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   Jon G. Allen
CONTENTS

ABOUT THE EDITORS AND CONTRIBUTORS ix

PREFACE xix
Peter Fonagy

FOREWORD AND ACKNOWLEDGEMENTS xxiii
Marianne Leuzinger-Bohleber

PART I: PERSPECTIVES

CHAPTER ONE
The prevention sciences of early development and challenging opportunities for psychoanalysis 3
Robert N. Emde

CHAPTER TWO
“Out-reaching psychoanalysis”: a contribution to early prevention for “children-at-risk”? 20
Marianne Leuzinger-Bohleber
CHAPTER THREE
Minds shaped through relationships: the emerging neurobiology of parenting
Helena J. V. Rutherford and Linda C. Mayes

PART II: EARLY PREVENTION PROGRAMMES

CHAPTER FOUR
Fraiberg in Paris—early prevention through a mental health programme for vulnerable families: preliminary findings and what we have learned in conducting the French CAPEDP study
Antoine Guedeney, Nicole Guedeney, Susana Tereno, Romain Dugravier, Thomas Saias, Florence Tubach, Jaqueline Wendland, Bertrand Welniarz, Alain Haddad, and Tim Greacen

CHAPTER FIVE
Understanding how traumatised mothers process their toddlers’ affective communication under stress: towards preventive intervention for families at high risk for intergenerational violence
Daniel S. Schechter and Sandra Rusconi Serpa

CHAPTER SIX
The triadic perspective for parenting and early child development: from research to prevention and therapy
Kai von Klitzing

CHAPTER SEVEN
Transition to parenthood: studies of intersubjectivity in mothers and fathers
Massimo Ammaniti, Cristina Trentini, Francesca Menozzi, and Renata Tambelli

CHAPTER EIGHT
The First Steps: a culture-sensitive preventive developmental guidance for immigrant parents and infants
Patrick Meurs
CHAPTER NINE
The evolution of an early parenting education programme, its follow-up, and its implications
Henri Parens

CHAPTER TEN
German perspectives on Henri Parens’ pioneering work in Philadelphia: the development of attachment-based parenting programmes
Karl Heinz Brisch

PART III: INTERDISCIPLINARY RESEARCH IN FRANKFURT

CHAPTER ELEVEN
Individual Development and Adaptive Education of Children at Risk: objectives and agenda of a transdisciplinary research centre
Marcus Hasselhorn, Ulrike Hartmann, Sonja Reuße, and Andreas Gold

CHAPTER TWELVE
History and concept development of psychoanalytically based prevention projects in preschool institutions of the city of Frankfurt: conducted by the Sigmund-Freud-Institut and the Institute for Psychoanalytic Child and Adolescent Psychotherapy
Angelika Wolff

CHAPTER THIRTEEN
Early prevention in day-care centres with children at risk—the EVA research project
Verena Neubert, Katrin Luise Laezer, Lorena Hartmann, Tamara Fischmann, and Marianne Leuzinger-Bohleber

CHAPTER FOURTEEN
First Steps: an integration project for infants with an immigrant background—conceptualisation and first impressions
Judith Lebiger-Vogel, Annette Busse, Korinna Fritzemeyer, Claudia Burkhardt-Mussmann, Luca-Sandra Paul, and Marianne Leuzinger-Bohleber
CHAPTER FIFTEEN
Cognitive stimulation and parental sensitivity in toddlers’ homes: how do children and parents interact and how effective are trainings for parents?  
Silke Hertel, Andreas Eickhorst, Miriam Kachler, Nadine Zeidler, Katharina Wolf, Marlis Abrie-Kuhn, and Manfred Cierpka  
283

CHAPTER SIXTEEN
Just wait and don’t upset yourself: when children are exposed to poverty in their daily lives  
Sabine Andresen  
297

PART IV: CLINICAL APPLICATIONS

CHAPTER SEVENTEEN
Through symptoms to subjects: the family physician and the psychologist together in primary care  
Luigi Solano  
309

CHAPTER EIGHTEEN
From nameless dread to bearable fear: the psychoanalytic treatment of a twenty-two-month-old child  
Agneta Sandell  
328

CHAPTER NINETEEN
A preventive attachment intervention with adolescent mothers: elaboration of the intervention  
Frances Thomson-Salo  
343

INDEX  
358
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Few books could be more central to this series than an up-to-date review of psychoanalytically informed developmental research and intervention studies in early development, both systematic and clinical. The editors were lucky in being able to bring together some of the most committed and respected contributors to this important field. The particular perspective from which this volume emerges takes parenting as its central theme. It is an intriguing facet of modern biology that the clearer we become about the importance of genetic influences on development, the more we are forced to recognise the central role that the early years—particularly early years scaffolded by a caregiver—play in the creation of the human mind.

In classical psychoanalysis the naive environmentalism of the years between the wars and the first two decades after the Second World War gave rise to an enormous systematic neglect of biological influence. It wasn’t just psychoanalysis; it was also learning theory, which saw little importance in genetic makeup except perhaps in the most extreme forms of abnormalities of the mind. The gradual recognition of the limitations of our ability to intervene and change clinical states once established, almost regardless of the techniques that we use, inevitably created an interest in the early years. The work of Robert Emde and
Daniel Stern perhaps was most central in bringing the psychology of the early years into the realm of psychoanalytic theorisation and clinical work.

Of course, the baby existed in psychoanalysis before the “baby watchers”, but Melanie Klein’s baby and Winnicott’s baby were adultomorphic to a considerable degree. They seemed in some way put there to explain the conflicts and vicissitudes of the adult years rather than to genuinely map how the mind emerges from a helpless infant in many ways biologically and physically unprepared for the challenges of the external world. The infants of early psychoanalysis were retrofitted to the couch. Rene Spitz, John Bowlby, and, I would argue, Dorothy Burlingham and other pioneers created the beginnings of an epistemological shift within psychoanalysis: because the subject matter was babies rather than adults, and perhaps because babies couldn’t talk and be analysed, the observation of the young child gradually became a legitimate source of psychoanalytic enquiry. In this regard, it was different from psychological observations concerning any other domain.

The ready availability of psychoanalytic data, either through direct clinical encounters or sometimes through the indirect study of artistic or literary products of the mind, made the direct study of the mature mind superfluous from a psychoanalytic standpoint. Most clinicians, however, who were little concerned about behavioural studies from psychology or psychiatry, found themselves intrigued by the early development of nonverbal infants. The rapid growth of experimental research in infancy gave rise to a veritable revolution in psychoanalytic theorisation. The baby watchers of the 1970s and 1980s, perhaps more than the clinicians or theoreticians of that time, were in my view responsible for the emergence of an interpersonalist intersubjectivist tradition. The 1980s and 1990s saw a brief convergence of theoretical psychoanalytic models around object relations theory rooted directly in the operationalised model of the parent–infant relationship internalised and working to create subsequent relationships in its mould. Of course, this common framework brings together the work of psychoanalytic giants like Otto Kernberg, Heinz Kohut, Bion, Winnicott and others into a single epistemic frame, still differentiated by content but held together by a shared set of assumptions in relation to the formative nature of early relationship patterns. When history is written, this period may be designated as one of the heydays, when the observation
of the human infant brought mature psychoanalytic traditions closer
together than at any other time.

This remarkable book is born originally of that tradition but also
introduces progress since the early days of observing infant behaviour.
Two major developments, both represented in this volume, characterise
the intervening period. The first is the application of our understanding
of risk and protective mechanisms to motivate preventive efforts
aimed at reducing pathology and enhancing wellbeing, and the second
is our increased understanding of brain function, particularly as this
pertains to neurodevelopment. Three brilliant overarching chapters
covering each of these areas with magnificent erudition, by Robert
Emde, Rutherford and Mayes, and Leuzinger-Bohleber ensure that
subsequent chapters are placed in context and the full weight of scien-
tific advance in these fields can be appreciated by the reader. Marianne
Leuzinger-Bohleber intriguingly discusses some new ways of dissemi-
nating psychoanalytic and other scientific ideas to German institutions
with the aim of supporting increasingly sophisticated approaches to
early parenting.

The declared aim of the book is to identify paths where psychody-
namic clinicians have been successful in reducing risk through early
intervention. Seven of the chapters offer distinct yet complementary
approaches to integrate psychoanalytic understanding of development
with developmental science to provide successful prevention protocols.
Each of the approaches has value, and each is described in sufficient
detail to permit generalisation.

One project deserves special mention, which is of sufficient size and
stature to merit an entirely separate section within the volume. The
work of colleagues in Frankfurt, covering a number of different indi-
vidual programmes of enquiry, is a superb example for us all in rela-
tion to what clinicians-turned-researchers can achieve. The studies are
exciting individually, and taken together they represent an awesome
contribution in terms of both project size and significance.

Early interventions are going to be increasingly relevant as we learn
from studies of brain development in psychosis and major depression
that the experience of disease itself can contribute to creating structural
and functional anomalies in the human brain. No human organ exists
where disease does not leave lasting scars. The heart, the kidney, the
liver will not be the same after they have been the site of an illness;
why should the brain be different? If the experience of illness—and
particularly repeated experience—serves to impact on the capacity of the organ to function appropriately, the prevention of full-blown disease must be a priority. This simple truth is now widely accepted and implemented by health policymakers in the case of cardiovascular disease or liver disease. In fact, a stroke could be seen as a failure of prevention. In mental health, we have perhaps taken a little longer to appreciate that the brain cannot be expected to fully recover after the assault of a major mental illness any more than we can expect our joints to spring back to normal function after an infection or accidental injury. Prevention and early intervention is, then, the core of mental health. Or it should be.

*Early Parenting Research and Prevention of Disorder* will become a classic of prevention science. It is a science with great promise, which has yet to deliver the kind of results that we know it has the potential to. Psychoanalytic understanding of infancy and early childhood has led the way to creating understanding of the human brain as necessarily developing in the context of important social relationships. These relationships—the ones between the child and the parent, as well as the ones between children—provide the material for the emergence of the human mind, which the brain has the potential to create. It is obvious, then, that influencing these relationships can serve either to optimise the achievement of this potential, or to undermine it in critical ways, leading to suboptimal outcomes. It is the aim of this book to orient us towards how we can work more effectively to minimise risk and maximise wellbeing, and the book succeeds wonderfully in achieving its aim.
This volume is based on the presentations of the Joseph Sandler Research Conference: Research in Early Parenting and the Prevention of Disorder: Interdisciplinary Challenges and Opportunities, which took place in March 2012 at the Johann Wolfgang Goethe University under the auspices of the Sigmund-Freud-Institut (SFI) in Frankfurt. The theme of this volume is devoted to a topic that has long been of fundamental value for psychoanalytic research; namely a quest for the roots of psychopathological impediments and disorders as well as the related question as to what extent these developmental disturbances can be avoided by adequate early parenting. At the same time this topic is highly relevant more generally wherein early prevention is increasingly recognised as a responsibility in modern society. Furthermore, as will be reviewed in these pages, psychoanalytic researchers have joined neuroscientists and others in adding to our knowledge about early cognitive, social-emotional and moral development.

As the director of a psychoanalytic research institute, I am grateful that “early prevention” is a topic which has given us the possibility to intensify the interdisciplinary dialogue that has already proven to be essential for a large interdisciplinary research network, the so-called
IDeA Center for Research on Individual Development and Adaptive Education of children-at-risk,\textsuperscript{1} involving psychoanalysis and various scientific disciplines. This network includes pedagogical and developmental psychology, mathematics, linguistics, as well as research on poverty, professionalism, special needs education, and the neurosciences. We acknowledge with gratitude that since 2007 the SFI has had the chance to build up the IDeA Center with the German Institute for International Pedagogy (DIPF) and the Johann Wolfgang Goethe University which is supported by the LOEWE Excellency Initiative (coordinator of M. Hasselhorn: see his chapter and chapters by Andresen and colleagues, Hertel and colleagues, Neubert and colleagues and Lebiger-Vogel and colleagues in this volume).

\* \* \*

In this volume we illustrate that current research is conducted within international, interdisciplinary, and intergenerational networks. This has been especially so in our prevention research in Frankfurt as indicated in my chapter and others wherein we acknowledge the work of many young scientists, interns, and students. Here I would like to especially acknowledge our methodical-statistic advisers, PD Dr Tamara Fischmann and Prof. Dr Bernhard Rüger. All of them are in intensive exchange with me as project manager. I would also like to say that psychoanalysis as a discipline of professional self reflection has proven to be very helpful for understanding and productively shaping the processes of this complex transgenerational network.

A distinctive feature of the SFI’s early prevention projects is the development of an “out-reaching psychoanalysis”. Experienced child and adolescent therapists with many years of professional experience concerning “children at risk” are intensively working with parents and teachers in the Kindergartens, which means in the concrete field of education and social integration itself. Committed analytic child therapists are acknowledged in my chapter on this topic. We realise that “out-reaching psychoanalysis” leads us out the door of our clinical and scientific ivory tower and into society and to the people of our city, who at times are in dire need of our psychoanalytic competence concerning early parenting. We also realise and acknowledge that an important context that surrounds early prevention research and one necessary for achieving its sustainable effects consists in the support and cooperation of politicians and foundations.
I would also like to add my perspective that psychoanalytic research at the SFI has outgrown Mitscherlich’s era, the founder of this institution in 1962, who himself was once referred to as a “one man army” by Erik Erikson, since it has evolved into a highly complex interdisciplinary, international, and intergenerational venture, where we are constantly faced with a variety of dependencies on others. Today psychoanalytic research occurs within an interdisciplinary network bringing knowledge concerning the unconscious determinants of human suffering—for example, due to early trauma—and linking it to findings of various scientific disciplines and discussions. From a psychoanalytic point of view it is not easy to deal with these new dependencies in a productive manner, because they inevitably unconsciously remind us of the dependencies, which we have experienced as a human infant, dependencies which are discussed in so many papers in this volume. The experience of not being able to survive without the empathic “good enough” and understanding primary object resides in each and every one of us as an archaic fear, a horror, and a “truth” in our unconscious. These basic psychic experiences can be reactivated in structurally similar situations, such as the dependencies of research’s day–to-day work. If undetected, this can become a source of strenuous conflict and stress in any research project. The fantasy of achieving everything self-sufficiently based on ones own narcissistic fantasies—a modern day Leonardo da Vinci, a solitary star sparkling in the scientific firmament—never depending on anyone, completely autonomous—is a comprehensible and yet a dangerous defence mechanism towards unpleasant and complex realities, which we must face repeatedly and reflect upon.

Seen from this perspective I am grateful that Robert N. Emde, an experienced international expert in the fields of early child development, psychoanalysis and prevention, was willing to support the prevention projects of the Sigmund-Freud-Institut. We are also very grateful that he helped organise the Sandler Research Conference together with Annemarie Sandler (London), Peter Fonagy (London), Anna Ursula Dreher (Frankfurt) and myself. It has been a great privilege to organise and perform the conference in this intergenerational and international network. Robert N. Emde was willing to be the first editor of this publication and is responsible for the first two sections of this volume while I have been responsible for editing the second two sections.

We also want to thank Marcus Hasselhorn, the Chair of the IDeA Center for organising this conference together thus enabling
a very special interdisciplinary exchange. Gabriele Beumer, Axel Scharfenberg and Renate Stebahne helped with the organisation: many thanks! We are also grateful for the translations of the German manuscripts into English which we acknowledge in specific chapters. We also thank Annette Busse, who helped with her strong commitment and professional skills in processing and organising the manuscripts.

Finally we would also like to thank the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG), the Sigmund-Freud-Institut and the IDeA Center for the financial support of the conference.

Note

1. The psychoanalytic research institute SFI had the chance in 2007 together with the German Institute for International Pedagogy (DIPF) and the Johann Wolfgang Goethe University to participate on a large research application in the scheme of the LOEWE Excellency Initiative (Coordinator: M. Hasselhorn). The SFI takes part with 3 projects, the EVA project, the MAKREKI project and the First Steps project at the IDeA Center (www.idea-frankfurt.eu; www.sfi-frankfurt.de).
PART I

PERSPECTIVES
The sciences of early development, disorder prevention, and health have recently undergone momentous advances (see the reviews in American Academy of Pediatrics, 2012; Beardslee, Chien and Bell, 2011; Emde, 2012; Mercy & Saul, 2009; Rutter, 2011; Shonkoff, 2012). New knowledge and methods have generated new ways of thinking. Correspondingly, a greater awareness of science, suffering and the adverse effects of unattended early risk have all combined to energise preventive interventions. Such work, converting knowledge into practice, is necessarily interdisciplinary and collaborative, and leads both to exciting opportunities and challenges. As the reader of this volume will find, psychoanalysts have much to contribute and have vigorously joined in preventive work. This chapter provides an introduction for the perspectives and programmes of empirical research in the chapters that follow.

After reviewing some basic prevention concepts, including trials and the emerging field of implementation science, I will discuss my perspective on prevention principles that lead to psychoanalytic opportunities. A view of current science will then serve to introduce the chapters of the book that provide overviews of research in some remarkably creative prevention programmes. I believe the reader will be rewarded by
experiences of sharing in the accounts of engaged psychoanalysts as they describe their working and their promising early results.

Prevention concepts, trials, and implementation

Prevention concepts in widespread use involve two different ways of thinking about intervention levels. Classic public health designations have been as primary, secondary, and tertiary. Primary prevention refers to intervention designed to prevent the onset of a disorder or condition before it occurs, secondary prevention refers to intervention designed to deal with early identification and treatment of a disorder (typically before it is symptomatic) and tertiary prevention to intervention via treatment of the disorder once it is identified as well as to minimising disability. More recently, useful concepts have included another set of intervention levels, with designations of universal, targeted, and indicated. Universal refers to interventions that are population—or community wide, for everyone, such as education about the adverse effects of smoking or alcohol intake during pregnancy or public campaigns about the encouragement of breastfeeding. Targeted refers to interventions that are designed for identified groups at high risk for problems, such as home visitation programmes for those living in extreme poverty and immigrant populations suffering from dislocation and trauma. Indicated refers to interventions that are designed for individuals already identified with problems or disorder, typically after screening procedures.

