Eds.), *Family preservation services: Research and evaluation* (pp. 3–31). Newbury Park, CA: Sage Publications.
- Pecora, P. J., Fraser, M. W., Haapala, D. A., & Bartlome, J. A. (1987). *Defining family preservation services: Three intensive home-based treatment programs*. Salt Lake City: University of Utah Social Research Institute.
- Plomin, R., DeFries, J. C., McClearn, G. E., & McGuffin, P. (2001). *Behavioral genetics* (4th ed.). New York: Worth.
- Rapoport, L. (1962). The state of crisis: Some theoretical considerations. *Social Services Review*, 6, 211–217.
- Rapoport, L. (1970). Crisis intervention as a mode of brief treatment. In R. Nee, & R. Roberts (Eds.), *Theories of social casework* (pp. 265–371). Chicago, ILL: University of Chicago Press.
- Reid, W., Kagan, R., & Schlosberg, S. (1988). Prevention of placement. *Child Welfare*, 67, 25–36.
- Rosenthal, R. (1995). Writing meta-analytic reviews. *Psychological Bulletin*, 118, 183–192.
- Rossi, P. H. (1992). Assessing family preservation programs. *Children and Youth Services Review*, 14, 77–97.
- Ryan, J., & Schuerman, J. (2004). Matching family problems with specific family preservation services: A study of service effectiveness. *Children and Youth Services Review*, 26, 347–372.
- *Schuerman, J. R., Rzepnicki, T. L., & Littell, J. H. (1994). *Putting families first: An experiment in family preservation*. New York: Aldine de Gruyter.
- Staudt, M., Scheuler-Whittaker, L., & Hinterlong, J. (2001). The role of family preservation therapists in facilitating use of aftercare services. *Child Abuse & Neglect*, 6, 803–817.
- Sutton, A. J., Duval, S. J., Tweedie, R. L., Abrams, K. R., & Jones, D. R. (2000). Empirical assessment of effect of publication bias on meta-analyses. *British Medical Journal*, 320, 1574–1577.
- *Szykula, S. A., & Fleischman, M. J. (1985). Reducing out-of-home placements of abused children: Two controlled field studies. *Child Abuse & Neglect*, 9, 277–283.
- Thieman, A. A., & Dail, P. W. (1992). Family preservation services: Problems of measurement and assessment of risk. *Family Relations*, 41, 186–191.
- Tully, L. (2008). *Literature review: Family preservation services*. Ashfield, Australia: Centre for Parenting & Research Retrieved June 26, 2010, from http://www.community.nsw.gov.au/docs/wr/assets/main/documents/research_familypreservation_review.pdf
- Van den Dries, L., Juffer, F., Van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2009). Fostering security? A meta-analysis of attachment in adopted children. *Children and Youth Services Review*, 31, 410–421.
- Van der Put, C. E., Stams, G. J., Dekovic, M., Hoeve, M., Van der Laan, P. H., Spanjaard, H., et al. (2011). Changes in the relative importance of dynamic risk factors for recidivism during adolescence. *International Journal of Offender Therapy and Comparative Criminology*, <http://dx.doi.org/10.1177/0306624X11398462>.
- *Walton, E. (1997). Enhancing investigative decisions in child welfare: An exploratory use of intensive family preservation services. *Child Welfare*, 76, 447–461.
- Watzlawick, P., Beavin, J. H., & Jackson, D. D. (1967). *Pragmatics of human communication: A study of patterns, pathologies and paradoxes*. New York: Norton and Co.
- Weisburd, D. (2010). Justifying the use of non-experimental methods and disqualifying the use of randomized controlled trials: Challenging folklore in evaluation research in crime and justice. *Journal of Experimental Criminology*, 6, 209–227.
- Weisz, J. R., Jensen-Doss, A., & Hawley, K. M. (2006). Evidence-based youth psychotherapies versus usual clinical care: A meta-analysis of direct comparisons. *The American Psychologist*, 61, 671–689.
- White, A., & Walsh, P. (2006). *Risk assessment in child welfare: An issues paper*. Ashfield, Australia: NSW Department of Community Services.
- Willems, D. N., & Rubeis, R. (1981). *The effectiveness of intensive services for families with abused, neglected or disturbed children: Hudson County project final report*. Trenton: Bureau of Research, New York Division of Youth and Family Services.
- Wilson, D. B. (2001). *Effect size determination program*. College Park: University of Maryland.
- *Wood, S., Barton, K., & Schroeder, C. (1988). In-home-treatment of abusive families: Cost and placement at one year. *Psychotherapy*, 25, 409–414.
- *Yuan, Y., McDonald, W., Wheeler, C., Struckman-Johnson, D., & Rivest, M. (1990). *Evaluation of AB 1562 in-home care demonstration projects: Final report*. Sacramento, CA: Walter R. McDonald and Associates, Inc.