Chapter 7
General Discussion
The aim of the thesis was to study behavioral and relationship functioning of young foster children and to compare the efficacy of two treatment foster care programs for children with severe emotional and behavioral problems. Conclusions from the different studies are summarized and discussed in this Chapter. Next, an overview of strengths and limitations of the studies described in this thesis is presented as well as directions for future practice and research, and a general conclusion.

Summary and conclusions

The thesis was divided into two parts. The first part included two manuscripts that focused on disturbances in emotional and relationship functioning of young foster children, which are presumed to be a consequence of physical abuse, sexual abuse, physical neglect, emotional maltreatment, removal from the birth home, and placement failure. Chapter 2 described a study that aimed to demonstrate that complexity of early adverse experiences would predict the complexity of post trauma symptoms. The study compared the symptomatology of foster children repeatedly exposed to adverse caregiving experiences (in Chapter 2 defined as ‘Complex Trauma’) to the symptomatology of children exposed to a single traumatic event. Based on data from 256 children, the conclusion was drawn that the likelihood of children meeting other symptoms in addition to PTSD was higher when potential traumatic experiences were more complex, wherein complexity was defined in ways of interpersonal, prolonged traumatization that had occurred within the context of caregiving. The DSM-IV criteria for PTSD may have been insufficiently sensitive to identify post trauma symptoms in children reared under pathogenic caregiving conditions, or the concept of psycho trauma does not apply to exposure to pathogenic caregiving environments. Next, the study described in Chapter 3 focused on symptoms of attachment disorder and tested whether differences between pathogenic caregiving conditions expressed themselves in different types of disturbances. In DSM-IV disturbances in attachment as a result of pathogenic care where subsumed within a single diagnosis, namely Reactive Attachment Disorder (RAD). Children meeting criteria for RAD were sub-classified as inhibited or disinhibited; a mixed type was not recognized. Instead of one diagnosis with an inhibited and a disinhibited subtype, DSM-5 describes two disorders, namely Reactive Attachment Disorder (the former inhibited subtype) and Disinhibited Social Engagement Disorder (the former disinhibited subtype). This split-up was in large part based on evidence derived from a sample of previously institutionalized Romanian children (Zeanah et al., 2005). Hardly any evidence for this split-up was available from other populations. To examine if this split-up was also supported by data from other populations, the study described in Chapter 3 focused on the origin and correlates of symptoms of inhibited and disinhibited attachment disturbances in young foster children in the Netherlands. Additionally, in an exploratory way, as the validity of a mixed type has not been accepted yet, the correlates of this mixed type including both inhibited and disinhibited symptoms were examined. Presence of inhibited and disinhibited attachment disturbances was assessed with the Disturbances of Attachment Interview (Smyke & Zeanah, 1999) in a sample of 126 foster children. Inhibited attachment disturbances were not associated with a specific form of pathogenic care, but were negatively associated with the length of stay in the current foster home. Physically abused children were more likely to show disinhibited attachment disturbances than other types of disturbances (inhibited or mixed symptoms).
Increased internalizing and externalizing problems were reported in children with disinhibited symptoms, not in children with inhibited symptoms. In sum, supported by other research as well (Gleason et al., 2012), inhibited symptoms depended upon the length of stay in the foster home and symptoms were not associated with other problems, contrary to disinhibited symptoms that did not appear responsive to improved caregiving but were related to internalizing and externalizing problems. It is therefore reasonable to state that in particular disinhibited symptoms are of concern and in need for intervention in addition to placement in a foster family. The current study demonstrated that both types are present in children exposed to neglectful caregiving experiences, but that harsh parenting is more likely to predict disinhibited symptoms. In addition and in line with previous studies (Zeanah & Gleason, 2014) justifying changes in DSM-5, it is increasingly plausible that inhibited and disinhibited symptoms differ in responsiveness to changes in the caregiving environment. Also like in previous studies, differences have been found between inhibited and disinhibited symptoms with respect to associated problems. However, in these previous studies inhibited and disinhibited symptoms have been reported with different types of problems (internalizing or externalizing), whereas the current study found divergent outcomes in terms of presence or absence of comorbid problems.