Aside from abstract concepts, learning by doing is the modus operandi of the prevention sciences, and such doing involves prevention trials. In framing the contributions of this book it is useful to review them, indicating why the sequencing of trials is important for the practice of prevention and why experimental trials (usually referred to as RCTs or randomised controlled trials) are at the centre of the prevention sciences.

A basic scheme or method strategy involves three kinds of preventive-intervention trials (Mrazek & Haggerty, 1994). These can be designated as pilot, experimental, and community. Most readers are probably familiar with experimental trials, often referred to as “the gold standard” for evidence (or not) of an intervention. Experimental trials have a particular method and format. They are considered crucial for the step-by-step establishing of evidence and progress, and as we consider
psychoanalytic prevention work, it is essential to use them. One can think of experimental trials as a pure test of intervention. They involve using randomised control groups in order to minimise selection factors and better allow inferences about cause and effect. They also involve a standard intervention with a manualisation of that intervention so that assessments of consistency of application can take place.

Experimental trials, however, are not intended to occur without preparation. It is important to carry out pilot trials within an earlier prevention phase that includes problem identification and forming hypotheses about how to change the problem for the better. Such trials are exploratory, assessing feasibility, and they typically involve simple designs such as before-and-after evaluations and such contrast groups as can be assembled. Ideally, after pilot trials, a “theory of change” (Connell & Kubisch, 1998; Mackenzie & Blamey, 2005) can be constructed, based on evidence on hand, that can lead to the next phase of experimental trials.

Experimental trials, of course, are not intended to occur as an ends-in-themselves, or in isolation. Correspondingly, the next prevention phase is for community trials that have to do with real-world application. Such trials are expected to respond to local community needs and hence to be based on a community needs assessment. They also involve a necessary adaptation of the manualised intervention that has come forward from the phase of experimental trial(s). Community trials may involve randomised control designs (also considered by many the “gold standard” for purposes of evaluation) or they may involve a variety of “quasi-experimental” contrasts. An additional feature for community trials concerns “reach”. This refers to evaluating the extent to which the intervention can be widespread, reaching the people who really need it, as well as understanding the issues involved in uptake.

In the basic scheme the trials are set in sequence and are conceived of as a cycle, wherein the community trials generate new problem identification and hypotheses in pilot work, and in turn this leads to more work with experimental trials and later community application trials (as originally described in Mrazek & Haggerty, 1994). The scheme is, of course, idealised and not strictly linear as multiple phases often occur concurrently within a given project. As important, and as the studies reported in this book illustrate, the realities of funding and of different community needs typically require more and more community participation and engagement in all phases.
This leads us to concepts and strategies in prevention that we can refer to as the emerging field of "implementation science" (Eccles & Mittman, 2006). Two major trends in research and science policy are noteworthy. The first has to do with the translation of knowledge, indicating that more attention be paid (and hence more resources mobilised) for "translational research" that brings knowledge from basic research to human application and then to community practice. Knowledge of "efficacy" (referring to what is gleaned from experimental trials) must be linked with more knowledge of "efficiency" (referring to what is gained from community application). In the United States, increasing priorities in funding are directed at providing incentives for translational research (Woolf, 2008).

The second trend has to do with what has become an active subfield in itself known variously by the designations of community based participatory research (or CBPR), action research and partnered participatory research (Minkler & Wallerstein, 2008; Israel, Eng, Schultz & Parker, 2005). This sub-field provides an orientation and methods that emphasise partnering with communities during all phases of prevention as well as in related research that is community-driven, flexible, and action-oriented. Much of its strategies are aimed at reducing health, education, and socio-economic disparities (Wallerstein & Duran, 2006) and there is a journal devoted to it (Progress in Community Health Partnerships: Research Education and Action).

The reader will see that the psychoanalytically inspired projects described in this book are in varying degrees participatory, action-oriented, and mixed in terms of prevention phases. The language, concepts, and methods of the prevention sciences, reviewed above, will be referenced. Moreover, as appropriate, vivid descriptions will be portrayed involving context and process as well as outcomes. This leads me to put forth some principles of preventive interventions that are not only central, but link to psychoanalytic areas of future opportunity.

**Principles of prevention and psychoanalytic opportunities**

I choose to highlight five. First is that prevention deals with health as well as illness, and that health is more than the absence of illness. Thus health promotion needs to be considered alongside of disease or disorder prevention. A scheme portrayed in Table 1 illustrates how we used
Table 1. A scheme for age of assessment using a parenting-to-parenting perspective for outcomes following early head start intervention at 0–3 years (Table modified form figure in Emde & Robinson, 2000).

<table>
<thead>
<tr>
<th>Developmental period</th>
<th>Age of assessment</th>
<th>Competency dimension</th>
<th>Promoting</th>
<th>Preventing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>3 years</td>
<td>Learning</td>
<td>Exploration; persistence in tasks</td>
<td>Lack of motivation for exploration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Communication skills</td>
<td>Social isolation; disruptive behaviours</td>
</tr>
<tr>
<td>Primary school</td>
<td>7 Years</td>
<td>Learning</td>
<td>Learning readiness for school</td>
<td>Lack of engagement in learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Social competencies for relationships</td>
<td>Disruptive behaviour disorders</td>
</tr>
<tr>
<td>Middle childhood</td>
<td>10 Years</td>
<td>Learning</td>
<td>School engagement</td>
<td>Detention, referral to special education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Positive peer relations</td>
<td>Disruptive behaviours and disorders</td>
</tr>
<tr>
<td>Adolescence</td>
<td>17 Years</td>
<td>Learning</td>
<td>Grade completion</td>
<td>School drop-out</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Positive peer relations</td>
<td>Anti-social behaviour, gang membership</td>
</tr>
<tr>
<td>Adulthood</td>
<td>25 Years</td>
<td>Learning</td>
<td>Employment/education beyond H.S.</td>
<td>Unemployment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social</td>
<td>Intimate relationships</td>
<td>Social isolation</td>
</tr>
</tbody>
</table>
this principle in setting long-term goals for our earlier birth-to-age-three collaborative intervention known in the United States as Early Head Start (EHS in Table 1). Note that competency dimensions of learning and social development are specified for age periods, both for promotion goals as well as for prevention goals (Emde & Robinson, 2000).

A second principle is that prevention deals with regulation, which is a central process for living activity and health. It is important to be mindful of the inverted U curve that can represent the relation of activation (on the vertical axis) to performance (on the horizontal axis). I find it worth remembering that this simple function, paradoxically, is one of the most profound and pervasive in biology. Adaptive regulation occurs between “enough” and “too much”—the “golden mean”—in systems at all levels, from cell, to psyche, to human interactions. Those concerned with health and prevention have emphasised the central significance of this aspect of regulation for metabolic functions and for fitness, for example, with enough exercise and other health adequate behaviours needed to promote health and longevity as well as to prevent disease (Bortz, 2011).

A third principle is that all preventive interventions deal with context, taking place within particular cultures, circumstances, and relationships. For meaning and effectiveness, such contexts with their associated values must be understood and taken into account (Sameroff, 2010; Spoth, Kavanagh & Dishion, 2002; Emde & Spicer, 2000).

The principles of health, regulation, and context conjoin in a fourth principle, namely that all prevention deals with development. The goal is to promote healthy development and prevent disruptions in development within individuals over time. Prevention is lifespan in its scope. Adverse human behaviour and decision-making, much of it automatic and non-conscious, is a major cause of morbidity and mortality (Kessler, Ormel & Petukhova, 2011; Kahnemann, 2011; Martineau, Hollands & Fletcher, 2012). As a consequence, more attention is being given in prevention—for both children and parents—to ways of engaging personal knowledge and responsibility with a goal of changing unhealthy behaviours. More poignantly, from the perspective of this book, parenting occurs at different times in development and furthermore, as Table 1 illustrates, our preventive interventions have a goal that our infants and children eventually become healthy and effective parents. The special importance of early experience, recognised in the prevention sciences, is reflected in the contributions of this book,
as well as the fact that there is an increasing principled appreciation of individual pathways, related to biology and context.

A final principle I highlight is an appreciation of the complexity of disorders. Individual developmental pathways are not linear in any simple way and there are many pathways to disorder. A striking finding since the human genome has been mapped is that most disorders and developmental outcomes are caused by many genes, not few, and that genetic influences vary and interact. Furthermore, genetic expression is strongly influenced by an individual’s internal regulatory interactions and environmental conditions—and these change as a function of development and circumstance (Mattick, 2011; Meaney, 2010; Roth & Sweatt, 2011; Rutter, 2011). Thus the basic function represented by an inverted U curve is interacting within a complex network. What this means in terms of prevention is that many interventions, applied early, may work and that in addition to specific interventions (for example as in avoidance of alcohol and toxins during pregnancy, reduction of exposure to trauma, treatment of parental depression) there is likely to be a role for non-specific interventions (e.g., minimisation of stress, social support, adequate diet, and exercise). Complexity also means that early preventive interventions are not permanent immunisations against disorder; they need to be followed by adequate environments and opportunities for later development.

How does this discussion link to psychoanalytic opportunities? Table 1 indicates how each of these principles lines up with psychoanalytic areas of expertise. Corresponding to health, adaptation is a major point of view in psychoanalytic theory and practice. Corresponding to regulation, personal meaning as well as dealing with emotional conflict and unconscious processes, are everyday aspects of psychoanalytic work. In terms of context, psychoanalysis in its clinical theory has become increasingly concerned with relationships, culture, and biology. Furthermore, as this book will instantiate, psychoanalysis is a developmental discipline. While it has in many ways given prominence to the significance of early experience, it has in its intended practice been lifespan—assisting in the developmental adaptations of adults, as parents and grandparents, as well as children. Finally, psychoanalysis throughout its history has been immersed in a world of complexity, and has tended to regard disorders as multi-dimensional rather than categorical and disordered individuals as subject to many ways of healing and prevention of disability. The developmental orientation of
psychoanalysis promotes adaptive individual pathways in the midst of complexity (Emde, 2005; 2011b).

**Current trends in health practice and science**

Before highlighting some current science that backgrounds the chapters of the book, I consider it important to mention two vital trends concerning health and prevention. Both are seen as transforming health care in the face of advances in science that in turn bring a new emphasis on prevention. They will also provide a new context within which we will be placing the insights indicated in this book.

The first of these trends is to more of a personalised medicine. An individual’s personal complete genome scan will soon be available at a reasonable cost, probably under $1000. Correspondingly, personalised medicine includes an individualisation of treatment based on a matching of one’s genome and revealed risks for disorder with the genetic knowledge of pathogens, side effects of drugs and with a practitioner’s knowledge of each individual’s adaptive capacities (Collins, 2010). Personalised medicine also includes more attention to personal responsibility for health and decision-making (“shared decision-making” for any treatment as opposed to “informed consent”) with more education of patients about health behaviours, risks of alternative treatments and prevention (Wennberg, 2010). As important, it includes more attention
to facilitating the doctor-patient relationship, with availability, talking and education over time (Bortz, 2011; Emde, 2012).

The second trend is regarding more integrated care. In the United States, studies have shown that increased cost and lesser quality both occur in areas where there is a high density of physicians and of specialists. All too often findings about an individual in treatment are not communicated across responsible professionals. Hence with new technology, there is a movement for a single electronic record for each individual, with a sharing of information, so that a primary care physician or other health care provider (and the patient) can have access to what is known, in a way that benefits individualised care. With this also comes a movement for systems of care in which individuals have a “medical home” wherein all specialty information is centred and there is a primary care relationship for each patient, with others consulting.

All of this presents opportunities and also challenges for psychoanalytic practitioners. Psychoanalysis deals with individualised meaning and helping to resolve conflicts about decision-making in the service of adaptation. Thus opportunities for consultation and research in this era of a transformation to individualised health care are abundant. So are the challenges, especially for communication, not only because of assuring confidentiality (which we need to remember belongs to the patient, not to us) but also because of psychoanalytic culture (which in the past has often involved isolation from other disciplines and health care practices (Wallerstein, 2007; Kernberg, 2007)).

Beyond this, current science leads us to an awareness of the strategic importance of early experience for health. It also leads us to this book’s emphasis on prevention during parenting and early development. Not only is there a powerful logical appeal for this early-age emphasis (reflected in the metaphor of building a strong architecture of the brain and providing a foundation for health) but there are also other reasons energised by the current excitement of science. Many will be encountered in this book, but let me alert you to some. These include our growing appreciation of the many effects of maternal behaviour and stress during pregnancy on subsequent child health, with the possibilities for identifying early risk and needed interventions. They also include extensive research that has shown early childhood adversity to be a major antecedent of major adult physical and mental disorders, with accumulating evidence that causal pathways are likely to be mediated by cumulative stress deregulation. What is
now being called “toxic stress” refers to the biological consequences of exposure to stress and elevated cortisol that can have effects on brain development, that in turn can have downstream effects on a range of adaptive functions, including stress physiology, immune functions, learning, and abilities to respond to future adversities (Shonkoff, Garner & Committee, 2012). One influential population study carried out from an internal medicine lifespan perspective, delineated the clear pathway from early adversity to later risk behaviours and then to poor health and poor educational achievement (Felliti, 2009; Andra et al., 2006). It is noteworthy that the risk behaviours in this pathway have been interpreted on the psychological level as coping with the ongoing emotional turmoil resulting from continuing effects of the early adversity. It is also noteworthy that an earlier generation of early childhood intervention studies, targeted for disadvantage populations in the US, let to substantial improvements in later behaviour and conduct as well as in educational continuance (see review in Heckman, 2006); similarly, a national randomised control study of a newly organised Early Head Start intervention in the US led to promising initial improvements in parent–child interactions, child behaviour and skills, while also showing the mental health needs of parents and children (Love et al., 2005; Raikes & Emde, 2006).

Thus we can see that, according to the theme of this book, poor educational achievement, and poor health are together outcomes of the early childhood adversity in a pathway mediated by cumulative stress physiology and then unhealthy risk behaviours. To bring attention to this perspective from current science, the American Academy of Pediatrics recently issued a position statement and a science background report documenting what they refer to as “the biology of adversity” and the early developmental origins of both educational failures and adult disease (American Academy of Pediatrics, 2012). The report also reviews how much we have learned about early inborn capacities and the extent to which brain growth relies on the necessary early experience that parenting interactions provide. In a turn-of-the-century National Research Council Institute of Medicine report in the US (Shonkoff & Phillips, 2000), knowledge from the sciences of early development was summarised with a statement “All children are born wired for feelings and ready to learn”, and evidence now converges that we can now add they are “born wired for being social and ready for moral development”.

Other science has included the extent to which early experience, dependent on parenting, influences genetic action important for survival and adaptation. Since the human genome has been mapped it has been said that some of the most dramatic findings at the molecular level, are pointing to the importance of the environment for regulating genetic expression of relevance for health and disorder—thus the study of epigenetics, of how genes are expressed and regulated by specific environments, is at the frontier of current science and has the potential for changing problematic environments for those individuals identified at genetic risk. The above cited position report of the American Academy of Pediatrics places paediatrics at the centre of early prevention work. The contributions of the current book stimulate an important question: To what extent can we also put psychoanalysis at the centre—with our understanding of individuals, differences, and the dynamics of adaptive life?

Psychoanalytic contributions to preventive intervention

We can be reminded of a contributing history of psychoanalysis that could encourage our answering this question in a positive way. Psychoanalysts have led in advancing our knowledge with regards to the significance of early experience and of needed work in prevention. Chapters of the book, telling of current projects, will acknowledge such a background in more detail, but let me highlight a few pioneering contributions from the past. Adding to Sigmund Freud’s developmental framework (Freud, 1905, 1926, 1937), other early pioneers made fundamental contributions in the areas noted. We can be reminded of Anna Freud’s contributions to thinking about developmental lines and her preventive interventions with war orphans (A. Freud, 1965); we can be reminded of Erik Erikson’s psychoanalytic contributions concerning the adaptive significance of culture and of psychosocial components of health throughout the lifespan (Erikson, 1959); we can be reminded of contributions of Rene Spitz (1946, 1959) and Margaret Mahler (Mahler, Pine, & Bergman, 1975) with respect to pathways to health through developmental transitions, and of Donald Winnicott (1965) and Selma Fraiberg (1975) on working with defences in early preventive interventions with parents and young children. And of course we can also highlight the contributions of John Bowlby (1988a, 1988b) with respect to founding
the now burgeoning field of attachment research, with its many preventive-intervention applications in relation to developmental pathways. I also mention Brandt Steele, who with Henry Kempe, and with psychoanalytic insights, wrote one of the most policy-influential papers initiating the recognition and beginnings of preventive treatments for child abuse and neglect (Kempe et al., 1962; Steele, 1994). These are some of the early psychoanalytic pioneers contributing to prevention, without mentioning those of the recent past, particularly in child analysis, where we are fortunate to have many reporting on their work in this volume.

