General introduction
1.1 GENERAL INTRODUCTION

1.1.1 Theoretical background

Fostering children exists in many cultures and is from all ages. Children growing up in adverse conditions are cared for by other families, often in the vicinity of the home of the biological parents. Foster family care in earlier times implicated that in those days the extended family, neighbours or the church community were involved in taking care of and supporting the child(ren) (Baartman & Zandberg, 1997). Help was given when the child showed difficult to manage behaviour, but more often if parents could not take care of the child anymore because of illness, poverty or death. By placing a child in the extended family (kinship care) for a shorter or longer period of time, the family relations remained intact. The contact between biological parents and their child remained, because the child lived in the neighbourhood, which also helped to normalize and reestablish the relationship between biological parents and children. This ‘natural’ utilization of the extended family is also known as ‘family preservation’ (Strijker, 2009). For a long time researchers believed that kinship care is ‘better’ than non-kinship care. It was presumed that kinship placements might be less traumatizing because relations with biological parents remained more or less intact. Moreover, less loyalty problems for children might arise. But disadvantages were also reported. Kinship foster carers may find it more difficult to actually engage or deal with the child because of loyalty to the biological parents. A Flemish study showed that kinship carers experience as much stress in the relation with their foster child as non-kinship carers (Van Holen et al., 2007). Currently, research findings are inconclusive with regard to the question whether kinship or non-kinship care is most to the benefit of children (Fechter-Leggett & O’Brien, 2010; Fernandez, 2008, 2009; Strijker et al., 2003).

1.1.2 Foster care in the Netherlands

In the Netherlands family foster care is the preferred intervention for young pre-school aged children whose development is threatened by external circumstances (Pleegzorg Nederland, 2013). Family foster care is used to secure a child when in (potential) danger, but it is also favored to help the child when biological parents are not able to do so. Family foster care may be useful in acute emergency, but it can also be indicated for longer periods of time.

Over the last decennia, the number of foster families in the Netherlands has grown steadily. This is especially the case with non-kinship care. Simultaneously, there is a growing awareness of the fact that fostering a child is a challenging task. Often the child has been neglected or maltreated before placement and suffers from traumatic stress (Strijker & Knorth, 2009). This impacts on his/her relationship with the foster carer in a negative way. It is a consequence of the child’s background or of the behaviour that the
child has developed in reaction to this background (Wilson et al., 2000). Continuation of a child’s stay in foster care cannot be taken for granted; a substantial number of placements (some studies claim approximately 30%) break down during the first year and many families stop as foster family because of a too heavy burden (Fees et al., 1998; Gibbs, 2005; Rhodes et al., 2003).

Acknowledging these factors leads to the conviction that foster carers are in need of extra support to help them cope with the challenge of fostering a vulnerable child. For this reason, several educational and training programmes have been developed in the early and mid 1990’s. Dorsey et al. (2008) reviewed existing parental training programs focusing specifically on interventions designed to increase the competence of parents, involved in child welfare, to cope with abused youth. Though there is a wide range of training programmes, empirical evidence of their effects and effectiveness is still slim. Many of these training programmes focus on practical and legal implications linked to being a foster carer.

Zeanah et al. (2011) underscore the importance for children of developing a secure attachment relationship at all times. In line with this, foster carers themselves report the most effect when interventions are carried out in their daily living circumstances and focus on their relationship with the child (directly after placement). They also report that interventions should be personalized, which means that they are adapted to the specifics of the new foster parenting situation, the age of the child, and the relation with biological parents (Dorsey et al., 2008). Despite this finding, only a few evidence-based interventions are documented (Dorsey et al, 2008; Dozier et al., 2002).

1.1.3 Infant mental health

The discipline of ‘Infant Mental Health’ studies the social and emotional development of infants and toddlers focusing on the parent-child relationship (Fitzgerald et al., 2011; Zeanah & Zeanah, 2009). The emotional growth and development of the child will benefit from influencing the parent-child relationship in a positive way. In this context, Sameroff (2010) developed the ‘unified theory of development’ to unite these assumptions. He described a child as being a ‘product’ of the continuous dynamic interactions between itself and the multiple social settings it has to negotiate, and in doing so Sameroff draws our attention to the plasticity of both the environment and the individual to foster change. He adds that it is not just the child or the environment that changes in response to the interaction but that both are altered as time goes, due to the transactions that occur. The model integrates four levels of change and is based on the assumption that this integration is necessary in order to understand human growth.
1. *Personal change* involves the changes that take place in an organism, including traits, growth, and development as it occurs across the lifespan.

2. *Contextual change* refers to understanding the complexities of the environment that can constrain or promote development. Developing children operate in increasingly complex bio-ecological environments that they have to negotiate. As a consequence, the capacities of the rearing-environment to stimulate and support the individual – directly or indirectly – dramatically affects the long-term developmental outcomes and needs to be understood as such.