Next, the thesis focused on the effectiveness of treatment foster care programs intervening on problematic functioning of foster children. The treatment under investigation was Multidimensional Treatment Foster Care for Preschoolers (MTFC-P; Fisher et al., 1999), which was compared to an existing treatment foster care program [in Dutch: ‘Therapeutische Gezinsverpleging’ (Van der Most et al., 2001)]. Although the effectiveness of MTFC-P has been shown repeatedly, its effectiveness has never been examined outside the US and by independent researchers. Effectiveness was examined in steps, and presented in three different manuscripts (Chapter 4-6). The first study replicated a pilot investigation performed in the US (Fisher et al., 2000) and is described in Chapter 4. This pilot investigation examined if time in MTFC-P predicted a decline in problem behavior. The study included 20 children, about whom daily occurrence of problem behaviors was assessed with the Parent Daily Report (Chamberlain & Reid, 1987). Analyses revealed significant reduced problem behavior in course of the intervention. Results of this pilot study were therefore promising with regard to the efficacy of MTFC-P. Chapter 5 described the planned study protocol with the rationale, content, and design of the first study to examine the relative efficacy of Multidimensional Treatment Foster Care for Preschoolers outside the United States, compared to treatment foster care as developed in the Netherlands. Like in the US studies, the primary objective of the study was behavioral improvement and secondary objectives were reduced foster care stress and improved HPA-axis functioning. Additionally, to expand on previous investigations, treatment effectiveness was measured in terms of trauma symptoms and symptoms of attachment disorder. In previous studies MTFC-P had been compared to regular foster care (Fisher et al., 2000; Fisher et al., 2005; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008). The current study included another treatment foster care program as the primary control group, in order to examine if MTFC-P was better able to reduce problems than treatment foster care. A second control group, of regular foster children, was included in order to examine whether MTFC-P was able to reduce problems to the level of problems experienced in regular foster care. The comparison between MTFC-P and regular foster care was conducted within a quasi-experimental design.
This Chapter also described some of the challenges that were expected conducting a randomized trial in a sample of young foster children. The outcomes of the relative efficacy study are presented in Chapter 6, but need to be interpreted with caution due to methodological limitations. Changes in behavioral and relationship functioning of children and foster carer stress were determined over the course of MTFC-P and compared with changes in course of treatment foster care as usual. Results failed to support the superiority of MTFC-P over treatment foster care as usual in treating behavioral problems, attachment problems, foster carer stress, and neurobiological functioning of children. Looking at the development of traumatic stress symptoms in either treatment, unexpected results were found. Whereas trauma symptoms in MTFC-P remained almost stable, the first six months in treatment suggested negative treatment effects for the usual treatment foster care services. Then over the last three months, an advantage of the treatment foster care as usual over MTFC-P was found with regard to trauma symptoms. Next, the study described in this Chapter compared the emotional and behavioral changes of children in MTFC-P with children in regular foster care. Based on the results from this comparison, the study was unable to demonstrate that MTFC-P led to improvement of behavioral and relationship functioning to the level reported in children in regular foster care. In sum, the study presented in Chapter 6 was unable to replicate the large positive effect sizes of MTFC-P above usual foster care that were reported in US studies. However, findings remain inconclusive due to the smaller-than-planned sample size and inability to completely adhere to the planned research strategies.

General conclusion

The studies described in this thesis present young foster children in treatment foster care, of whom a substantial number continues to suffer from the impact of pathogenic caregiving experiences after out of home placement. Besides poor behavioral functioning, foster carers reported clinical levels of PTSD symptoms in a third of the children investigated in this study, and in over a third of the children clinically significant symptoms of attachment disorder. Overall, treatment foster care in the Netherlands appeared to serve a highly symptomatic population. Little evidence was found to suggest that placement in a foster family or passage of time was enough to facilitate recovery, which underscores the need for more intensive intervention. MTFC-P is one of the few evidence-based intensive intervention programs for foster children. The results of a test of relative efficacy of MTFC-P over treatment foster care as usual in the Netherlands, which takes the form of therapeutic foster care, failed to support an advantage of MTFC-P. With regard to trauma symptoms, children appeared to fare even better over time in the usual treatment foster care. Behavioral problems improved in both interventions, attachment problems remained stable in both interventions. Usual treatment foster care services appeared more beneficial as it achieved similar outcomes on behavior, but in addition positively affected trauma symptoms. One caveat with these findings is the small sample size that was achieved for the randomized controlled trial design of the study.