Marianne Leuzinger-Bohleber, in her preface to this volume, indicates the vigorous interdisciplinary programmes of prevention research that are being carried out in Frankfurt and referred to as “outreach psychoanalysis”. These are detailed in her chapter and in others in Part III and are followed by the clinical applications in Part IV. In a second perspectives chapter that follows this one, Helena Rutherford and Linda Mayes review recent studies on the neurobiology of parenting and attachment, indicating their psychoanalytic background, as well as ongoing frontiers for prevention research. These perspective chapters frame the seven reports of empirical research programmes in Part II of the book. The authors document their ongoing commitments to prevention research and the developmental follow-up of participants. In addition to documenting their methods and results, they give us a picture of what it is like doing this kind of work that involves teams of collaborators and community immersion in different cities and contexts. Antoine Guedeney describes a large RCT involving a home-based preventive research programme in Paris, one that is targeted for multi-risk families and aimed at reducing disorganised attachment. Daniel Schechter tells us about his prevention programmes in Geneva and New York aimed at improving emotional communications and reducing parenting disruptions in targeted at-risk parents who have been exposed to interpersonal violence and traumatic stress. Kai von Klitzing describes his prevention programmes in Basel and Leipzig, bringing his psychoanalytically oriented experiences in working with mother, father, and child together in order to promote parenting and early development. Massimo Ammaniti reports on his programmes in Rome that, like those described by Rutherford and Mayes, take account of psychobiological transformations that occur in parents during pregnancy
and early child development; in particular, he brings attention to the activation of maternal brain circuits and mirror neuron systems that also provide a basis for empathy, intersubjectivity and psychoanalytic work. Patrick Meurs reports on his Belgian prevention programmes that address a culture-sensitive and psychodynamic—sensitive way of working with immigrant parents and young children adapting to experiences of loss, a new culture and the challenges of education in that country. Henri Parens then discusses a multiple decade follow-up of his early parenting programme in Philadelphia. A final report of this section is provided by Karl Heinz Brisch, who not only tells us of his attachment-based prevention projects in Munich but also gives us a moving narrative of the influence of Parens’ work on his thinking, as well as on recent cultural change in Germany.

I offer a final reflection for the reader. Psychoanalysts are trained to find meaning in complexity. Applied psychoanalysis, with finding meaning outside the consulting room, has grown, and as the contributions in this book show, there are more opportunities for psychoanalytic work, not only in applying scientific knowledge to developing individuals, but also applying it to parenting, family relationships and intervention programmes. The reader will encounter exciting new science that increases an understanding of what is possible. Still, it is worth reminding ourselves that understanding is not enough, and theories are not enough. Learning in the prevention sciences comes from doing. Not only must we find meaning in complexity, we must find ways to translate it into practice. This condenses to a message: If you think you can change something for the better, and you have evidence, try it, evaluate it and find ways to tell the rest of us about it.

Notes

1. The concepts and strategies highlighted in this section are reviewed more thoroughly in Markman, Ramey, Shure & Long, 1993; Mrazek & Haggerty, 1994; Greenberg, 1994; Collins, Murphy & Bierman, 2004; Eddy, Smith, Brown & Reid, 2005; Olds, Sadler & Kitzman, 2007; Marmot & Bell, 2011; McLaughlin, 2011. The reader may wish to consult them for more understanding of their evolution and usage.

2. “Early experiences matter and nurturing relationships are essential” was the second major summary statement made by the 2000 National Research Council summary report.
References


“Out-reaching psychoanalysis”: a contribution to early prevention for “children-at-risk”? 

Marianne Leuzinger-Bohleber

This chapter supplements the overview from the prevention sciences provided in chapter one with a perspective from clinical psychoanalysts in Germany, bringing their knowledge to “children-at-risk” outside their “normal” treatment settings. We refer to this as “Out-reaching psychoanalysis”. It is an engagement which takes up a well-known tradition of psychoanalytical pedagogics (e.g., Anna Freud, Bruno Bettelheim, August Aichhorn and many others) and tries to adjust it to new challenges for a psychoanalytical oriented prevention in Western countries.

Introduction: early prevention as a societal responsibility

In its report the OECD deplores ... “that migrants in almost no other country have such a bad level of education as in Germany” (Klingholz, 2010, p. 1299). Every fourth child with a background of migration leaves school without a certificate. Many of them become unemployed as are their parents and lead a life on the fringe of society. The societal disparity between them and other children in Germany, who have never had it better, becomes greater and greater. Early deprivation, violence and the increase of psychosomatic and mental illness such as depression
and addiction are among the consequences. Seventy per cent of violent criminals have themselves been abused as children. Twenty to thirty per cent of their children, in turn, become violent criminals (e.g., Egle, Hoffmann & Joraschky, 2000).

As a consequence, early and earliest prevention of so-called children at risk has become a paramount responsibility of society. As many contributions in this volume show, the results of psychoanalytic, developmental psychology and neuroscientific studies all concur that such early support and intervention programmes are promising and sustainable. Since René Spitz’s pioneering studies in the 1940s on hospitalism, many psychoanalytic research groups have, in ever increasing detail, studied clinically, empirically and in interdisciplinary groups the results of early deprivation and trauma on psychic development (see also Emde, Feldmann and Mayes in this volume). Thus, for example, De Bellis and Thomas (2003) have summarised many studies that verify that the early experience of violence and emotional neglect leads to the development of post-traumatic stress syndromes (PTSD) in children and adolescents. They point to the fact that in the US approximately three million children are affected by such early trauma.

Above all, the results of research on the attachment behaviour of disorganised attached children are cause for concern (type D, cf. the contribution of Neubert, Laezer, Hartmann, Fischmann and Leuzinger-Bohleber in this volume). On the basis of many longitudinal studies, it has been shown that these children with great probability will develop hostile-aggressive behaviour, massive psychological problems and poor school achievement (Lyons-Ruth, Alpern & Repacholi, 1993; Green, Stanley, Smith & Goldwyn, 2000). These are the children, fore mostly, that have experienced extreme trauma and violence from their primary caregivers (Fonagy, 2010; Lyons-Ruth, Bronfman & Atwood, 1999).

Although further research is necessary in this area, most experts share the opinion that it is this group of children that most desperately are in need of offers of early prevention. Psychoanalysts possess immense knowledge about the effects of early traumatising object relations and their consequences. How can this knowledge be made fruitful for such endangered children?

The Sigmund-Freud-Institut (SFI) in cooperation with the Anna Freud Institute (AFI) has been involved with this question since 2003. Jointly, we have initiated diverse early prevention projects. In all of these psychoanalytic projects, the Frankfurt Prevention Study, the
projects Starthilfe, EVA and currently First Steps, we link the specific psychoanalytic, interdisciplinary, and intergenerational competency of the research institute (SFI) with the specific competency of the training Institute for Psychoanalytical Child and Adolescent Psychotherapy (AFI) and the knowledge and year long clinical experience with preschool children and infants. This association has made it possible in the last years to realise these studies concerning sustained effects in the field of early prevention (cf. Wolff in this volume). All these projects are combining the following modules:

a. Regular supervision of the teachers in the Kindergartens (preschool) by experienced psychoanalysts
b. Weekly consultation of the Kindergarten (preschool) teams and parents in the institutions themselves by experienced child psychotherapists
c. Child therapies offered to “children-at-risk” in the institutions themselves (payed by the insurance companies)
d. Violence prevention programme Faustlos (second step) offered to the five-year-olds by trained teachers
e. Education of parents
f. Individual support of the transmission of children from Kindergarten (preschool) to grade school.

In this chapter I will report on our experiences in applying psychoanalytic knowledge to early prevention in these projects. Angelika Wolff’s will describe the different programmes in more detail in her chapter. First, I will briefly locate our own studies in the landscape of national and international research. Considerations about the specific contribution of psychoanalysis on the founding of extra-clinical projects on early prevention will follow. Finally, some conceptual considerations on the “outreaching psychoanalysis” in the field of prevention will be given.

Psychoanalysis and early prevention: some national and international examples

As a recently published report of the German Federal Agency for Migration and Refugees shows, most programmes of integration support in Germany are concerned with the furtherance of language competency of the parents and children (cf. Friedrich & Siegert, 2009). Some projects include furthermore the early social integration of “children at
risk” and focus partially on the migration background of these children (Friedrich & Siegert, 2009). Only few psychoanalysts are engaged in this field (exceptions are e.g., Karl Heinz Brisch, Emil Branik, Manfred Cierpka, Michael Günther). Furthermore, hardly one of these projects has been intensively scientifically evaluated from independent scientists, a fact that endangers, among others, the long-term financing of these projects.

The most controlled studies (the so-called RCT studies, randomised controlled trials) were conducted in the United States. Some psychoanalysts and developmental researchers were committed for years in this area, the likes of Robert Emde, David Olds and Henri Parens (cf. Raikes & Emde, 2006, see also chapter one by Robert Emde in this volume). Olds, Sadler and Kitzman (2008) establish in their general review of these studies that in the meantime a great number of international RCT studies on the efficacy of early prevention exist, that, though many still leave various questions open, they do, however, allow some final conclusions. “In spite of these constraints, a number of trials has been reported in the last 10 years that give us reason to believe that carefully crafted programmes aimed at improving parents’ early care of the young child can have significant and enduring effects on children’s health and behavioural adaptation. A number of such efforts has failed to produce the desired effect, however, and it appears that the failure can be traced to insufficient development of the intervention models with clear attention to engaging parents in the programme and specification of methods for reliability bringing about changes in targeted aspects of parenting or family context” (Olds et al., 2008, p. 356).

RTC studies have, as is well known, the advantage that, in the spirit of the age of evidence-based-medicine, they minimise bias due to selection factors, and may lead to worthwhile prevention projects for society. Yet, the results of individual trials convey little about the complex interplay of different factors in early prevention (see Emde in this volume). I believe we can provide important insights into this complex and intricate interplay of factors through clinical-psychoanalytic studies and through studies that include quantitative as well as qualitative approaches. For this reason, in our Frankfurt prevention studies we combine both approaches in addition to clinical and extra-clinical (psychoanalytic) research methods (see Leuzinger-Bohleber, 2007). In this way, we attempt to transport clinical knowledge and psychoanalytic concepts based on it into non-psychoanalytic settings, for example, in
prevention projects in day-care centres and to utilise it for the deepened understanding of children.

**Psychoanalytic early prevention**

*Factors in the early object relations and their long-term effects*

Psychoanalysis with patients with psychosocial desintegrations are a unique clinical-empirical possibility for research in order to study the complex interplay of the genesis of different trauma factors in early development and their long-term effects. The insights that were won in the long psychoanalysis with Mr A. that will be briefly summarised here, may illustrate this point.

a. A short clinical example² illustrating the importance of early prevention

Mr A. is a twenty-eight-year-old athletically built young man, who comes from the Arabian world, was unemployed and socially fully isolated when he sought therapeutic help. He said that closeness to other people was problematic for him. “Always when someone gets close to me, someone, for example, at an odd job or a woman, it produces panic in me—I develop an inner compulsion to go to the next airport in order to book any last-minute-flight to fly to any other continent …” We refer these fears also to a possible therapeutic relationship: “… I can naturally try many things to assuage these fears”, I mentioned, following a spontaneous notion, “but I can’t take my couch and follow you into the next airplane with it …” We could both smile about this fantasy without it appearing to offend or to create distance between us, which for me was an indicator that a productive form of unconscious communication could develop between us.

During the first two assessment interviews, I could learn little about his life history other than that Mr A. is a child of a bicultural marriage of an Iranian refugee, an engineer, and a German secretary, a relationship that he describes as chronically unhappy. Both have had a problem with alcohol. The father was now severely physically ill and worked once in a while in a snack bar. The mother owned a store for cleaning carpets that, however, was near
bankruptcy. He had three other siblings—two older brothers and a younger sister. Both brothers have had a problem with drugs, were recurrently involved in acts of violence and unemployed for years. The sister still went to school and was obese. He too suffered from “episodes of binge eating”, followed by severe stomach colic and insomnia.

After his training as an auto mechanic, Mr A. finished his high school degree in evening school—despite attention and concentration problems and obtained—despite extreme difficulties—after two years a Bachelor’s degree in America. He returned to Germany in order to save his mother’s shop, without success. “Now, I myself have been unemployed for the last year and earn some money once in a while as a travel guide …”

I must limit myself to mentioning one of the central crises in the second year of treatment that opened the door for us to a deeper understanding of the long-term effects of the multiple early trauma of the patient. Mr A. was silent for weeks on the couch. He was emotionally less and less accessible—in the hours, dull despair and severe depression diffused their atmosphere. As I finally—after several weeks, inwardly resigned, confronted Mr A. with it, he finally broke his silence: “Just now I saw my mother lying in a dark room, rigid and silent—I must have been about seven years old. She was unable for years to cook us a warm meal …” “Could it be that you put me in the role of a depressive, helpless mother or rather, are convinced that I will not take care of you and that it does not matter to me if you come for your appointment or not, since you will not get anything nourishing or vitally necessary anyway?”

It became apparent in the next sessions that the silence in the last hours was the staging of an unconscious truth that the primary object is unable to empathise with his despair and existentially threatening condition and to bring him out of his psychic horror. The closeness to the loved object reactivated apparently such an archaic longing for being loved and understood that he felt completely flooded by it and developed a massive fear of losing his autonomy and his self. Connected with this was also the conviction that, in his nearness to the loved object, he would lose control over his own aggressive, destructive impulses and either psychically or in reality destroy the object. These unconscious fantasies and convictions stood, as we finally found the shared understanding,
in correspondence to the early emotional neglect by his depressed primary objects and the later cumulative trauma, among others, through the early separations, the suicide attempt of his father etc.

His mother suffered after his birth from severe postpartum depression and was treated for months with antidepressants. When he was two years old, Mr. A. experienced a six weeks separation because of her hospitalisation. In the day-care centre his hyperactive and unfocused behaviour was conspicuous and he was often caught up in aggressive conflicts with other children. At the age of four, he was in a children’s home for almost half a year since his mother was again depressed and felt unable to cope. Also, during the entire time in grade school his mother lay often for days in bed, as just mentioned. He had to take care of his little sister himself. During the psychoanalysis it became apparent that the intimate contact to the young child touched him in his great loneliness and meant, therefore, very much to him. When he was in pre-puberty, about ten years old, he had an erection when she sat on his lap, he became frightened and was afraid apparently to lose control over his sexual impulses: he refused from that time on to babysit his sister and turned his attention to a group of boys that played football together.

When he was eleven years old he discovered his father after a suicide attempt with pills and by calling an ambulance, saved his life. After this profound experience, he gave up all his activities in the football club and attempted to concentrate his efforts on school. When an idolised German teacher embarrassed him in front of the class by reading his paper with humiliating remarks to the class, it was another catastrophe for him: he lost the last spark of hope for a “good, empathetic object” in his external reality that he could identify with and thereby could have again found traces of a “good inner object”. Thus, he also lost his interest for school, skipped classes and became more and more influenced by a right-wing, violent gang.

In his psychoanalysis the memory of a physical quarrel with his father became a key scene: his father beat him up in a bar in front of his friends. He remembered his fear of hitting back and, like one of his friends, killing his father. This teenager had protected his mother while the drunken father beat her. He had thrown him against a radiator in such an unfortunate way that he died from severe head injuries. After the scene in the bar, the parents refused
to let Mr A. live with them any longer: he lived almost half a year on the streets, petty crime helped him to get through, he took part in violent, right-wing operations, took drugs and was severely suicidal. In what seemed to us almost a wonder, he met one of his few friends from grade school by coincidence and he took him home. He was fondly taken in there and he fell in love with the sister of his friend. With the help of this guest family, he was able to extricate himself from the violent gang and began, as mentioned, his training as an auto mechanic.

The psychoanalytic process gradually led Mr A. out of his total social isolation and unemployment and made it possible for him to take up an intensive, stable loving relationship. Also his psychosomatic symptoms were fully alleviated (Leuzinger-Bohleber, 2009). However, a long, intensive psychoanalysis was necessary. “With how much less effort and pain could I have been helped in kindergarten ….” Mr A. said at the end of his treatment.

b. Early object relation experiences, trauma, and resiliency

The early object relations experienced by Mr A. were affected by the multiple trauma of his parents (the fate of migration of the father, the tragically unhappy, bicultural marriage, poverty, psychic vulnerability etc.), of the chronic depression of the mother and in connection with it, the early emotional neglect as well as the cumulative experiences of separation etc. They made, among others, the psychic integration of archaic-hostile impulses within a stable feeling of self more difficult, as well as the development of adequate affective regulation processes.

Clinical-psychoanalytic research has developed, emanating from psychoanalyses involving problems similar to Mr A., differentiated concepts on the meaning of early object relations, on the short- and long-term results of trauma, the impact of depressive mothers on the early self development of the child, of the inadequate formation of early affect regulation (cf. & c. Stern, 1990), as well as the risk factors involving migrant families. It goes beyond the scope of this chapter to adequately summarise and differentiate these concepts (cf. Leuzinger-Bohleber, 2009; Leuzinger-Bohleber, Fischmann & Vogel, 2008; Leuzinger-Bohleber, Canestri & Target, 2010). Since we have a surprisingly high number of children with a disorganised attachment type (D)
EARLY PARENTING AND PREVENTION OF DISORDER

(see Chapter Thirteen in this volume) in the EVA study and this attachment type, as mentioned above, is more often found in children with cumulative, severe early trauma, in the following only some brief results of psychoanalytic research on the result of early trauma will be mentioned, as well as the question how the resilience of early traumatised children can be strengthened in the framework of prevention programmes.