3. *Change of regulation* describes the dynamic interface of the self and the environment where interactions during infancy evolve from being primarily biologically driven to a more and more psychologically (i.e. by the self) and socially (i.e. by relationships with others) driven regulation.

4. *Representational change* explains the relationship between ‘real world experiences’ and the development of thinking in the form of cognitive structures that coin the everyday experiences. Real world experiences are encoded and stored in the memory and then used with increasing complexity as children age to provide an explanatory structure to their actual experience (Phillips & Cameron, 2012).

Sameroff developed this integrated model upon the ecological system of Bronfenbrenner (1994). He subdivided the ecological framework for human development in different ecosystems (see figure 1).
This model encompasses the development of the child, his/her genetics and biology, and the psychological capacities, in relation to parental variables, parenting factors and context of the family, and also the wider social context. It is a multicomplex bio-psychosocial-ecological model in which the development of the child is operationalized in such a fashion that it makes it possible to understand and theorize about possible contributing effects of different influences (e.g., trauma) on the child.

Figure 2 depicts the ‘unified theory of development’ itself. Sameroff integrates the components of the bio-psychological self, which includes the personal, contextual and regulatory change, within the social ecology over time. He excludes the representational change from the figure stating that it would make the model too complex, but reminds of the importance of understanding that it permeates every aspect of the model – that is, the interacting identities, attitudes, and beliefs of the child, the family, the culture, and the organizational structure of the social institutions.

Sameroff (2010) integrates the components of the bio-psychological self, which includes the personal, contextual and regulatory change, within a social ecology across time. The younger the child, the more s/he depends on the environment to regulate the self; the older the child, the more s/he is able to regulate him/herself. The model provides clear understanding of the component parts of the child and its surrounding environment that interact and transact with each other to create change across time. This characteristic of interaction and transaction is an important element we used in designing our intervention in foster care.

The ability of the environment to support and then sustain the individual – directly or indirectly – may significantly affect the long-term developmental outcomes in foster children and therefore needs special attention. Hence, the upbringing of the child is
an important factor. Belsky considers this upbringing a bidirectional relationship between carers and children (Colpin, 2007). He developed a model centered around influencing the behaviour of the child. Children's behaviour is influenced by child factors as temperament, personality traits and intelligence. The child also interacts with its surroundings. In the model the carer is situated as a moderating system on all aspects of upbringing. The carer needs certain skills to do this: monitoring the child, positive engagement, positive reinforcement, discipline and problem solving behaviour. The way carers execute these tasks will be influenced by their own past experiences and support systems (Fig 3).

1.1.4 Infant mental health and foster care

Research on Infant Mental Health focuses on the biological parent-child relation in the context of the development of the child, its biological and psychological make-up in progress. The principles used are applicable in every relation between carers and children. In foster care an extra contextual ‘complication’ should be added to the model of Sameroff: as foster carers and children they are involved while they do not share genes nor a common history. The foster carer has a shallow knowledge of the child’s background or of the impact that this background may have had on the child. The child in turn is not akin to his/her new home and it’s rules, and does not know what kind of people the foster carers are. Dozier et al. (2006) pointed out that, as a result, young children often react to the placement in a foster care situation with *avoidant coping behavior*. Especially infants are difficult to ‘read’ under those circumstances: How do they experience placement (the contextual challenge in Sameroff’s model)? Are they stressed or do they feel secure in relation to their carers (an extra regulatory challenge in the model)? The child’s young age, background of possible history of abuse and vulnerability are extra risk factors that underline the utmost importance of facilitating and giving optimal support to the foster care placement under difficult circumstances. Foster carers need certain skills to support their foster child: monitoring the child, positive

![Figure 3. A process model of the determinants of parenting (Belsky, 1984).](image-url)
engagement, positive reinforcement, discipline and problem solving behaviour (Belsky, 1984) and taking into account its specific needs. This was the rationale for developing the Foster carer- Foster child Intervention (FFI). The FFI has been designed using principles derived from the outcomes of Infant Mental Health research.

1.1.5 The Foster carer- Foster child Intervention (FFI)

The FFI is directed at optimizing the relation between the foster carer and the foster child (aged 0-4 years) to enhance the likelihood of developing a secure attachment relation with the child steered by a better awareness of the child’s condition and emotional state. The FFI is not aimed at influencing attachment relations directly; it focuses on optimizing basic conditions and thus favoring the development of an optimal attachment relation. To sum up the FFI focuses on the enhancement of:

- emotional availability of the foster carer;
- observational skills of the foster carer;
- anticipating skills of the foster carer.

In terms of Sameroff the intervention focuses on interaction and transaction between foster carer and child to create developmental change across time. It is important to help foster carers focus adequately on the age appropriate developmental level of the child and on the emotional needs of the child.