The outcomes of the efficacy studies need to be interpreted in the context wherein the studies were performed, which is different from the US where the other efficacy studies were conducted. A first major difference is the permanency planning for foster children, whereby children in the Dutch foster
care system may experience longer-term absence of a perspective on permanency than children do in the US foster care system. In the US, children are regularly adopted, whereas in the Netherlands adoption of foster children is rare. Unlike in the Netherlands, in most states of the US parental rights are terminated after children have spent 15 out of the 22 previous months in foster care (Child Welfare Information Gateway, 2013). Previous research (Fisher et al., 2005) showed that none of the permanent adoptive family placements of MTFC-P children failed within 24 months. Placement failed in 10% of the cases which concerned reunification with birth families. Although not investigated in the current study, adoption may bring along more certainty about the future perspectives of children and permanent foster carers, and increases the benefits of the aftercare provided within the MTFC-P intervention. It has been suggested that a lack of permanency planning negatively affects treatment outcomes and therefore the development of foster children (Weterings, 2000). A second difference is the population that was served in the two trials. Although maltreatment rates and days in care were about similar in the two populations, children in the Dutch population were on average older and had experienced about one more placement failure, compared to the US population (P. Fisher, personal communication, December 2nd, 2014).

Prolonged exposure to insecure caregiving and higher instability may have led to more severe symptomatology in the Dutch population. Unfortunately, traumatic impact of previous experiences has not been determined in ways of symptoms of attachment disorder and PTSD symptoms in US studies and it remains unclear whether MTFC-P in the Netherlands served children with more severe problems. Furthermore, effectiveness studies in the US have been performed within the research site where MTFC-P was developed. The fit between intervention and context may therefore have been less well in the current trial. According to Weisz and colleagues (2013) effect sizes of evidence-based interventions, like MTFC-P, tend to decrease when effectiveness trials are replicated from the research site to everyday practice, especially when applied in populations with severe, complex, and comorbid problems. Evidence-based interventions adhere to strict treatment protocols that in some cases may be insufficiently flexible to meet the individual needs of children in complex target populations. A third and most important difference is the comparison groups used to examine relative efficacy. The comparison treatment in the Dutch study comprised usual treatment foster care services, which have constantly been modified and adapted to the needs and possibilities of children and foster carers. This thesis was the first to systematically examine outcomes of usual treatment foster care services in treatment foster care in the Netherlands. Positive outcomes on behavior and trauma suggest that these usual treatment foster care services may include some important mechanisms for effectiveness. Within the eclectic character of usual treatment foster care, social workers can draw on a number of evidence-based interventions and may be able to meet some of the individual needs of foster children.

The possibility of program diffusion could also not be excluded. Social workers of both interventions worked together closely. Whereas MTFC-P workers are instructed to strictly adhere to MTFC-P principles, the eclectic approach of the usual treatment foster care program allows social workers to adopt some of the MTFC-P strategies. The placement perspectives of children in usual treatment foster care provided more stability. Children in usual treatment foster care received treatment within the permanent foster family, contrary to children in MTFC-P who received treatment within a temporary foster family. Also, the usual treatment foster care program used in this study comprised several
evidence-base treatment modules and intensive support for foster carers such as Trauma Focused-Cognitive Behavioral Treatment (TF-CBT; Cohen & Mannarino, 2008), Parent Child Interaction Therapy (PCIT; Eyberg, Boggs, & Algina, 1995), and Eye Movement Desensitization and Reprocessing (EMDR; Shapiro & Maxfield, 2002). The comparison services in the US may have comprised less evidence-based and intensive treatment strategies, which enables MTFC-P to show greater effect sizes. In line herewith, a debate has been arisen about the best way to compare evidence-based interventions with services in usual treatment, for example how to exclude variation between individual therapists and distinguish between effects of general common treatment factors and effects of specific treatment factors (Weisz et al., 2013; Weisz, Jensen-Doss, & Hawley, 2006).