Early trauma and its influence

As Bohleber (2000, pp. 803ff.) shows, the discussion about the traumatic effect of emotional neglect and other deficits in the early mother–child interaction goes back to the 1950s, or rather the 1940s. The hospitalism studies of René Spitz were mentioned above. Also, the studies of Anna Freud and Dorothee Burlingham (1951) on the impact of the separation of infants and small children from their mothers because of the German bombing raids on London, had a great influence, as well as the report of John Bowlby (1951) on the WHO (World Health Organization). Bowlby had, already as a young man, observed the influence of early attachment in his work in a home for adolescents with behavioural problems. In his retrospective study of forty-four thieves, he postulated that disturbances of early mother–child relationships were a determining factor in the dissocial development of adolescents, adolescents that he characterised as “cold-hearted”. All had experienced long separations as babies or small children. After years of further observation of children who grew up in children’s homes, he described, in a now famous report to the WHO, the influence of early separation and deprivation on psychic development. Greenacre showed (1950) that happenings that have a traumatic effect in the early, preoedipal phases of development can lead to severe neuroses, that are accompanied by disturbance of the development of the self, character disturbances, and perversions. Ernst Kris (1956) described the subliminal continual stress that such children experience, as stress trauma. In the theoretical language of the time, the insufficient stimulus protection was described, which the mothers gave their child exposing it thereby to a constant and overwhelming fear of separation and abandonment. Hoffer (1952) described the constant conditions of early inner stress as “silent trauma”. Winnicott (1965) focused on the traumatic consequences of maternal malfunctioning in the phase of the self-development of the child. If the child cannot
integrate the traumatic effects (mostly set off by a disturbance of the empathy of the primary object), it splits off the true self and develops a “false self”, which is then used to protect against further traumatic over-flooding of the true self. Keilson (1979) developed the terminus of “sequential traumatization”, since in his study the quality of object relations before and after the traumatic loss of the primary objects by Holocaust orphans played a decisive role. Khan (1963) spoke of cumulative trauma, Sandler (1967) of retrospective trauma.

*Early development of self and attachment*

During the past decades empirical infant-, attachment-, and mentalization-research has verified psychoanalysis’ clinical-empirical findings through extra clinical and experimental methods and also stimulated new conceptualisations pertaining to socio-emotional development processes (see Stern, 1985; Leuzinger-Bohleber, 2009). Many studies have explored the affective, reflecting and resonating communication with the primary caregiver showing the interplay of genetically determined, neurobiological and socially interactive processes (see Rutherford and Mayes, in this volume). Gergely and Unoka (2008) define early affect regulation as a social biofeedback process. These highly fragile processes are indispensable for the early development of socio-emotional competences. The “still-face-experiment” impressively shows the high level of irritation in infants when the mother’s facial expression freezes for the duration of three minutes (see Beebe & Lachmann, 2002). The negative impact of postpartum depression on the early mother-child-interaction has been thoroughly researched.

The findings of empirical attachment research complement those of infant research in many ways. For instance: The antagonism within attachment- and exploration-behaviour as depicted by Bowlby (1969) also reveals a high potential explaining social-emotional learning processes: The motivation-systems cannot be activated simultaneously. When a child feels secure it is able to activate its exploration system and (learningly) explore the surroundings. When a child perceives danger fear is activated, hence the attachment behaviour is activated. The child will then interrupt its exploration behaviour and seek out the caregiver for safety.

Many studies concentrated on the long-term effects of negative early experiences on neglected and abused adolescents (see e.g., Cicchetti &
Toth, 1997; Teicher, Andersen & Polcari, 2002), as well as adolescents, who had experienced separations from their primary objects in their early childhood and who, for example, had been placed in foster families or orphanages (e.g., Rutter & O’Connor, 2004). Furthermore, other studies have proven the correlation between early deprivation and emotional problems in adolescence (see Dozier, Albus, Fisher & Sepulveda, 2002; Gunnar, Bruce & Grotevant, 2000). As Bowlby had already emphasised, such findings are not further surprising because of the evolutionary perspective: for primates there is hardly any greater danger than the loss of early caregivers, who secure their survival.4 Moreover, early experiences of deprivation are often connected with poor conditions of care in general, as with abuse or severe neglect, either by the early caregivers themselves or other corresponding institutions (as orphanages) (see Dozier, Albus, Fisher & Sepulveda, 2002; Gunnar, Bruce & Grotevant, 2000). Early emotional, physic or sexual neglect or abuse correlates with later affective difficulties and problems of adaptation (De Bellis & Thomas, 2003; Teicher, Andersen & Polcari, 2002). In all groups of adolescents after early deprivation, there was found a high level of fear and an increase in the numbers of depressive illnesses in comparison to “normal” adolescents (Wolraich, Felice & Drotar, 1996; De Bellis & Thomas, 2003; Cassidy & Shaver, 2008; Maheu et al., 2010). Such abnormality in adolescence denotes higher suicide rates, anxiety disorders and depression in later years (Pine, 2003, 2007).

Bowlby’s model has been enhanced in the last few decades by Main, Kaplan & Cassidy, 1985; Bretherton, 1985; Crittenden, 1990; Sroufe, 1996; Cassidy & Shaver, 2008; Fonagy & Luyten, 2011, and others. It became essential to develop various tests examining the attachment behaviour according to Bowlby, this was initially done by his colleague Mary Ainsworth. This allowed the evaluation of the attachment quality of a one-year-old child, going on two, towards its mother (or father) by means of the “strange situation test”, a standardised observation situation (Leuzinger-Bohleber, 2009, p. 110). To this day a large number of studies have been conducted pertaining to the assessment of attachment behaviour. Ainsworth’s Baltimore study showed sixty-eight per cent of securely attached children, twenty per cent avoidant, and twelve per cent ambivalent (type D, did not yet exist). There are highly interesting cultural variations: Type A is more common in the USA and Western Europe than for example, Israel and Japan, where a higher ratio of type C can be found than in other western countries. In his meta-analysis Van
IJzendoorn (see Cyr, Euser, Bakersmans-Kranenburg & Van IJzendoorn, 2010) compared many studies from different countries. Within a non-clinical population he detected the following ratio: fifty-five per cent securely attached, twenty-two per cent avoidant, eight per cent ambivalent and fifteen per cent disorganised attached children.

These attachment types are regarded as the effect of early attachment experiences within the first year. The child has developed an “inner working-model” that has proven to be successful in regard to the primary caregiver. Due to the mother’s sensitivity the securely attached child (B) has experienced the chance to establish a secure relationship with her, in which the entire spectrum of human feelings regarding the communication with another human being can be perceived, experienced and expressed. The avoidantly attached child (A) on the other hand experienced the mother being most comfortable if it does not show intense affects and behaves controlled, distanced, and less affective towards her. Throughout the first year of its life the ambivalently attached child has experienced its mother as partially appropriate, partially rejecting or overbearing; in short: inconsistent. Hence the mother’s behaviour cannot be anticipated by the child. Since the mothers of disorganised attached children (D) were suffering from the effects of an acute trauma according to the hypothesis the children were not able to acquire a stable inner working model (see Meurs in this volume). The mothers were so psychically absorbed by their trauma that they were hardly able to establish a coherent attachment to their infant.

Many studies have shown that the attachment type is a central precursor of the social-emotional behaviour. Hence a secure attachment type is a protective factor for a child’s development (also see Fonagy, 2008). This assessment bears great significance for all forms of early and earliest prevention. As generally known a mother’s sensitivity—the most valuable instrument in developing a child’s secure attachment behaviour—is most fragile. As soon as a mother is affected by stress and tension her empathic ability to relate to the inner condition of the infant, is compromised and in extreme cases even ceases to exist. This is one explanation for the many studies finding negative consequences for the social-emotional development within a strained family atmosphere (see meta-analysis by MacLeod & Nelson, 2000; the summary in Reichle & Gloger-Tippelt, 2007, p. 204). Tension between parents affects the way they handle the children, especially infants, in the sense of a “spillover” effect, “sometimes leading to emotional inaccessibility,
rejection, aggression and hostility …” (Reichle & Gloger-Tippelt, 2007, p. 204). Thus early prevention tries to decrease stress factors in parents and families by different approaches.

The capability to mentalise

Fonagy and his colleagues define mentalization according to the philosophical tradition of Brentano (1874), Dennett (1978) and others, as a form of preconscious imaginative mental activity, since human actions are interpreted by terms of “intentional” mental states. Imaginative in the sense that we have to envision what other people could be thinking or feeling. Admitting that we do not know what is really on somebody else’s mind proves a high mentalization level. In children and adolescents empathy for mental conditions of others is important regarding social-emotional competence and a prerequisite to not seriously injuring someone during a dispute. In order to understand, that the self and the other have a “mind” the child requires a symbolic representation system of mental conditions. Even though mentalization may be associated with a larger number of brain activities it is usually connected to the activation of the medial prefrontal cortex—and possibly the paracingulate area.

Through various studies Peter Fonagy, Mary Target, George Moran, Miriam and Howard Steel, Anna Higgitt, György Gergely, Efrain Bleiberg and Elliot Jurist found that the development of a healthy mentalization ability is strongly connected to the attachment system, yet they are not identical. The reliability of the early childhood attachment to the mother is not set during the pregnancy but determined by the mother’s ability to understand her own child–parent relationship with her parents regarding psychic conditions, in other words her ability to mentalise (Fonagy & Target, 2003, p. 270). This ability is not biologically provided for it is gradually obtained through interactions with important attachment figures. Yet the authors do not consider this ability to be solely cognitive: “Its origin lies in the ‘discovery’ of affects through the medium of primary objects relationships. Therefore we have focused on the concept of ‘affect-regulation’, which is very important in many areas of developmental theories and psychopathology” (Fonagy & Target, 2003, p. 276).

Fonagy and Target (2003) developed several ideas regarding the development processes concerning mentalising (p. 274 et seq.).
1. During early childhood the main characteristic of the reflection function is that inner experiences are related to outer situations in two ways: (a) When in a serious inner condition the child expects the own inner world and the inner world of others to correspond with reality; subjective experiences are often distorted in order to adapt to information coming from outside (psychic equivalence mode) … (b) A child engaged in play knows that its inner experience not necessarily reflects the outer reality …; yet it assumes that the inner condition is in no way related to the outer world and bears no implications for it (pretend-mode).

2. Around the age of four a child will usually begin to integrate both modes and subsequently obtain the ability to mentalise—meaning it will obtain the reflection mode—up to a point where mental conditions can be perceived as representations. It is able to see a connection between inner and outer reality and simultaneously notices, that inner and outer can be very different—they no longer need to be equated nor dissociated from each other.

3. Usually mentalization becomes apparent when a child detects that its experiences are reflected … (mirrored by the parents or a sibling in form of a refinement of early mirroring processes during the mother–child–interaction).

4. This integration can fail in traumatised children due to the intense feelings and the connected conflicts. Aspects of functionality are marked by the “pretend-mode of the psychic equivalence …” (Fonagy & Target, 2003, p. 274.)

This last aspect is of major importance for our topic: Since maltreatment causes the child to retreat from the abusive caregiver and leaves it no longer willing to empathically understand the other person’s feelings, abuse and other traumatisations affect the development of mentalization and reflection abilities. Also the abuse of a child ensues the loss of resilient abilities which are connected to the ability to understand interpersonal situations.

According to Fonagy and Target (2003) mentalization and secure attachment result from successful containment during early socialisation, even though they are not one and the same. The ability to mentalise is commonly found in empathic, securely attached mothers, but can also be found in traumatised mothers after successful psychotherapy. The ability to critically reflect their own disorganised
attachment pattern enables these mothers to develop an “earned secure attachment” and break the transgenerative cycle of relaying their attachment type onto their children: They often have children with a secure attachment pattern. Insecure-avoidant attachment on the other hand can be seen as identification with the mothers’ defensiveness for example, these mothers often feel incapable of mirroring the child’s experiences of negative affects or stress, since they feel threatened and cannot mentalise these processes. Most likely memories of personal unbearable experiences are triggered by the perception of these negative effects, which cannot be fended. Therefore the child is solely capable of staying close to the mother by sacrificing reflection abilities. In contrast insecure-ambivalent mothers mirror the child’s negative affects in an exaggerated way or confuse them with their own experiences, which seems alienating or alarming to the child. In both cases the children will internalise the attachment figure’s conduct. The lack of synchronisation of their own affect-condition and that of their mother will then become the sole content of self experience.

The effects of early traumatisation on development better yet non-development of mentalization abilities is even more dramatic. Fonagy (2007) for instance gives an account of such gravely traumatised children and adolescents interviewed and treated in prisons. Their acts of violence were also conditioned by the fact that they had hardly obtained any mentalization abilities and were therefore incapable of empathising with their victim’s physical and psychological condition. He refers to this as “violent attachment” or “attachment-trauma”.

He references studies indicating that the ability for mentalization is inhibited in most people who have suffered any form of trauma. Traumatised children do not acquire a vocabulary in order to express feelings (Beeghly & Cicchetti, 1994) and traumatised adults have difficulties understanding intentions deriving from facial expressions. The equation of the inner and the outer is a second major aspect. In the face of trauma dilapidated mentalization is followed by the loss of awareness regarding the relationship of inner and outer reality. In most cases traumatised survivors refuse to recollect the past experiences because remembering means reliving.

Dissociation is the third aspect of attachment-trauma’s phenomenology. As mentioned before hand the pretend-mode is a developmental complement to the psychic equivalence. Not yet capable of mentally
envisioning inner happenings child fantasies are extremely far away from the outer world. Younger children are incapable of engaging in make-believe (even when they are aware that it is make-believe) and dealing with reality at the same time. When questioned whether their imaginary rifle is a rifle or a branch it ruins their game. Especially in dissociative experiences Fonagy views a collapsing of an adequate connection between equivalence and pretend-mode as a result of trauma and the limited mentalization ability. Dissociative thinking inhibits any connections—the principles of the pretend-mode in which the imagination is cut off from reality expands to the extent of nothing having any relation (Bohleber, 2010). Interaction with others on a mental level is substituted by the attempt to substitute thoughts and feeling with actions … (often a main reason for aggressive-destructive behaviour, M.L-B.) “Stuart describes his feelings upon being sent to a foster home at the age of 11 as follows: ‘I tried to make them understand that I was upset, so I started throwing things around, I threw my bed out of the window, I broke every window in the room. It was the only way of showing them that I didn’t want to go.’ Not only especially traumatised children such as Stewart find a physical way of expression to be more convincing than words—words which were also experienced as meaningless in the pretend-mode. Following a trauma we are all in need of a physical reassurance of safety” (Fonagy, 2007, p. 6).

With reference to early prevention, we can cull from these studies the importance of enabling professional caregivers of children to become more sensitive to the manifestation of trauma in children’s behaviour and to more adequately understand these children.

A short example may illustrate this idea:

In a supervision of the EVA project (see Chapter Thirteen), the team reports with distress about a five-year-old Chinese boy, whom they described as autistic. He plays mostly by himself, repetitively places, hour after hour, the same animals in the same row behind each other, hardly talks with another child or the day-care personnel or completely flips out if he is disturbed in his repetitive activities or is merely interrupted. For this reason, the teachers do not take their eyes off of him. Too great is the provocation of his bizarre, strange behaviour for other children to enter into his world or to intentionally disrupt him, which regularly ends in extremely aggressive conflicts, often with injuries.
The day-care personnel found out, that the little boy is not physically touched either by his mother or his father, for example, he is not embraced by them. They did not want to give him any time to adjust to the situation in the day-care centre, but deposited him one day with the expectation, that he should stay six hours in the facility right from the start. As it turned out, Li had been brought shortly after his birth to his grandparents in China and lived there in the country for three years in poverty. Assumedly, he experienced little emotional warmth since his grandparents worked more or less the entire day in the fields. When he was three years old, his parents brought him to Germany so that he could go to kindergarten (preschool). Tragically, his father became severely ill shortly after the boy’s arrival. The parents, who were self employed, had to give up their jobs and now live from welfare. Li has been in several other facilities, but the parents took him out again as soon as the day-care personnel mentioned his difficulties.

Li has apparently experienced diverse, severe trauma. His seemingly autistic defence could be an attempt to cope with the trauma. Due to their joint understanding of the inner and outer situation of Li, it was possible for the day-care centre team to motivate the parents to allow Li to be given a psychological and paediatric check up and subsequently an analytic child therapy. For the facility, an application for integration measures was made since otherwise Li was not tolerable in the facility. After two years of psychotherapy, Li had notably changed: he had partially become less isolated, had made two friends and made “exceptional growth in his development” (teacher A). The parents have joint weekly sessions with the child therapist, which, as they express it, is a big help for them to cope with the illness of the father but also with their fate as migrants.

Early object relations and resilience

In the example described above, it was possible to work together with the parents and to treat Li’s trauma in an analytic child therapy. As already mentioned we found a very high number of “children-at-risk” in the sample of the EVA Study (for more details see Chapter Thirteen in this volume): We had only thirty-three per cent securely attached children in our sample (compared with around fifty-five to sixty per cent in normal populations) and thirty-eight per cent children with the
attachment pattern C and D, which means, “children-at-risk”, which are in danger concerning their future development if they will not get any psychotherapeutic or psychosocial support.

As expected, only about the half of the parents of those children, who urgently need a psychoanalytic therapy (D Type and C Type) in the framework of the EVA project agreed to the treatment. Can we even reach the other fifty per cent of children at risk (most with a disorganised attachment type) through other modules of our prevention offers? And if yes, then how?

Some results of psychoanalytic and non-psychoanalytic resilience research give us cause for some hopeful considerations in this context that will be briefly outlined here. Since we have dealt with research on resilience and the role of early prevention more thoroughly in another paper (Leuzinger-Bohleber, Fischmann & Vogel, 2008), we will restrict ourselves here to two of the most relevant psychoanalytic long-term studies: the study of Hauser, Allen and Golden (2006) and the catamnestic investigation of the study of Brody and Axelrod by Henry Massie and Nathan Szajnberg (2006).

The research group of Stuart Hauser conducted a comprehensive follow-up study of 150 adolescents, who had been hospitalised in a psychiatric clinic because of drugs, violence, and suicidal tendencies. Within the scheme of the so-called “High Valley Resilience Study”, the researchers conducted yearly interviews over a longer period of time (since 1978) with the 150 teenagers. Half of these teenagers were treated in the psychiatric institution, the Children’s Center of High Valley Hospital. Approximately twenty-four children between five and seventeen years from widely different milieus, from different parts of the US were placed here. Some of the children suffered from psychosis or autistic disturbances, many from depression. Some presented neurological problems (Tourette Syndrome). All of them had one thing in common: they had uncontrollable anger and were violent.