Enhancing the skills of the foster carer is expected to help establish a sound investment in the relationship with a foster child. The skills help to nurture, educate and support the child in an age appropriate manner. The effect of this investment should be that the child feels more secure and respected, which might also reflect in his/her behaviour. Thus the child may become more responsive to the carer, may react with less aggression, and will feel safe to seek comfort when in discomfort or pain.

The FFI consists of six sessions, each with a specific theme targeting emotional security issues for the child and possible adjustment issues the young child in foster care may encounter shortly after placement.

1.2 AIMS AND RESEARCH QUESTIONS

The main objective of this thesis is to add to the evidence base of the Foster carer - Foster child Intervention (FFI).

The main question addressed in this thesis is whether empowering the foster carers by administering the FFI will help the child to feel more secure and to temper his/her stress level. More specific aims of the thesis are:
1. to empirically explore the developing relationship between the foster carer and the young foster child;
2. to empirically test the effects of the FFI on the foster child - foster carer relationship and the foster child’s stress level.

Other questions were:
Which interventions already do exist that might be indicated to help very young children after having been placed in foster care? Is salivary cortisol a possible biomarker to measure stress in very young children? Is it indicated to use salivary cortisol as a measurement to evaluate an intervention effect in young children?

1.3 SETTING

Twelve out of the twenty-eight foster care organizations in the Netherlands participated in our research. The organizations formed specialized teams to carry out the Foster carer - Foster child Intervention in practice. In most cases, these teams consisted of four foster care workers and a behavioral scientist as the supervisor. The supervisor provided practical support to the foster care worker on the spot. The teams were trained and also supervised by the developers of the FFI every other month during the four years (July 2009 - August 2013) of data collection. The aim was to maintain a high level of quality in implementing the FFI. All foster care workers were trained at the start during one whole day. In addition, once a year booster training sessions were organized, also with the goal of maintaining the high level of quality. Data collection was performed with the help of master students from the Department of Special Needs Education and Youth Care, Faculty of Behavioural and Social Sciences of the University of Groningen. Bachelor and master students from this unit were trained to code videotaped sessions of foster carer - foster child interactions.

1.4 OUTLINE OF THIS THESIS

Chapter 1 starts with a general introduction, in which the basic theories needed for this thesis are highlighted. The connection between these theories and the possible needs of the very young foster child are explained.
Chapter 2 reviews the literature on studies that report on interventions aimed at helping foster carers and foster children to cope with stress and behavioural problems. A substantial number of interventions has been developed but with differences in goals, theoretical background, and methods. A statistical meta-analysis is performed to probe the relative effectiveness of the different approaches at diminishing the foster child’s defiant behaviour and/or enhancement of specific parenting competences in the foster
carers. Further, the question is discussed whether these interventions are also useful in situations where foster children react with avoidant and internalizing behaviours.

Chapter 3 provides a review of the research on the use of salivary cortisol as a possible biomarker for stress in young foster children. There is converging evidence that a disruption of the normal circadian rhythm of salivary cortisol is associated with the experience of having been exposed to domestic violence and being victim of aggressive behaviors. The review focuses firstly on the question whether young (0-4 years of age) foster children do show HPA-axis dysregulation, and if so, whether HPA-axis functioning (expressed by diurnal salivary cortisol) is an appropriate indicator to measure stress. A second question is to what extent the use of diurnal salivary cortisol as an outcome measure in intervention research on young foster children is a reliable and valid procedure.

Chapter 4 describes the Foster carer- Foster child Intervention (FFI). The theoretical background underlying the intervention is presented, with a focus on those treatment elements that are supposed to be useful in attaining our goals of fostering secure attachment in young children and enhancing foster carers’ skills to recognize and cope with behavioural expressions of heightened stress levels in these children.

Chapter 5 reports on the quality of newly formed relationships between recently placed preschool-aged foster children (6 weeks to 3.5 years of age) and foster carers. It used the baseline measurements from the the randomized clinical trial comparing control to FFI: data at the first visit after the placement of children in their foster care families (N=123). Subsequently, we explored the development of the quality of these relationships six to eight weeks after placement. The research questions were: 1) How do foster children and their foster carers interact in terms of emotional availability and perceived parenting stress?; 2) Which demographic and placement characteristics influence the quality of this interaction?; and 3) Are children’s biological stress levels associated with the quality of the foster children’s - foster carers’ interaction?

Chapter 6 reports on a randomized controlled trial on the FFI. Outcome data of an experimental group (N=63) and a control group (N=62) will be compared. Foster carers and their children were observed when interacting with each other at home during an average day. Carers were instructed to interact with their child as they are used to and this interaction was videotaped. A scale on parenting stress was administered to the foster carers and children’s salivary cortisol was collected. Regarding these last two variables the same instruments were used in the first (directly after placement) as the second (half a year later) measurement.

In the general discussion (Chapter 7) we summarize the main results of the different studies, reflect on the strengths and limitations of our research, put the findings in a broader theoretical context, discuss the impact our findings could have for the foster care practice, and give recommendations for future research.
BACKGROUND REFERENCES