Strengths and limitation

The first part of the current thesis added to the limited knowledge about the threat on children’s development that comes with different forms of pathogenic caregiving. The strengths of this study were the systematic study of previous experiences of maltreatment, neglect, and placement instability and the combined investigation of associated symptoms within two important caregiving-related DSM disorders, PTSD and RAD. Phil Fisher and his colleagues, but also others have made a great effort in the development and evaluation of foster care programs tailored to the needs of preschool-aged foster children. The evaluation has been made on numerous outcomes, within the psychological as well within the physiological domain of child development. Although outcomes on different domains have been investigated independently from each other, these studies have increased our knowledge about effective possibilities for treatment. This thesis expanded on previous studies using a multi-domain evaluation of the development of young foster children in treatment foster care. Especially the inclusion of symptoms of attachment disorder and trauma has been relevant in the population under investigation. Further strengths of the studies presented in the current thesis were the use of multiple informants (foster carers, teachers, children, and child protective services), and using multiple data gathering strategies (interviews, questionnaires, saliva collection, and case record analysis).

In addition to these strengths, some limitations should be mentioned. The studies were limited in the way concepts under investigation were measured. Attachment behavior was only included in these reports in terms of symptoms of attachment disorder. The assessment of quality of attachment may reveal important information as well. Moreover, only foster carer report of attachment was analyzed whereas observational measures are considered more accurate for assessment of attachment (Boris & Zeanah, 2005). Psychological trauma was measured in terms of DSM-IV criteria for PTSD, however it has been suggested that these criteria are developmental insensitive (Scheeringa, Zeanah, Myers, & Putman, 2005) and lack ability to identify the outcomes of stressful events that occurred more repeatedly and prolonged, and within the context of caregiving (Sar, 2011). Some other limitations of the thesis concern the study design and use of control groups. With regard to the second part of the thesis, the small sample size limited statistical power to find differences between treatments. Furthermore, the comparison between MTFC-P and regular foster care was hampered by the significant differences at baseline. Also to deviate from planned random allocations brings along some limitations. Treatment effects found in either of the treatments remain inconclusive because outcomes may have been biased due to selection of children for either one of the two treatments.
Clinical implications

The high prevalence of complex trauma-related symptoms and symptoms of attachment disorder that has been reported in the study population calls for extensive diagnostic screening of children, by a clinical child psychologist or psychiatrist, when entering the department of Treatment Foster Care. This finding furthermore indicates the importance of trauma-informed or attachment-focused strategies to be included in the MTFC-P interventions. For example, the content of weekly foster carers meetings may be more attachment-focused or trauma-informed. Although behavior improved with time in MTFC-P, there was no evidence that the intervention was responsible for this effect. It may also be beneficial to behavioral treatment that the origin of problematic functioning is seen within in the context of traumatic experiences and foster carers become more sensitive to early rearing conditions of their foster child (Klain & White, 2013). When foster carers understanding of the causes of problem behavior increases, so does their ability to cope with problems (Scholfield & Beek, 2005). Also, increasing foster carers’ knowledge about the discrepancy that exists in the behaviors and needs of the children may equip them better for sensitive and nurturing caregiving (Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004). In addition, increase of foster carer support within MTFC-P can be beneficial as it is expected to lower stress levels of foster carers and therewith indirectly improving children’s behavior. Furthermore, it may be beneficial to improve placement stability and consider opportunities to provide MTFC-P in permanent foster families. Although the exact effect of the end-of-treatment transfer in MTFC-P is unknown, placement breakdown in common has been known to be negatively associated with children’s development (Oosterman et al., 2007).

Finally, it may be of interest to integrate MTFC-P in a more flexible treatment protocol, wherein effective treatment modules are incorporated and can be inserted into an individualized treatment protocol (Chorpita et al., 2013). Potentially, the treatment foster care as usual provides an overall framework according to the principles of complex trauma, as it offers opportunities to match the treatment components to the needs of foster children and carers.

Implications and directions for future research

Lack of empirical evidence was a reason why the proposed Complex Trauma Disorder for young children exposed to prolonged traumatization was not included in DSM-5 (Friedman, 2013). However, PTSD criteria have become more developmentally sensitive in DSM-5, which introduced a new preschool subtype of PTSD (American Psychiatric Association, 2013). Although this thesis adds some evidence for the clinical significance of Complex Trauma Disorder, more evidence is necessary before adaptations are made to current trauma disorders defined by DSM. Based on the high rates of adverse childhood experiences, but absence of a diagnosis that gathers the full picture of symptoms related to these potentially traumatic and pathogenic experiences, future research is encouraged to investigate the existence or non-existence of a subtype of trauma disorder that occurs after complex forms of repeated traumatization early in life. Especially, comparison of the traumatic impact in young children exposed to single trauma with young children exposed to pathogenic care is needed. Next, findings from the current thesis supported recent changes that were made by DSM-5 regarding the split-up of the inhibited and disinhibited subtype of Reactive Attachment Disorder, into two different disorders. The split-up seems warranted from the current study findings, as inhibited and disinhibited symptoms of attachment disorder differed with respect to previous caregiving experiences, associated clinical
problems, and their dependency on length of stay in the current foster family. However, because the current thesis used foster carer interviews to screen attachment disorder on symptom-level, the thesis was unable to conclusively validate these adaptations. Future research is encouraged to assess on a disorder-level using at least observational measures (Boris & Zeanah, 2005).