For the authors, it was the most amazing result of the follow-up study, that some of these children, despite their poor prognosis, had developed into “normal adults”. In order to understand the reasons for these unexpected developments, sixteen adolescents were more carefully examined again. Nine of them had, for the most part, recovered from their severe adolescent crisis. In extensive case studies, the authors reported on four of the former patients. In former times researchers explained such amazing positive development with the idea that with these children had especially strong personalities, who—presumably
because of their genetic predispositions—despite adverse conditions, found the strength to adjust to the demands of later realities. Hauser, Allen and Golden (2006) call this conception an idealisation. It was in lieu of a more adequate definition of resilience.

“For children of adversity are wounded, often severely. To imply otherwise is to deny the acuteness of suffering in children, who don’t ‘come’ resilient but become resilient—after they have been hurt. There is no shield that keeps them safe from all harms, no intrinsic toughness such as the older terms implies. It is not the illusionary toughness such as the older terms imply. It is not the illusionary vulnerability of resilient children that should command attention and respect, but their powers of self-healing. And these are powers that vary with circumstances, people’s styles of adaptation change and evolve over their lifetimes”. (Hauser, Allen & Golden, 2006, p. 4)

In order to speak of resilience, therefore, two conditions must be fulfilled: first that such a person develops normally and second that this person was faced with the great risk of not being able to overcome this grave misfortune and adversity by his own strength. In the study, thirteen per cent were diagnosed as “resilient”, using objective test criteria, The authors see—with reference to studies on the Adult Attachment Interview (AAI)—cues, most of all in the narrative specifics of the stories of the teenagers, that resilient children despite their experienced trauma, possess to some extent an inner relatedness to other people. They infer, among other things, that resilience cannot solely develop from an inner strength of these children, but that at least some “good enough” object relations are necessary.

These hypotheses were tested by the authors through detailed analyses of the teenagers' lives. They discovered that resilient children—in contrast to those whose careers ended in criminality, drug addiction, or mental illness—had at least one reliant, good experience of a relationship (to a grandmother, a neighbour, a befriended family). These positive relationships were experienced by the children as a source of hope, that protected them inwardly from psychic resignation and capitulation. They built up a counter balance to the experiences of violence and to the severe trauma that they were at the mercy of for years.

In most of the cases described by Hauser and colleagues the non-familial, to some extent also professional attachment persons,
contributed to the psychic survival of these children. These results seem to underscore the already briefly mentioned clinical-psychoanalytic experiences that, especially for children from problem families, non-familial positive experiences of relationships, also when they may seem to be very rudimentary, are not to be underestimated. In the best case, they can, though unnoticed, ensure the psychic survival of these children. Therefore with our prevention studies we connected the hope, that it might be possible also in the restricted framework of a study—because of the experience with an empathetic, reliable adult—to open a window of hope in their dark, childish world. However, this attempt, as we have seen again and again in all prevention studies, often involves enormous feelings of insufficiency for the day-care personnel, since the offers of help seldom seem to reach the children. Often, only years later are the positive long-term effects observable.

Thus, it was at the same time always clear, that, at best, we could help children not to lose their courage to turn to the world of the adults and to hope for a future worth living for themselves. The suffering under the partly unbearable reality of their childish everyday life should not, though, be denied or trivialised (see e.g., von Freyberg & Wolff 2005, 2006). There is indeed a certain danger in the use of the term “resilience”. Thus, Henry Massie and Nathan Szajnberg (2006), for example, showed in their impressive study, that traces of psychic and physical abuse and experiences of violence can still be found in those adults, who—according to the criteria of resilience research—had developed surprisingly well. The authors conducted a follow-up study thirty years later of those infants, whom Sylvia Brody and Sidney Axelrad had studied. They write in summary: “Resilience, however, may be a superficial concept, for, in this series of cases, seemingly adequate coping in formerly mistreated children always came at the price of emotional vulnerability and compromised potential” (Brody & Axelrod, 1978, p. 471).

The concept of an “out-reaching psychoanalysis” in the prevention studies at the Sigmund-Freud-Institut: some historical and conceptual remarks

Can the immense knowledge of psychoanalysis about early development be made useful for early prevention dealing with children at risk that live on the fringe of our society? And how? These questions are in the centre of all our preventions programmes (see Wolff, chapter
twelve; Neubert et al., chapter thirteen and Lebiger-Vogel et al., chapter fourteen, in this volume).

We know, that with this concern, we are again taking up an old tradition in psychoanalysis if we think of some of the famous personalities of “applied psychoanalysis” or “psychoanalytic pedagogy” as August Aichhorn, Bruno Bettelheim, Anna Freud, Fritz Redlich, Chezzi Cohen or in Frankfurt a.M. Alois Leber. Yet, we will not place the main emphasis here on historical reflection, but on a description of, as we find, a new attempt to connect clinical and extra-clinical research in this area. Being identified with a “research-oriented attitude” (Leuzinger-Bohleber, 2007), we attempt to offer psychoanalytic experiences and concepts to traumatised children, their parents and to the day-care personnel in day-care facilities in areas with greater social problems. In contrast to earlier approaches, above all of the psychoanalytic pedagogy, we are pursuing, for example, in the EVA Project, a kind of “out-reaching psychoanalysis”, a psychoanalysis that goes into the field in order to understand in a more differentiated manner the unconscious processes in certain children, in the group and in the team—jointly with the day-care personnel. A differentiated understanding of complex, mostly unconscious processes seems to us to be a prerequisite for an adequate, professional “containment” in this difficult field. These processes manifest themselves in the individual child in its idiosyncratic behaviour towards the teacher and other children—alone or in the group—and mobilise in the teachers many different affects, countertransference reactions, projections and projective identifications as well as fragmentations and wishes for expulsion (see examples above). As we have briefly mentioned with reference to the psychoanalytic resilience research, we hope through such a “out-reaching psychoanalysis” to enable the day-care personnel, despite the daily overload and often frustrating, institutional structures, to offer to the many traumatised children in their facilities (above all for many disorganised attached children) an alternative, supportive object relation, that could be decisive, in the best case, for the future development of these children. Thus, the deeper understanding of certain children builds the centre of the supervision every two weeks and inculcates, as we hope, a psychoanalytic view of certain children and their specific (traumatic) stories.

A second dimension of “out-reaching psychoanalysis” is created by the presence of an experienced child therapist in the facility one day a
week. She/he offers the team and the parents in single consultations her professional understanding and the possibility for reflection, as well as her broad psychoanalytic knowledge about early development and its disturbances, trauma, migration etc. In single cases, child therapies are conducted in the facilities (with the concomitant counselling with the parents) since these families generally do not find their way to private psychoanalytic practices. As far as we know, this is a new possibility to provide children and their families with psychoanalytic experience and competency in therapies directly in the facilities. In contrast to the approaches of psychoanalytic pedagogy, a psychoanalytically based concept of education is not introduced, but rather a professional dialogue is induced: the day-care personnel fulfil their educational obligations (including aspects of social work, the contact with the youth welfare office etc.)—and the analytic supervisors and child therapists carry out the psychoanalytic supervision and/or therapies. The competencies are not mixed together, but are used in a mutual exchange to understand the psychic and psychosocial situation of certain children and finally in a joint consultation to advise how the child and its family can best be supported. The day-care personnel are still day-care personnel; the supervisors still supervisors and the therapists still therapists. The professional identities are respected: the professional exchange is on equal terms.—Therefore we speak of the “research-oriented attitude” of the analytic child therapists and supervisors who work in the prevention projects with children and families. These families are often strange and new to them in comparison with clientele in their “normal psychoanalytic practices”. For this reason, the specific unconscious fantasies and conflicts of these children, who come from other cultures and classes of the population, must first be jointly psychoanalytically studied and understood. In regular meetings of the supervisors and therapists, it becomes very clear: all professional colleagues experience the study as truly a new chance that rouses curiosity and interest, but often also insecurity and self-doubt. Thus, as a rule, it is especially difficult, to motivate the parents of these children at risk to work together with us and to adjust the treatment technique to the unusual setting and the often unusual children.

In the EVA project we have the unique chance in the scheme of a model project to connect this clinical-psychoanalytic research with extra-clinical research, the evaluation of “Early Steps”. In this context we could not deal with methodological questions (see Chapter Thirteen
in this volume), but can only mention that we use, among others, a new instrument to diagnosis the attachment type, the MCAST. As is well known, it is the merit of attachment research, that it attempts to describe the central psychoanalytic concepts, such as the inner object world of children and central unconscious fantasies, in one terminology (inner working models, attachments types etc.), that is understandable and empirically verifiable for the non-psychoanalytic world. We consider it to be new that, on the one hand, we bring together psychoanalytic concepts and clinical, psychoanalytic knowledge in the supervision and therapies as professionally and with as much differentiation as possible. On the other hand, we employ such attachment classification instruments, as the MCAST, for extra-clinical research without melting together the two research fields and epistemological key beliefs. In contrast to other early prevention projects as, for example, Circle of Security (Ramsauer, 2010) we do no attempt to adapt theoretical attachment theories into practical (“manualised”) instruction for day-care personnel and parents, but see ourselves in an open and critical dialogue with these theories and the corresponding empirical results. To choose just one example again: we have mentioned the many disorganised-attached children of our sample. Clinical-psychoanalytic knowledge about these traumatised children would assume analogous conclusions like those from attachment research on the disorganised attached children: These children exhibit a high risk for their development and need intensive educational and/or psychotherapeutic support. For this reason, among others, we use the results of the MCAST to systematically identify these children in our sample. In a second step we attempt, however, to regard these children, their unconscious object world, their fantasies and deficits in their development from a psychoanalytic perspective (e.g., in the case supervisions), that allows us to see a much more differentiated picture of the psychodynamics of the single child than that of the attachment theory, which only diagnoses four different basic types of attachment patterns. We attempt to motivate all disorganised children and their families for an analytic child therapy. If they are not ready to accept this support (or as an addition to therapy), we search for alternative possibilities such as individual pedagogical care, using the existing social resources to accompany these children in the transition between Kindergartens and grade school (see above and more detailed description of the prevention projects, see Wolff, chapter twelve, in this volume).
The conceptualisation of “out-reaching psychoanalysis” can also be transferred to other fields. Later results of our model projects could offer a scientific legitimation for this. The model project, with its connection between clinical and extra-clinical research, is, however, only possible, as we see it, through the unique institutional cooperation between a psychoanalytic research institute, the Sigmund-Freud-Institut and the Anna Freud Center with its rich clinical experience and professional knowledge. We regard this “psychoanalytic sibling relation” as a special chance that, however, as it is among siblings, needs constant reflection and libidinous caring. This reflection is assuaged through our joint political engagement for children with endangered childhoods.

Table 1. Baseline result: EVA sample compared to other samples.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of children</th>
<th>Type A</th>
<th>Type B</th>
<th>Type C</th>
<th>Type D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe (different samples, Van IJzendoorn &amp; Kroonenberg, 1988)</td>
<td>510</td>
<td>28%</td>
<td>66%</td>
<td>6%</td>
<td>Not investigated yet</td>
</tr>
<tr>
<td>USA (21 samples, Van IJzendoorn et al., 1992)</td>
<td>1584</td>
<td>21%</td>
<td>67%</td>
<td>12%</td>
<td>Not investigated yet</td>
</tr>
<tr>
<td>Isreal cities (Sagi et al., 2002)</td>
<td>758</td>
<td>3%</td>
<td>72%</td>
<td>21%</td>
<td>3%</td>
</tr>
<tr>
<td>EVA study, Frankfurt</td>
<td>241</td>
<td>81</td>
<td>84</td>
<td>23</td>
<td>53</td>
</tr>
</tbody>
</table>

Notes

1. I would like to thank Betty Hatton-Krummheuer for the translation of this chapter.
2. The summary is based on an extensive depiction of psychoanalysis in Leuzinger-Bohleber (2009).
3. Although we have met many early traumatised children in all early prevention projects, it would exceed the scope of this article to dwell on the psychoanalytic trauma theories (cf. Leuzinger-Bohleber, 2009).

4. Crying is also a biologically embedded behaviour that should activate the succor of the caregiver. If these attachment needs are not satisfied, the child will develop, with great probability, symptoms of a partial deprivation, an exaggerated need to be loved, severe feelings of guilt and depression, among others. Also other characteristics as superficiality, listlessness, lack of concentration, tendencies toward fraud and compulsive stealing—are—next to developmental delay or retardation—all possible consequences of early experiences of deprivation.

References


CHAPTER THREE

Minds shaped through relationships: the emerging neurobiology of parenting

Helena J. V. Rutherford and Linda C. Mayes

“I do not believe it is possible to understand the functioning of the mother at the very beginning of the infant’s life without seeing that she must be able to reach this state of heightened sensitivity, almost an illness, and to recover from it” (Winnicott, 1956 [1975], p. 302). When Winnicott made his observations of a special shift in the mental economy of adults recently becoming new parents, he was calling attention to a critical adult developmental stage that has implications not only for the parent but also for the infant (Winnicott, 1956 [1975]). For Winnicott, the adult’s experience of a preoccupied mental state was essential not only for the new parent’s coming to understand their infant but also for creating a “transitional space” in which the infant’s self slowly differentiates.

Key to Winnicott’s observations is that both parent and infant are engaged in a critical developmental period with each shaping and influencing the other. Indeed, the onset of parenthood represents a significant transitional period in the lives of many adults, requiring a host of psychological and neurobiological changes to facilitate adaptive and responsive caregiving to the needs of the infant. Across disciplines, there has been decades of research addressing how parental care impacts child development; however, there has been far less consideration of
how adults transition to their parenting role and the psychological and neurobiological changes that accompany this period. As Winnicott observed, the onset of parenthood is characterised by heightened sensitivity and involvement to one’s child (Winnicott, 1956 [1975]), but the neurobiological mechanisms that underscore these changes have only recently been of interest to researchers (Leckman et al., 1999; Mayes, Swain, & Leckman, 2005; Swain, Lorberbaum, Kose, & Strathearn, 2007). Here we review recent neurobiological studies of mothers and fathers that have begun to unpack how their minds may be shaped through the emerging relationship with their child and vice versa.

**A neurobiological approach to parenting**

Research designed to understand the neurobiological changes that occur with the transition to parenthood is in its early stages. Many of the neuroimaging studies described here resonate with early observations by Winnicott (1956 [1975]) in describing primary maternal preoccupation. This time-limited psychological state develops during pregnancy and continues for some months into the postpartum period. Winnicott (1960 [1965]) argues that it is a time during which the infant has absolute dependence on the mother, with preoccupation serving an adaptive as well as critical function in preparing the mother to be able to support both the physical and psychological needs of her child. Furthermore, a preoccupied state focused on the infant and her parenting role facilitates the mother’s better identifying with her child, allowing the infant to become the centre of the mother’s mind and thus the shaping of the infant’s mind and emerging sense of self. During this preoccupied state, Winnicott (1956 [1975]) proposed that mothers evidence both a heightened sensitivity, as well as a more narrowed focus of attention, toward their child and the expression of their needs. From Winnicott’s perspective, mothers “must recover” from this altered state of mind, or, from another theoretical orientation, this reallocation of mental resources so as to allow their infant to become a separate individual with a separate mind. Thus, this period of primary maternal preoccupation is transitional.

Extending these observations of mothers entering and moving through a preoccupied state of mind, Leckman and colleagues developed a semi-structured interview to assess levels of preoccupation in mothers as well as fathers (Feldman, Weller, Leckman, Kuint &
Eidelman, 1999; Leckman et al., 1999; Mayes & Leckman, 2007). One study reported that consistent with Winnicott’s (1956 [1975]) observations, mothers became increasingly preoccupied with their child following delivery and the initial months postpartum after which the level of preoccupation began to decline (Leckman et al., 1999). Interestingly, while Winnicott (1960 [1965]) viewed fathers very much as a holding environment for the attunement of the mother–infant dyad, Leckman and colleagues (1999) found that fathers also showed increasing levels of preoccupation from pregnancy through to the postpartum. This finding converges with neuroendocrine data showing that fathers experience comparable physiological changes to mothers following the arrival of an infant (Gordon, Zagoory-Sharon, Leckman & Feldman, 2010). Therefore, while traditionally preoccupation has been examined with the principle focus being on the mother, these studies suggest more consideration of the role of fathers and their preoccupied transition following the birth of a child.

This psychoanalytic approach to the presence of increased sensitivity to infant cues as a transitional state of preoccupation is particularly compelling to experimental researchers in allowing for testable predictions regarding the psychological changes in women (and men) as they become parents. However, to better understand preoccupation and how becoming a parent shapes both mind and behaviour, it is necessary to operationalise more clearly what parenting means. With this in mind, the approach that we, and others have adopted, is to first consider the mechanisms that may underscore parental sensitivity to infant and child cues and how individual differences in sensitivity impact caring behaviours, and then to devise approaches to measure these mechanisms. The third more long-term goal is to relate the measurement of these mechanisms to individual differences in observable, as well as self-reported, parenting behaviours among parents with specific clinical disorders including addiction, depression, anxiety, and post-traumatic stress disorder.