Considering the specific context of the studies and the strengths and limitations, the question remains if behavioral improvement is sufficient to change the adverse course on numerous other domains in children's development. Also, the time effect on behavior in both interventions indicates that not only strict behavioral approaches will lead to behavioral improvement. Extensive research on the effective mechanisms for symptom improvement is therefore encouraged. Furthermore, based on the findings presented in this thesis still little is known about sustainability of effects on behavior and whether these effects predict foster family placement stability on the long term. Of specific interest is the effect on sustainability of behavioral improvement in MTFC-P, as the end of treatment dictates that children leave the therapeutic foster home. The absence of a clear behavioral and neurobiological effect of MTFC-P was unexpected. Previous research (Fisher & Stoolmiller, 2008), suggested that lowered caregiving stress was associated with more typical HPA-axis functioning of foster children. In the current study, we found no effects on foster carer stress, nor on children's HPA-axis functioning, which may have hampered further improvement of behavior of children. However, the current thesis provided no further insight in how the absence of effects on stress and HPA-axis functioning of foster carers is related to behavioral improvement. In sum, future research is encouraged to identify specific factors leading to behavioral improvement, the need to intervene on foster carer stress, the treatment mechanisms associated with HPA-axis functioning, and the long-term behavioral effects on future placement stability of children treated with MTFC-P in the Netherlands.

Despite the absence of a treatment effect of MTFC-P in this study, social learning theories have been found to provide effective strategies to improve children's behavior (Kazdin, 2011). An explanation for the absence of effects may lie in the complexity of problems experienced in the investigated population. The high prevalence of symptoms of attachment disorder and trauma-related symptoms in addition to behavioral problems underlines the need to consider other theoretical perspectives as well. Currently there are three major theories that guide much of the research and practices towards young foster children. Besides the social learning theory, also attachment theory and complex trauma theory provide an import framework for intervening in young foster children. Attachment plays a prominent role in the life of a foster child, both before and after placement in foster care. Abuse, neglect, separation from biological parents, and unstable foster care trajectories negatively affect attachment behavior of young children. Disappointed by previous experiences, children may ignore or resist comfort and proximity of foster carers. With each rejection of the child it may become more challenging for foster carers to stay positive and responsive towards the child, which further hampers the child to develop a healthy and stable attachment relationship with foster carers (Dozier, Stovall, Albus, & Bates, 2001). Yet, a stable attachment relationship is of great importance to start behavioral and emotional recovery for young foster children. Some well-known evidence-based interventions for young foster children have been developed based upon principles of Attachment Theory. For example the ABC intervention (Attachment and Bio-behavioral Catch-Up) developed by Dozier and colleagues (2002) in order to help foster carers. An adapted version has been developed especially for children reared in abusive and
neglecting families (Bernard, 2012). The primary aim of the ABC intervention is to increase sensitivity of foster carers, to inform them about the needs of children for security and stability, to make them understand difficulties in children’s behavior, and to help foster carers to support their foster child’s capacities for self-regulation. Randomized controlled trials, conducted in the US by the program-developers, demonstrated positive outcomes on behavioral and biological regulatory capacities of children (Dozier et al., 2006). Although developed for younger children (3-39 months old), it may offer effective strategies for pre-school aged children as well. Still, in light of the finding presented in the current thesis it needs to be investigated whether this or similar attachment-focused approaches are able to support recovery from disinhibited attachment.

In the Netherlands an attachment-focused treatment has been developed, VIPP (‘Video feedback Intervention to promote Positive Parenting’; Juffer, Bakermans-Kranenburg, & Van IJzendoorn, 2008) which combines strategies to intervene on sensitivity of foster carers with strategies aimed to positively modify children’s behavior. Evidence for treatment effectiveness has been found in a randomized controlled trial in the Netherlands (Van Zeijl et al., 2006). An adapted version of VIPP has been developed that specifically targets foster families (VIPP-FC). An efficacy trial focusing on this latter version is currently ongoing (Trial register: NL39376.101.13).

In addition to attachment, complex trauma plays an important role in the lives of foster children as many foster children have been exposed to prolonged maltreatment, neglect, and multiple separations from caregivers. Complex trauma refers to both exposure as well as the widespread consequences of prolonged traumatic experiences in the caregiving context. Fear and insecurity in the context of caregiving can have a traumatic impact on children’s development. The results from Chapter 2 are in line with the literature (Cook et al., 2005; Kolko et al., 2010; Lieberman, Chu, Van Horn, & Harris, 2011) showing that complex traumatic experiences may result in (partial) PTSD, often in combination with problematic behavioral and relationship functioning. Currently existing foster care treatments offer minor evidence for effective intervening on traumatic symptoms. However, because of the chronic exposure to potentially complex traumatic experiences of the current study population specific trauma-focused treatments may be beneficial to foster children. For example trauma-focused cognitive-behavioral therapy (TF-CBT), which is a short (approximately 12 to 18 sessions), structured, multicomponent treatment protocol, based on principles of cognitive and behavioral theories (Cohen & Mannarino, 1996). TF-CBT components are provided separately to children and (foster) carers in individual sessions and in conjoint child-carers sessions. The TF-CBT comprises components such as psychoeducation, parenting skills, relaxation and affective modulation, cognitive processing, trauma narrative and mastery of trauma reminders, and enhancement of safety and future development. TF-CBT has been shown to address the effects of traumatic experiences (Silverman et al, 2008) and is considered best-practice for traumatized children (Diehle, Opmeer, Boer, Mannarino, & Lindauer, 2014; Fox, Keane, Friedman, & Cohen, 2008). An adapted version of TF-CBT has been developed to meet the needs of complexly traumatized children (Cohen, Mannarino, Kliethermes, & Murray, 2012; Scheeringa, Weems, Cohen, Amaya-Jackson, & Guthrie, 2011). Although the documented evidence for treatment success of TF-CBT is large, the evidence available for TF-CBT effectiveness when provided within the context of foster care is limited (Weiner, Schneider, & Lyons, 2009).
TF-CBT is a promising intervention, but there are no guarantees that it will be equally effective when provided within the treatment foster care system. Foster children, especially the currently investigated treatment foster care children, often lack a secure attachment relationship. The absence of secure attachment has been linked to poor regulatory capacities of the child (Cassidy, 1994), to the level of foster carers’ commitment to the child (Dozier & Lindheim, 2006), and to diminished effects of trauma-focused interventions (Overbeek, De Schipper, Lamers-Winkelman, & Schuengel, 2014). With a strong emphasis on parental commitment and regulatory capacities of children, feasibility of TF-CBT in treatment foster care becomes challenging.

Future research is encouraged to investigate best practices for complexly traumatized preschool-ages children, with high rates of symptoms of attachment disorder, trauma symptoms, and behavioral problems. In light of the suggested interventions, it is of great importance to examine whether these intervention not only affect their primary target problem (attachment or trauma), but are able to subsequently improve behavior as problematic behavior remains the most important factor for placement failure (Oosterman et al., 2007). However, behavioral improvement may rely on the absence of trauma and presence of secure attachment. An additional important focus of future research would therefore be to examine the use of mixed approaches and the most effective sequence of hereof.

At the end of this thesis the knowledge about young children in treatment foster care in the Netherlands has arrived to a point where we know that many foster children have been exposed to an accumulation of adverse childhood experiences. In the aftermath of early adverse experiences these children show wide variety in problems that seem unaffected by passages of time or placement in foster care solely. In the attempt to identify the exact developmental changes and effective treatment to start recovery, more questions have been raised than can be answered by this thesis. Nevertheless, we know now that time in MTFC-P predicts behavioral improvement, but that MTFC-P in its current form and implementation is insufficiently able to affect other developmental domains. Further research should examine if MTFC-P was a contributing factor to behavioral improvement, if behavioral improvement is sufficient to gain long-term positive outcomes and if not, focus on necessary treatment elements that can be included or provided in addition to MTFC-P.