Traditionally, how adults transition to parenthood has been examined with a combination of self-report measures and observations of parenting behaviours. For instance, microanalysis of video recorded parent–infant interactions has suggested that certain elements of parenting are automatic or intuitive, operating over rapid temporal intervals of 200–800 ms (Papousek, 2000). However, while these behaviours may be observable (albeit within a millisecond range), it is not clear
what the mechanisms or processes are that underlie these intuitive parenting behaviours, or the neural architecture that supports this rapid responding to infant cues. Even before observational accounts of intuitive parenting can be captured, a series of neurobiological cascades may have unfolded, promoting adaptive and rapid responding to infant cues. Consequently, it becomes necessary to employ techniques that are fitting with the nature of the phenomenon of interest, and therefore examine the stage before what is observable and measurable, that is, to examine what is not observable but can be measured at the level of the parental brain.

Consistent with conceptualising the mechanisms and processes that may underscore parenting, we have recently proposed that parental sensitivity and responding (i.e., primary maternal preoccupation) may be understood within a neuroscientific framework of signal detection (Rutherford & Mayes, 2011). Winnicott (1956 [1975]) proposed that entering preoccupation served to increase the mother’s sensitivity and responding to her infant’s signals of affect, allowing her to both make room for the infant in her psychology, as well as nurture the infant through the postpartum period. Expressed from a neuroscience perspective, preoccupation can be thought of as heightening a mother’s ability to detect and be responsive to infant signals across sensory domains. That is, the purpose of entering a preoccupied state of mind is to heighten the mother’s sensitivity to her infant and her infant’s expression of needs. Mothers who are highly preoccupied may respond faster and be more vigilant to infant cues, in contrast, mothers who are less preoccupied may instead respond more slowly to these same affective cues. Furthermore, we (Rutherford & Mayes, 2011) propose that heightened signal detection of infant cues may persist beyond the immediate postpartum period, even if especially heightened during the early weeks from delivery, reflecting a more permanent developmental stage in parenthood where infant cues will always be especially sensitive to parents relative to non-parents.

This signal detection approach to parenting leads to a number of important predictions that resonate with Winnicottian theory: First, it is likely that sensitivity to infant cues will differentiate parents from non-parents; second, there will be changes in the sensitivity to infant cues across the postpartum period; and third, there will be individual differences in the level of preoccupation in parents. In considering the broader range of this discussion, this approach demonstrates
the capacity for integration between the disciplines of psychoanalysis and neuroscience, and in this instance, how neuroscience can provide a means through which the mechanisms that subserve this important psychological transitional state of preoccupation may be measured and quantified.

Much of our understanding of the neuroscience of maternal behaviour has been drawn from preclinical studies using a variety of techniques, primarily in rodent models (Numan, 2007). However, in human studies, there are two neuroimaging techniques that are commonly used to investigate the shaping of the mind with the transition to parenthood. The first, functional Magnetic Resonance Imaging (fMRI), relies on changes (increases and decreases) in the hemodynamic response in the brain as a correlate of neural activity in response to different experimental conditions. The utility of fMRI is in its spatial resolution, allowing a “window into the brain” in identifying regions that are recruited during parental responding to infant signals. The second technique employs scalp-recorded electroencephalography (EEG), time-locking averaged EEG activity to stimulus presentations to produce a series of waveforms that underscore perceptual and cognitive stages of processing (termed event-related potentials, ERPs). The value of EEG/ERP is in its temporal resolution, capturing neural activity with millisecond accuracy. Therefore, converging the superior properties of fMRI (space) and EEG/ERP (time) presents a unique opportunity to examine both where and when the parental brain responds to infant signals and any variability in this brain response.

The studies that will be presented and discussed in the next paragraphs typically employ neuroimaging techniques to simultaneously record brain activity while parents or non-parents are presented with infant and non-infant stimuli that are photographs (varying in familiarity and emotional expression) or vocalisations (cries, laughs). These are typically passive tasks, and one of the goals of parenting research is to move beyond the detection of infant signals to both the interpretation of these signals, as well as the accompanying behavioural response elicited by these signals (c.f. Lenzi et al., (2009) for observation and imitation of infant signals in mothers). These studies are important in identifying the time course (EEG/ERP) and the cortical and subcortical brain regions (fMRI) that are differentially sensitive to infant and non-infant signals, and how individuals (parents and non-parents) may have a differential neural response to these signals. Notably, in parents, there are a number
of key brain regions that have been identified as critical to the parental response when parents are exposed to visual and auditory infant stimuli in fMRI paradigms. These include regions associated with (1) processing emotional valence, including the amygdala, anterior cingulate cortex (ACC), and insula; (2) processing reward, including orbitofrontal cortex (OFC), striatum, and nucleus accumbens; (3) executive function and motor control, including dorsolateral and medial prefrontal cortex (DLPFC, MPFC) and substantia nigra; and (4) homeostasis, including the hypothalamus and pituitary region (Gonzalez, Atkinson & Fleming, 2009). In respect of the temporal dynamics, the accumulating evidence presented here suggests in parents (mothers and fathers) that there is rapid and increased responding to infant signals, especially if infants are expressing distress, relative to non-parents.

**Neurobiological differences between parents and non-parents**

Only a handful of studies have examined functional neurobiological differences between parents and non-parents, likely in part because of the difficulties in recruiting and matching parent and non-parent samples for rigorous experimental protocols without introducing concerns for potential confounds in the interpretation of the results. Those studies that have addressed parity have focused on the neural response to infant stimuli (photographs of infant faces and infant vocalisations). One study employing fMRI examined the neural response between parents and non-parents (male and female) while they listened to audio clips of an infant crying or laughing, as well as a frequency matched neutral control audio clip (Seifritz et al., 2003). It was found that parents evidenced a greater neural response to infant cries than laughter in the amygdala (as well as the cingulate, insula, ventral PFC, and the temporal-parietal junction), with non-parents instead showing a greater response in these regions when listening to infant laughter than cries. That is, the neural response to infant affect was differentiated by whether participants were parents or non-parents, suggesting that parental experience may shape neural sensitivity to infant affective signals, with distress being more salient to parents.

Converging with this fMRI finding, Proverbio and colleagues (2006) using ERPs found that parents had a rapid differential neural response to viewing photographs of infant distress (i.e., very negative) and infant discomfort (i.e., mildly negative) that was not observed
in non-parents. Moreover, earlier ERP work also demonstrated heightened sensitivity to infant cry (as well as control stimuli) in very recent mothers relative to non-mothers (Purhonen et al., 2001). These studies therefore suggest that the neural response to infant negative affect is particularly strong in differentiating parents from non-parents. Indeed, even at the level of discriminating photographs of infant affect, neural activity recorded in right prefrontal cortex differentiated mothers from non-mothers (Nishitani, Doi, Koyama, & Shinohara, 2011). In extending this important perceptual work, neural differences in emotion regulation between mothers and non-mothers have also been reported, with ERP data suggesting that mothers may implicitly regulate their emotional response when presented with photographs of infants expressing negative emotions relative to non-mothers where this implicit response is absent (Rutherford et al., under review). Taken together, these findings suggest that both the detection of infant signals as well as responding to those signals differentiate parents from non-parents.

While the studies reviewed thus far suggest there are differences in neural responses to infants in parents compared to non-parents, whether these differences reflect changes as a function of neurobiological/neurohormonal changes during pregnancy and the postpartum period, experience with infants during the postpartum period, or a combination of neurobiology and experience is yet to be determined. One study that partly examined this issue measured the neural response to infant faces in birth mothers and adoptive/foster care mothers viewing pictures of their own child, as well as pictures of a familiar and unfamiliar child and adult (Grasso, Moser, Dozier, & Simons 2009). In both maternal groups, there was an increased neural response when viewing photographs of one’s own child compared to the other stimulus conditions, consistent with increasing allocation of attention to these highly salient stimuli. However, when comparing the two maternal groups (biological mothers, adoptive/foster care mothers), there was no difference in the magnitude of the neural response to viewing photographs of one’s own child. This finding suggests a potential role for experience in addition to any neurobiological changes in shaping the mind and the maternal brain response, although it is necessary to be cautious with this interpretation with there being no assessment of whether the adoptive/foster care mothers had their own biological children. Thus the absence of a group difference may reflect in part existing neurobiological changes
that have occurred already for these women after their pregnancies and delivery of their biological children.

**Neurobiological responding in parents**

Psychodynamic and neuroscience accounts propose that parenting is a transitional process, and therefore there should be measurable structural and functional changes in the parental brain across the postpartum period. In the first study to address possible structural changes, structural MRI was employed to assess changes in brain volume across the postpartum period. Specifically, Kim and colleagues (2010) reported a significant increase in grey matter volume measured in mothers at two to four weeks postpartum and then again at three to four months postpartum. This increase in volume was observed across prefrontal, parietal and midbrain (including hypothalamus, substantia nigra, and amygdala) regions. Moreover, grey matter volume increase in midbrain regions across the postpartum period was predicted by self-reported positive perceptions of parenting by these recent mothers, suggesting that cortical re-organisation during parenthood may reflect in part maternal positivity to, or engagement with, her infant during this time. Thus these findings suggest that there may be neurobiological changes during the postpartum period in developing mothers consistent with theoretical accounts of parenting. Notably it is worth considering whether there is a dynamic change with each pregnancy or whether the magnitude of change is mediated by experience. In the Kim and colleagues (2010) study, as with others, both first time and more experienced mothers were assessed without specific comparisons of parity, and thus whether there is an initial shaping of mind with the transition to parenthood and whether this may be refined with repeated pregnancies remains unknown.

Concurrently a number of studies have examined the functional neural response to infant signals in parents, and have attempted to isolate specific factors that may explain differential neural responding, namely in respect of infant familiarity, affective state, and attachment. For instance, in studies comparing the neural response to maternal and romantic attachment stimuli (photographs of infants and romantic partners), while there is overlapping activity in regions including the striatum, insula, and dorsal anterior cingulate, the lateral orbital frontal cortex (OFC) and periaqueductal grey (PAG) respond selectively to
cues of maternal attachment (Bartels & Zeki, 2000, 2004). Thus, while there may be some common neural circuitry to attachment, maternal attachment may be uniquely recruiting the lateral OFC and PAG. The role of the OFC in parenting will be further discussed below; however, the role of the PAG in human parenting is less well understood. Notably though data from preclinical work suggests that the PAG is involved in the nursing behaviour of rodents (Lonstein & Stern, 1997).

One of the first fMRI studies in mothers evidenced that when listening to infant cries, compared to control noises, mothers exhibit an increased brain response in the anterior and posterior cingulate, medial PFC and thalamus, hypothalamus, as well as regions involved in reward processing including the right OFC, central and ventral tegmental areas, substantia nigra, caudate, putamen, and nucleus accumbens (Lorberbaum et al., 1999; Lorberbaum et al., 2002). This finding of an increased reward response in mothers listening to infant cry is noteworthy, and may perhaps be consistent with the notion that infant cry may motivate approach, rather than withdrawal, behaviours towards the infant and facilitate caregiving as a consequence. Indeed, in non-parents listening to infant cries, increases in amygdala activity are typically observed in the absence of activity in regions associated with reward (Montoya et al., 2012; Sander, Frome & Scheic, 2007). Furthermore, Kim et al. (2010) reported that the neural response to infant cry at two to four weeks postpartum was positively correlated with maternal sensitivity measured at three to four months postpartum, suggesting that the neural response to cry may uniquely contribute to the development of sensitive parenting.

Multiple studies have examined the maternal brain response when mothers view photographs of infant faces (both familiar and unfamiliar faces), although other studies have used film clips of infants (Ranote et al., 2004). One study reported that when mothers viewed photographs of their own child compared to an unfamiliar child, there was an increase in bilateral OFC activity, with this OFC activity positively correlating with positive mood scores (Nitschke et al., 2004). A separate study found that when mothers viewed photographs of infant faces, left OFC activity correlated with positive mood and right OFC activity correlated with negative mood scores in these women (Noriuchi, Kikuchi & Senoo, 2008). Notably, infant familiarity also modulated activity in the DLPFC, anterior insula, putamen, and PAG. Critically, familiarity alone does not explain these findings. Indeed, when mothers view photographs
of their own child compared to another familiar child, they maintain a heightened response in the left insula and right amygdala, as well as other cortical regions including the DLPFC, anterior paracingulate, and left superior temporal sulcus (Leibenluft, Gobbini, Harrison & Haxby, 2004).

While past studies have manipulated infant familiarity, more recent research has manipulated both familiarity and affective expression of infant face stimuli in their paradigms. Indeed, in addition to regions associated with emotion processing, regions associated with reward (including the OFC) also prove sensitive to infant familiarity and affect. In one study, twenty-eight first time mothers viewed photographs of either their own infant or an unfamiliar infant expressing happiness, upset, or neutral expressions (Strathearn, Li, Fonagy & Montague, 2008). There were no differences in the neural response to familiarity (own vs. unknown) in visual processing regions; however, critical regions involved in the reward neural circuitry were differentially sensitive to infant familiarity, with own infant faces producing the strongest neural response in regions that included the left lateral OFC, ventral striatum, putamen, head of the caudate nucleus, ventral tegmental area, and substantia nigra. Regions typically associated with emotion processing, including the amygdala, insula, and ACC, elicited similar sensitivity. Importantly, the magnitude of these findings were strongest when mothers viewed photographs of their own infant smiling (relative to an unfamiliar infant smiling).

In summary, these studies illustrate that there are consistent regions recruited in response to infant signals that include regions associated with emotion and reward processing, and when mothers are engaged with their own infant, this is especially salient and motivating in driving the maternal brain response. Furthermore, it is also important to highlight that in parents, brain regions associated with reward respond to infant cries, potentially facilitating maternal approach to the infant and adaptive caregiving behavior.

Sources of individual differences in the parental response to infant signals

While the studies reviewed thus far have highlighted the neurobiological differences between parents and non-parents, as well as between conditions of familiarity and affect of infant signals within parent
groups, recent parenting research has begun to focus on individual variability in the response to infant signals. This work has been mainly in the clinical domain but other studies in normative samples have been reported in identifying important sources of variance in the maternal neural response using both EEG (Killeen & Teti, 2012) and fMRI (Kim et al., 2011; Musser, Kaiser-Laurent, & Ablow, 2012; Strathearn, Fonagy, Amico, & Montague, 2009; Swain et al., 2008). Indeed, an individual’s attachment style (secure, insecure) has been shown to modulate the neural response to infant cues as measured using fMRI. Strathearn, Fonagy, Amico, & Montague (2009) presented mothers with photographs of their own and unfamiliar infant faces, varying in emotional expression. Securely attached mothers, relative to insecurely attached mothers, had a heightened response in PFC, hypothalamus, and pituitary regions when viewing photographs of their own infant compared to an unfamiliar infant. Interestingly, brain activity in hypothalamic and pituitary regions correlated with the amount of oxytocin peripherally circulating in blood plasma following a free play assessment conducted prior to the fMRI visit. Oxytocin is produced in the hypothalamus, and has been shown to be important in both the initiation and maintenance of maternal behaviour (Gordon, Zagoory-Sharon, Leckman, & Feldman, 2010), as well as affiliative relationships more generally (MacDonald & MacDonald, 2010).

Strathearn, Fonagy, Amico, & Montague (2009) also showed that attachment classification differentiated the neural response to viewing own infants expressing happy and sad expressions. Securely attached mothers showed increased activity in the OFC, mPFC, and ventral striatum when viewing their own happy infant, with insecurely attached mothers instead showing decreased activity in the ventral striatum (and increased activity in the DLPFC). When viewing sad infants, securely attached mothers again showed an increased response in the ventral striatum; however, insecurely attached mothers showed increased activity in the DLPFC and insula. The insula finding is particularly intriguing because it is a region that has been previously associated with anticipation of loss (Knutson, Rick, Wimmer, Prelec, & Loewenstein, 2007) as well as disgust (Wicker et al., 2003), and may suggest an interesting direction for future research in examining the neural correlates of attachment. Indeed, in a separate study of the neural response to infant cry (familiar and unfamiliar) and mother–infant interactions, increased activity in the left anterior insula (as well as temporal pole)
was observed in mothers who were more intrusive during interactions with their infants compared to mothers who were more harmonious and instead showed increased activity in left hippocampal regions (Musser, Kaiser-Laurent, & Ablow, 2012). Moreover, it has been recently reported that healthy control mothers deactivate the insula cortex when viewing films of children (familiar, unfamiliar) compared to mothers with interpersonal violence-related post-traumatic stress disorder who do not show this same pattern of neural response (Schechter et al., 2011). Therefore while the insula has not traditionally been a brain region of interest in parenting research, it may play a considerable role in understanding more about individual differences in maternal behaviour. This is especially relevant considering the role of the insula in the perception and experience of avoidance affective experiences such as loss and disgust (Knutson, Rick, Wimmer, Prelec, & Loewenstein 2007; Wicker et al., 2003). Perhaps for some mothers, difficulties in parenting may be understood from a neurobiological perspective wherein infant signals promote avoidance rather than approach, and the development of the mother–infant relationship is modulated as a consequence.

A number of studies have also begun to examine the impact of psychopathology as an individual difference modulating the maternal brain response. Depression in particular has received attention owing to the rates of postpartum depression (PPD) in recent mothers (and the likely under diagnosis of this) and the implication of PPD for child outcomes (Murray & Cooper, 1996). Even in parents (and non-parents) with subclinical levels of depression, neural markers of infant signal perception are related to depression symptomatology (Noll, Mayes, & Rutherford, 2012). One recent study investigated the neural response to infant cry in depressed and non-depressed mothers (Laurent & Ablow, 2011). In this study, mothers listened to infant cries that were from their own infant or were cries from an unknown infant (as well as listening to a control non-cry stimulus). Regions, including the OFC, striatum, thalamus and ACC, were recruited when non-depressed mothers listened to their own infant cry compared to the other conditions (unfamiliar cry, control sound). Notably, depressed mothers evidenced no differential brain response when listening to their own infant cry compared to an unknown infant cry and the control sound. Interestingly in a separate study, depressed mothers showed a habituated response in the ventral striatum to monetary reward compared to non-depressed mothers (Moses-Kolko et al., 2011), consistent with the notion that
there may be a more general reduction in sensitivity to reward signals in mothers with depression that may encompass non-infant as well as infant-related rewards.

Recent work has also begun to examine the consequences of addiction to the parental brain, considering the high rates of child neglect and abuse by substance using parents and the possible mechanisms that may underscore these rates of maltreatment (Cash & Wilke, 2003). This work has been motivated by the notion that addiction represents a dysregulation between stress and reward neural systems, systems which overlap with the neural circuits identified as key in studies of parenting responses to infant signals (Rutherford, Potenza, & Mayes, 2013; Rutherford, Williams, Moy, Mayes, & Johns, 2011). Therefore there may be a potential neurobiological pathway through which substance abuse may impact parenting behaviour, and this understanding could prove important for both treatment and intervention efforts. Landi et al. (2011) investigated this notion by having substance using and non-substance using mothers listen to infant cries and view photographs of infant faces (all unfamiliar stimuli). In response to both cries and faces, there was a decreased response in the substance-using mothers in sensory processing, prefrontal and limbic (parahippocampal and amygdala) regions, compared to non-substance-using mothers. These findings suggest that there is reduction in the saliency of infant signals in substance using women. Converging with this study, very rapid markers of infant emotional face perception have been found to be unaffected by the emotional expression in mothers with a substantiated neglect of a child under the age of five compared to the same neural response measured in non-neglecting mothers (Rodrigo et al., 2011). In summary, reduced sensitivity to infant signals may represent an important mechanism that underscores a number of psychopathologies impacting caregiving capacity.

**Considerations and limitations**

In this chapter we have described the studies that have begun to investigate how having a child may shape the mind and brain to support parenting. Specifically neuroimaging techniques have demonstrated differential neural responses to infant signals between parents and non-parents as well as how neural responses within parents may vary in respect of normative and clinical variables. It is important to recognise
the limitations of the neurobiological work reviewed here as well as highlighting the contribution to our understanding of parenthood. Many of the studies presented here employed passive paradigms requiring little engagement on the participant’s behalf beyond the perception of infant faces and cries. One of the challenges of parenting is not only the detection of infant signals but also the interpretation and selection of how to respond to those signals. Furthermore, if unsuccessful in the interpretation and response to the signal, the capacity to change behaviour online during dyadic interactions is critical. For this reason, the contribution of executive functions to parenting has become of recent interest to parenting research (Barrett & Fleming, 2011), with one study finding that mothers with lower working memory capacity evidence more reactive negativity toward their child during frustrating cooperation tasks than mothers with higher working memory capacity (Deater-Deckard, Sewell, Petrill, & Thompson, 2010). The critical role of executive functions in facilitating caretaking may underscore why many of the studies reviewed here show the recruitment of prefrontal cortical regions in response to infant signals.

The studies reported here also primarily focus on the role of mothers and the neurobiological changes occurring in motherhood with few exceptions. While many mothers represent the primary caretakers of the infant, in moving forward in this area it will be important to understand more the role of fathers and paternal brain changes. Clearly there are findings that support self-reported as well as neuroendocrine changes in men with the onset of fatherhood (Gordon, Zagoory-Sharon, Leckman, & Feldman, 2010; Leckman et al., 1999) and many fathers are also primary caretakers for their children. This requires a shift in focus for preoccupation away from the father as a figure to maintain the external reality (Winnicott, 1960 [1965]) to specifically examining the potential of primary paternal preoccupation, and whether this is a qualitatively, as well as quantitatively, different to primary maternal preoccupation. Related to this point is understanding more the shaping of the parental brain through experience in the absence of any hormonal changes that occur during pregnancy and postpartum. This is most evident in the case of mothers (or fathers), who adopt or foster children, but may be equally as interesting to investigate in women in professions with exposure to infants on a daily basis (e.g., paediatric nurses, childcare workers) thus opening up the discussion as to whether the maternal brain changes described here represent changes brought
about by biology, experience, or perhaps a combination of biology and experience.

There are a multitude of individual difference factors that may contribute to shaping the parental brain, and it is unlikely that any one study can measure and control for all these potential variables. Research studies are only beginning to scratch the surface of the consequences of perinatal caretaking factors (such as breastfeeding or delivery method) as well as psychopathology on the neurobiological markers of sensitivity to infant signals. Amount of sleep, experience with children (in terms of first time and experienced mothers, past caretaking responsibilities), social support and environmental conditions are all likely to contribute to parenting. Indeed many of these factors may contribute more generally to the amount of stress a parent may be experiencing, and this may have important consequences for both brain and behaviour. Indeed, while parenting may be rewarding, it also represents a significantly stressful period for new parents, in terms of caring for a dysregulated infant as well as in other factors related to poverty, poor physical and mental health, domestic violence, and decreased social support potentially impacting the capacity to parent (Wells, 2009). To date, no studies have specifically examined at the neural level the role of stress in impacting individual differences in parenting and dissociating the stress of parenting from other life stressors in determining the parental brain response.

While there are notable limitations to this area of research on the parental brain, it is important to recognise both that this literature is very early in its developmental trajectory and the research studies that are being conducted have important implications to our knowledge and understanding of what it means to parent and to be a parent. Finding that there are normative responses to infant signals and how this may be different in clinical populations provides an important avenue for treatment and intervention work. While this may allow in part for more neurobiological approaches in caring for patients, it is also important in recognising that the neurobiology of a parent may be different from the neurobiology of a non-parent, with different demands as well as different neural circuits engaged on a daily basis that warrant refined treatment and intervention approaches specific to parents. With this in mind, there are a number of successful intervention programmes that have been designed to work specifically with clinical samples of parents (Suchman, Decoste, Castiglioni, Legow, & Mayes, 2008; Suchman
et al., 2010); although the neural correlates that may represent changes following the intervention have yet to be investigated.

**Conclusion**

In this chapter we have outlined how primary maternal preoccupation has laid a foundation for a number of neuroimaging studies that have evidenced how the brain is shaped with the onset of parenthood and the importance of individual differences in how that parental brain responds to infant signals. This is a stimulating and provocative area that promises exciting programmes of research in the future, as well as necessitating interdisciplinary approaches to understanding parenting in normative as well as clinical samples. The multitude of variables that may contribute to the neural response of the parental brain will provide continual refinement of our understanding of parenting. Consistent with this notion we conclude with a final quote from Winnicott that is likely to underscore ongoing research in this area: “For the scientist the formulation of questions is almost the whole thing. The answers, when found, only lead on to other questions” (Winnicott, 1961 [1986], p. 14).

**References**


PART II

EARLY PREVENTION PROGRAMMES
CHAPTER FOUR

Fraiberg in Paris—early prevention through a mental health programme for vulnerable families: preliminary findings and what we have learned in conducting the French CAPEDP study

Antoine Guedeney, Nicole Guedeney, Susana Tereno, Romain Dugravier, Thomas Saïas, Florence Tubach, Jaqueline Wendland, Bertrand Welniarz, Alain Haddad, and Tim Greacen

Along with the advisors of the scientific committee of the CAPEDP Study
Professor Bruno Falissard, MD PhD, and Professor Richard E. Tremblay, PhD

The author thanks the 440 families who accepted to participate in the study, the members of the home-visiting team and of the home-based assessment team, without whom this project would have been impossible: Joan Augier, Amel Bouchouchi, Anna Dufour, Cécile Glaude, Audrey Hauchecorne, Gaëlle Hoisnard, Virginie Hok, Alexandra Jouve, Anne Legge, Céline Ménard, Marion Milliex, Alice Tabareau. The authors particularly thank the members of the supervision team: Laure Angladette, Drina Candilis, Judith Fine, Alain Haddad, Joana Matos, Anne-Sophie Mintz, Marie-Odile Pérouse de Montclos, Diane Purper-Ouakil, Françoise Soupre, Susana Tereno, and Jaqueline Wendland, under the leadership of Bertrand Welniarz.
EARLY PARENTING AND PREVENTION OF DISORDER

CAPEDP received ethical approval from the ethics committee of Ile de France Lariboisière St Louis (CEERB) and from the Commission Nationale de l’Informatique et des Libertés (CNIL, 907255). Clinical Trial Registration number is NCT00392847.

Introduction

Early prevention has become a major field of research in the last fifteen years. One of the best known and most assessed programmes is that of David Olds, in the US, firstly in Elmira then replicated in Memphis and Denver, leading to the large scale implementation of the Nurse Family Partnership programme (NFP) (Olds, Kitzman, Cole, & Robinson, 1997). Olds studied the effect of home-visiting by trained nurses for young mothers with low educational level, and showed through a randomised controlled research design that such an intervention allowed for better birth weight, lower rate of ER (Emergency Room) visits, decreased tobacco use, and better mother–child relationships (Olds, 2006). Fifteen years later, children from the intervention group had also had a lower rate of contact with the criminal justice system (Olds et al., 1998a). Olds’ trials were carried out with first pregnancies and emphasised that such preventive work should begin early, during the second trimester of pregnancy, with emphasis on the mother’s physical wellbeing, nutrition, and avoiding neurotoxins. The need for rigorous methodology to guarantee truly comparable results and reproducibility led Olds to participate in developing the CONSORT criteria for such preventive trials (Begg et al., 1996; Olds et al., 1998b).

The French situation: the CAPEDP project

In 2005, along with Dr Alain Haddad, child psychiatrist, psychoanalyst, and then head of the child and adolescent psychiatry department for the nineteenth district of Paris and with Tim Greacen, head of the research lab for the Maison-Blanche Paris Mental health hospital a congress was organised on the topic of “What Works for Whom” in terms of prevention, at the French ministry of Health (Haddad, Guedeney & Greacen, 2004). France developed right after World War II a national mother–child support and prevention network known as the “Protection Maternelle et Infantile” (Infant and Mother Protective services or PMI).
These services were linked with the creation of free public mental health services for both adults and children, to be developed across the country. Mothers can consult in PMI centres free of charge from pregnancy through to the child’s third birthday. Certain check-ups and vaccinations are compulsory if the mother wishes to access local government family support funds to help raise the child (Allocations familiales). Widely used, even by middle class families, this system has never really been evaluated in terms of cost/efficiency (Ikounga N’Goma & Brodin, 2001). The PMI do make home-visits to more vulnerable families, but in almost sixty per cent of cases, this happens only once, and very few families receive more than three home visits. PMI nurses do not receive specific training in mental health issues for mothers and children and receive little organised psychological supervision (DASES 75, 2003).

The current chapter describes the first controlled study on early prevention in France, with a psychodynamic, attachment-oriented approach. Given that France already provides a free public mother-child protection system, our goal was to assess the additional preventive effect of a reinforced mental health orientated, home-based intervention on child mental health at the age of two.

The main motivation for CAPEDEP was to see to what extent the prevalence of psychopathology at age two and a half would be influenced by a decrease in postnatal depression in the mother and an increase in child attachment security (Bowlby, 1969). Another specific goal was to see to what extent maternal disorganising behaviour could be influenced by an increase in maternal mentalization and a decrease in maternal isolation.

A total of 440 women were recruited during their first pregnancy. They were under twenty-five years of age, understood spoken French well enough to be able to participate in the informed consent process, and had at least one of three targeted risk criteria: planning to raise the child alone; low socio-economic status (SES) (defined as being on welfare benefits, or being close to poverty threshold); having less than twelve years of school education. Ten maternity wards participated in recruitment for the study, with families living in the northern part of the City of Paris and in the suburbs (Dugravier et al., 2009; Saias et al., 2012; Tereno et al., 2012).

After agreeing to participate, women were randomly assigned to either the intervention group or the control group. All had access to prenatal
and PMI care as usual. Both groups had independent assessment, through six home visits, from the seventh month of pregnancy until the child’s second birthday.

The main goals of the study were to evaluate the effects of the intervention on postnatal depression, assessed with Cox’s EPDS (Cox, Holden & Sagovsky, 1987), the child’s psychological symptomatology at age two with the CBCL 1.5–5 (CBCL 1.5–5, Achenbach & Rescorla, 2000) the Parent’s Stress Index (PSI, Abidin & Wilfong, 1989), parental ability to adjust to and foster the child’s development (HOME, Bradley & Caldwell, 1979), the child’s attachment status (Q-Sort home assessment of child’s security of attachment, Waters & Deane, 1985), and questionnaires on the use of health and social care services. A subsample of 117 mother–infant dyads was gathered by asking every mother in both intervention and control groups, following the order of inclusion if they agreed in participating in a supplementary assessment. Sixty-five mothers from the intervention group and fifty-two from the control group were thus recruited into the Attachment-capdep ancillary study). When infants were from twelve to sixteen months of age, their mothers were invited to participate in the CAPEDP-A study. If they accepted, they signed an informed consent form and an appointment was then given to them for a two hour assessment procedure within two weeks. Mothers received fifty euros gratification for participating in the CAPEDP-A study (Tereno et al., 2012). A free play session and a nappy change session were video recorded, and the mother’s behaviour rated using the Insightfullness Assessment (Oppenheim & Koren-Karie, 2002). Also, the mother’s disorganising behaviour was assessed using AMBIANCE (Lyons-Ruth, Bronfman, & Parsons, 1999), in the context of the strange situation procedure. Table 1 gives the several assessment tools used in both samples.

A major goal of the study was to examine to what extent an attachment-grounded, home-based intervention by trained and supervised psychologists, using interactive guidance on a firmly built working alliance could increase the mother’s mentalising abilities, as assessed with Oppenheim’s Insightfulness Assessment, decrease her feelings of isolation and stress and increase her sensitivity to the child’s cues. An additional goal of the intervention was to increase the child’s attachment security and decrease disorganised attachment in the child. In addition to this attachment focus, the intervention was centred on the idea of empowerment, aiming at helping the mother make the most
Table 1. Scales, tests and assessment tools used in the CAPEDP study.

<table>
<thead>
<tr>
<th>Tool used</th>
<th>Variable measured</th>
<th>Type of instrument (self-administered/hetero-questionnaire)</th>
<th>Author/validation study</th>
<th>Scores/subscales</th>
<th>Timing of use (months)</th>
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<tbody>
<tr>
<td><strong>Main goals indicators</strong></td>
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<tr>
<td>Edinburgh Post-partum Depression Scale (EPDS)</td>
<td>Pre and postnatal depression</td>
<td>Self-administered</td>
<td>(Cox et al., 1987) France: (Guédeney et al., 1995)</td>
<td>One global score range 0–30 (clinical threshold: pre-partum = 12, postpartum = 11)</td>
<td>Prepartum, 3, 6, 12</td>
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<tr>
<td>Home Observation for the Measurement of the Environment (HOME)</td>
<td>Parental skills</td>
<td>Hetero-questionnaire (Bradley &amp; Caldwell, 1979)</td>
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<td>Five subscales</td>
<td>3, 12, 18</td>
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<tr>
<th>Tool used</th>
<th>Variable measured</th>
<th>Type of instrument</th>
<th>Author/validation study</th>
<th>Scores/subscales</th>
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<td><strong>Secondary goals indicators</strong></td>
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<tr>
<td>Alarm Baby Distress scale (ADBB)</td>
<td>Withdrawal behaviour</td>
<td>Hetero-questionnaire</td>
<td>(Guedeney &amp; Fermanian, 2001)</td>
<td>0–10 (clinical threshold = 5)</td>
<td>18</td>
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<tr>
<td>Attachment Q-Sort (AQS)</td>
<td>Attachment</td>
<td>Hetero-questionnaire</td>
<td>(Waters &amp; Deane, 1985)</td>
<td>Correlation with typical secure pattern</td>
<td>18</td>
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<tr>
<td>Social Support Interview (SS-A; SS-B)</td>
<td>Social support</td>
<td>Hetero-questionnaire</td>
<td>(Vaux et al., 1986; Vaux et al., 1987)</td>
<td>Description of social support structure</td>
<td></td>
</tr>
<tr>
<td>Parental cognition and behaviours</td>
<td>Parental self-efficacy</td>
<td>Self-administered</td>
<td>Boivin et al., 2005</td>
<td>Parental coercion (0–10) Parental self efficacy (0–10) Parental impact (0–10)</td>
<td>3, 12, 24</td>
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<tr>
<td>(Pacotis)</td>
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<td>Brunet-Lézine II Developmental Quotient (QD)</td>
<td>Developmental Quotient (QD)</td>
<td>Test</td>
<td>Brunet-Lézine Revised, 1997</td>
<td>Developmental age (QD: 100, 4 subscales)</td>
<td>6, 12, 24</td>
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<tr>
<td>Knowledge of Infant Development Inventory (KIDI)</td>
<td>Knowledge of infant development</td>
<td>Self-administered</td>
<td>(McPhee, 1981)</td>
<td>Score -48 to 48</td>
<td>P, 3, 24</td>
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<tr>
<td><strong>Parental Stress Inventory (PSI)</strong></td>
<td><strong>Parental stress</strong></td>
<td><strong>Self-administered</strong></td>
<td><em>(Abidin &amp; Wilfong, 1989)</em></td>
<td><strong>Parental stress (0–48)</strong></td>
<td>3, 6, 12, 24</td>
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<td><strong>Symptom Check-list (SCL-90)</strong></td>
<td><strong>Mother’s psychological disorders</strong></td>
<td><strong>Self-administered</strong></td>
<td><em>(Derogatis, 1994)</em></td>
<td><strong>P, 3, 24</strong></td>
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<td><strong>Other indicators</strong></td>
<td><strong>Services</strong></td>
<td><strong>Use of services</strong></td>
<td><strong>Hetero</strong></td>
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<td><strong>Description of the use of services</strong></td>
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<td></td>
<td><strong>Questionnaire</strong></td>
<td><strong>Mother’s attachment</strong></td>
<td><strong>Self-administered</strong></td>
<td><em>(Bifulco et al., 2003)</em></td>
<td><strong>Vulnerability Insecurity</strong></td>
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<td></td>
<td><strong>Vulnerable Attachment Style Questionnaire (VASQ)</strong></td>
<td><strong>Working alliance</strong></td>
<td><strong>Self-administered</strong></td>
<td><em>(Horvath &amp; Greenberg, 1989)</em></td>
<td><strong>Score 12–84</strong></td>
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<tr>
<td><strong>Working Alliance Inventory (WAI)</strong></td>
<td><strong>Attachment A CAPDEP specific assessments</strong></td>
<td><strong>Infants’ attachment</strong></td>
<td><strong>Hetero: video of strange situation 7 episodes</strong></td>
<td><em>(Ainsworth et al., 1978)</em></td>
<td><strong>Secure attachment</strong></td>
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<td><strong>Insecure-avoidant</strong></td>
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<td><strong>Insecure-ambivalent/resistant</strong></td>
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<td><strong>Disorganised/disoriented</strong></td>
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<td><strong>attachment</strong></td>
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<th>Tool used</th>
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<th>Type of instrument (self-administered/hetero-questionnaire) study</th>
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of all available resources (Rappaport, 1987). To what extent could an intensive, psychologically focused intervention add to the general preventive effect of the PMI?

Seven recently graduated female psychologists were trained in working alliance skills, early development, attachment, and aspects of health promotion and prevention during pregnancy. Four additional psychologists, with the same profile, made up the assessment team. The members of both teams participated in the demanding task of recruiting 440 young mothers in ten state-run hospital maternity wards.

The intervention was manualised but tailored to each family’s needs. The manual was inspired by Weatherston’s work on home-visiting and reflective supervision (Weatherston, 2000), the Florida State IMH Partners for a Healthy Baby (Florida State University Center for Prevention and Early Intervention Policy, 2007), and by the STEEP™ programme (Center for Early Education and Development, 2009). The manual described the specific goals for home-visits during the different periods of the study. The intervention consisted of home-visits during pregnancy and the first semester, then the frequency slowly decreased along time; the frequency of home-visits was adjusted to each families needs. In between visits, phone calls could be made as often as necessary. The theoretical basis of the intervention heavily drew from Fraiberg’s concepts: “Ghosts in the nursery” (Fraiberg, 1980), with the key concepts of developmental conflict between infant and a young mother. We largely used Susan McDonough’s developmental guidance through the use of video clips, home made, and shared with the mother (McDonough, 1993). The interventionist also provided films on delivery, as well as aspects of child’s development in order to view and discuss them with mothers. The study by Lyons-Ruth (Lyons-Ruth & Melnick, 2004), showed that such targeted early prevention could have beneficial effects on preventing later externalising behaviour, with a clear dose effect relationship; further, the model of joint intervention by nurses and by infant mental health practitioners conducted by Boris et al. (Boris, Larrieu, Zeanah, Nagle, & Steier, 2006; Zeanah, Larrieu, Boris & Nagle, 2006) confirmed this effect with vulnerable populations.

The motto for the home-visiting team was: build a working alliance, and allow yourself to be used by mothers as a source of information, support, and help, as well as a person with whom they can reflect about themselves, their life and their relationship with their child.
Overview of findings

Our results are preliminary, with much data yet to be analysed (Guedeney et al., 2011), both qualitatively and quantitatively. The fidelity and adherence to the project was quite good, as assessed by a qualitative analysis of 1058 home-visit case notes (Plos One, 2012). Qualitative study of the supervision process is underway.

One significant finding after recruiting this large sample, with a fifty per cent acceptance rate, was that it was much more vulnerable than expected. Mean maternal age was twenty-two, with a high prevalence of postnatal depression (fifty per cent), with high levels of suicidal ideation, and a high incidence of unwanted pregnancies (Saias et al., 2012).

As indicated in the flow chart of Figure 1, the drop-out rate was high. Fifteen per cent accepted to participate, then disappeared before doing the first interview. The final drop out rate, several years later, was sixty-five per cent, no doubt linked to the geographical volatility of this high risk, vulnerable sample, in the heart of one of the biggest urban settings in Europe. However, the drop out rate was significantly lower in the intervention group. Due to the high drop out rate, we considered the results for the global scores on the Home and on the CBCL as inconclusive.

The impact of the intervention on postnatal maternal depression measured at three months after giving birth, was, at first glance, disappointing: the intervention did not significantly decrease PND. On the other hand, there was no suicide attempt despite a high level of suicidal ideation. The fact that six long home-visits took place for assessment in the control group, along with referral if needed may have made a possible difference between the two groups. It also must be remembered that the project did not compare the intervention to nothing or to a waiting list but to care as usual provided by the PMI and free and compulsory prenatal consultations.

The intervention, however, did yield some results that were deemed clinically important. One significant result was a positive effect of the intervention on the use of the PMI (Well baby clinic) as well as the use of mental health services. The intervention also significantly increased mothers’ social support; they played more with their children, and provided them with age-appropriate playing environments. Further, there were less dysfunctional parent–infant interactions, as assessed with the PSI at six months of age of the child. Parents’ feelings of competence were increased at twelve months. In the intervention group, there was
Figure 1. CA PEDP Flow-chart.
*One patient had his first visit at T2, and another at T3.

significantly more contact with the PMI at six and twenty-four months, as well as more contact with a psychologist or a psychiatrist, when the family was referred to supplementary mental health support by the head of the research team (AG).
The Attachment sub-sample analysis yielded some particularly interesting results. The whole sample was used to make the first normative description of attachment categories in a French sample, and found the usual sixty per cent rate of security, with security being higher in the intervention group, as assessed both with the Q sort procedure and with the Strange Situation. The most striking result was the effect on disorganisation, which was significantly reduced in the intervention group (Guedeney et al., submitted). This result is in line with the recent meta-analysis on the effect of different socio-cultural factors on attachment disorganisation in the child, showing that the accumulation of five or more independent vulnerability factors, such as being a young mother, low SES, low level of education, being part of a minority ethnic group or misuse of substances can lead to infant disorganisation (Cyr, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2010). This effect in reducing disorganisation of attachment in the child is remarkable in that it was not associated with a decrease in the mothers’ levels of postnatal depression or an increase in their mentalising ability (using the Insightfulness Assessment) (Oppenheim & Koren-Karie, 2002), but was indicated by a decrease in the mothers’ disorganising behaviour as assessed with the AMBIANCE scale (Lyons-Ruth & Melnick, 2004).

We are aware of a number of limitations of our study. The first was the lack of a pilot study, which would have revealed the importance of concentrating on a smaller catchment and intervention area, and more systematic cooperation with existing local PMI and social care services and, potentially, resulting in a lower drop out rate right after inclusion. Additionally, the intervention might have been more successful with more experienced psychologists, or by a team including both nurses and psychologists. Giving more emphasis on assessment of postnatal depression, using more intensive BCT techniques or interpersonal therapy (IPT) and using both individual and group help for depressed mothers might have yielded a greater effect on the level of postnatal depression. Finally, the A Capdep subsample (n = 120) is a volunteer sample and therefore biased.

*The importance of supervision*

Clearly, these young, clinically inexperienced psychologists, however energetic and courageous they were, making home-visits sometimes late in the evening or on weekends in distant and difficult suburbs,
could not have achieved what they achieved without benefiting from support, supervision, and ongoing training. In a minority of cases, their work was limited to simple information and prevention, reducing the anxiety and the isolation of young mothers. But in other cases, they found themselves engaged in veritable parent–infant therapies, in individual therapy with the mother, or even in couple therapy. They brought back some incredible personal stories of different mothers, and were able to help mothers work through major traumatic experiences: abuse and neglect, separation and loss, often in the context of migration and war, or having been raised by parents with mental health problems.

In order to provide them with this support, we progressively installed a multi-layered supervision system. The first layer was individual weekly supervision by a child psychiatrist or a therapist with psychodynamic training. Senior therapists were chosen from three community mental health services for children. This supervision allowed for the teams to work on countertransference issues, which were sometimes very present in this delicate parent–infant work. Group supervision, twice a month, centred on risk issues for both the child and the mother, and sometimes for fathers. Issues around referral to mental health services, social services or child protection services were treated by the first author. A specific supervision was put into place for the use of video and for discussing video clips with parents. Finally, each home-visiting psychologist was encouraged to call the child psychiatrist-psychoanalyst (AG) at any time, day or night, if she was in danger or in distress, or felt that the situation with a mother and child was dangerous. From a psychopathological point of view, axis I DSM-IV R or ICD-10 diagnoses reportes included major depressive episodes, anxiety disorders, and occasional feeding disorders, psychotic states, borderline personality disorders. Substance misuse was not uncommon, and the level of traumatisation was striking. Disorders noted were also frequently associated with relationship disorders, as assessed using global assessment with the PIR-Gas in the DC 0–3R (Zero To Three, 2005).

Theoretical and practical implications

We believe our work provides some support to the idea that attachment theory is an adequate theoretical ground for early prevention. The intervention was home based, and manualised, but individually tailored to suit the needs of each family. Intervention was made by young
psychologists, trained in the development of a working alliance with the family, and in auto video work to improve awareness of mothers of the child’s development. Intervention was effective in reducing child’s disorganisation of attachment, even though it did not reduce the mother’s level of postnatal depression. Our study experience leads us to plea for making such psychologically oriented preventive work, ideally along with nurse’s preventive work on mother’s health. Reducing disorganisation of attachment in infants is an important goal, as such disorganisation can result in an increase in later psychopathology. Disorganising parental behaviours are therefore a main target for early preventive intervention, and the use of videos within home based preventive intervention seems helpful in helping mothers become aware of their own disorganising behaviours. We also felt that a dual co-ordinated NFP and mental heath preventive intervention seems to be effective in increasing the child’s security of attachment, decreasing the disorganising behaviours from parents, as well as in reducing the young parents isolation. Such an intervention seems to help the families make a better use of well baby clinics and other services. Such a set of effects can be obtained by young psychologists even with little professional experience but with a specific training on home based intervention, that includes reaching a working alliance, increasing mentalization and using video assisted developmental guidance techniques. However, such a home based preventive intervention is demanding and calls for a high level of supervision and support to be effective. We have begun with a follow up study of the CAPEDP families, to check for stability of beneficial and other effects after one year.

References


CHAPTER FIVE

Understanding how traumatised mothers process their toddlers’ affective communication under stress: towards preventive intervention for families at high risk for intergenerational violence*

Daniel S. Schechter and Sandra Rusconi Serpa

Within the context of infant–parent attachment, primary caregivers provide multiple, complex, and often “hidden” regulatory functions. These functions are akin to individual coloured threads that then when woven together, compose a brilliant, unique, and clearly recognisable pattern, itself the focus of the artful tapestry that is the individual infant’s relationship to his primary caregivers (Hofer, 1984). One form of “hidden” regulation of critical importance to the child’s capacity to form healthy relationships with others and to learn, is that of emotion regulation (Cassidy, 1994). The term “mutual regulation,” as first used by (Tronick & Gianino, 1986), refers to a bidirectional, albeit asymmetric, process of emotion regulation between the adult caregiver and the infant.

Focus of our study

Our studies both in New York and in Geneva are interested in understanding the interplay of factors that disrupt and facilitate mutual

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emotion regulation. It is well known that maternal psychopathology (e.g., depression (Tronick & Gianino, 1986) or anxiety (Moore, Whaley, & Sigman, 2004)) disrupts mutual regulation. It is clearly established in our field that maternal history of attachment security and parental reflective functioning as its robust marker (Fonagy, Steele, Steele, Moran, & Higgitt, 1991; Slade, Grienenberger, Bernbach, Levy & Locker, 2005) are robust predictors of maternal caregiving sensitivity, disrupted parent–infant communication, and thus maternal ability to engage in and be supportive of mutual emotion regulation with her child.

**A central hypothesis**

Central to our programme of research is the hypothesis that mothers with violence-related post-traumatic stress disorder (PTSD) may experience their very young child’s routine distress as a trigger of pre-existing post-traumatic stress (Schechter, Kaminer, Grienenberger, & Amat, 2003). We have noted, via our clinical observations, the particular phenomenon in which intense displays of helplessness, frustration, rage, and terror by very young children with limited developmental capacity to regulate their emotion remind many mothers who have been victims of violence of either their violent perpetrators’ behavioural dyscontrol, or the victim-mother’s own fear and helplessness. As such, the young child can trigger her mother’s PTSD symptoms.

Clearly, such a perceived interpersonal threat by the very young child in distress can shift a mother’s primary preoccupation with that young child’s needs to that of her own individual survival as marked by the possible fear behaviors of fight, flight, or freezing (Porges, 2007). As if that were not difficult enough, this redirection of attention to self-preservation removes the mother from her very important focus on her child’s cues, with a focus on self rather than mutual-regulation of arousal and emotion, greatly increases the risk for gross misinterpretation of her child’s cues, increasing the child’s internal dysregulation of emotion and arousal.

Additionally, if we are correct in saying that the child’s helplessness, fear, and rage can elicit traumatic memory traces in the post-traumatically stress disordered mother, then it is at these moments that a traumatised mother can procedurally impart to her infant a “post-memory” of trauma (Adelman, 1995)—or something of her past that
her baby never experienced first-hand, and that becomes in the new mother–child relationship recast via co-construction, embodiment, and emerging language, an intergenerational communication of trauma. This “traumatic interaction” while hearkening to a prior traumatic experience of mother, takes on new meaning to both mother and child within their intersubjective field which meaning is likely to be obscure to others (Leuzinger-Bohleber, 2008; Schechter, 2004; Varela, Thompson, & Rosch, 1991; Shai & Belsky, 2011). The child can learn that “to be with mother”, they must share hypervigilance, separation anxiety, mother’s projections onto the child, and dysregulation, producing an attachment disturbance at the level of the secure base.

When we started our research in this area, there had only been a single published study on PTSD and parenting (Lyons-Ruth & Block, 1996). This study had found a moderate correlation between severity of self-reported maternal PTSD symptoms that were associated with histories of maternal histories of maltreatment and hostile-intrusive caregiving behaviour, the latter particularly associated with history of physical abuse (Lyons-Ruth & Block, 1996). In cases of maternal violence-related PTSD, these repeated acts of attentional redirection to mother’s self preservation amplify the sense of helplessness and distress in the child. Helplessness and distress in the child, in turn, often lead the mother to further defend herself from her own feelings of helplessness and to distance herself emotionally and/or physically from the child, rather than providing contingent comfort, emotional containment, and protection.

PTSD and negative maternal attributions

Maternal attributions clue the clinician into the mother’s mental representations of her child and relationship with her child. The running record of these maternal representations—“working model” in terms of attachment theory—are largely based on a mother’s own relational experience and strongly predict how a mother will behave with her child (Zeanah, Larrieu, Heller, & Valliere, 2000). A mother’s perception of her child may be negatively skewed by the experience of interpersonal violence and subsequent triggers of post-traumatic stress (Lieberman, Van Horn, & Ippen, 2005; Schechter, et al., 2003). Our clinical observations informed this hypothesis; namely, the majority of PTSD-afflicted mothers tended to label their very young child as one of the three greatest stressors in their lives rather than as sources
of joy and have distorted, negative, and poorly integrated maternal mental representations of the child (Schechter, Myers, Brunelli, Coates, Zeanah, Davies et al., 2006). In this previous paper, we also described the association between mentalization as coded from maternal narrative, otherwise operationalised for measurement in research as “maternal reflective functioning (RF)” and balanced, integrated positive and negative maternal mental representations of her child.

Often, caregivers with PTSD very specifically misperceived their child’s separation anxiety and sense of helplessness as anger, coerciveness, or otherwise a threat. As a result, many traumatised mothers stated that they often try to avoid their child’s distress by “tuning out”, “blocking out the crying”, or “leaving the room” so as to maintain their own emotional regulation (Schechter, 2003) We also found that mental representations that were excessively angry or otherwise distorted by being excessively negative or otherwise distorted by virtue of attributing to the child characteristics that would clearly be beyond his power or inappropriate for his age were associated with symptoms of violence-associated PTSD (Schechter, Coots, Zeanah, Davies, Coates, Trabka et al., 2005).

The child as a trigger of maternal pre-existing PTSD

The idea that the child herself could be a trigger of pre-existing post-traumatic stress for a parent emphasises the co-constructed parent–child interaction with primacy on the child’s impact on the parent in moments of distress and the parent’s reaction to the distressed child in return. This is in contrast to the more frequently described and no less important effects of the parent with her history and how she affects her child (Scheeringa, Peebles, Cook, & Zeanah, 2001). One of the most well-studied paradigms in our field that is used to study child-caregiver attachment, the Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978) as well as the Crowell Procedure as modified by Zeanah (2000) involves parent–child separation and reunion that offers us a normative stressor that is observable in the laboratory and that, particularly within the second year of life, tends to elicit parent and child distress. While much attention has been paid both to what happens during reunion, and effects of mother’s state on the child, relatively little attention has been paid to what happens in mother’s and child’s mind during separation and the subsequent effect of the child’s distress on the mother.
QUESTIONS OF THE STUDY

We have asked first, quite simply, using this laboratory version of a common stressor (i.e., separation), if there is a difference in the way violently traumatised and non-traumatised mothers are affected by their child’s separation distress, and/or if the children of a traumatised mother become more distressed than those of non-traumatised mothers? Secondly, during the moment of reunion, when traumatised mothers open the door, what happens? How do they perceive or read their child’s cues and specifically their child’s distress? Thirdly, how are traumatised mothers compared to healthy mothers at tolerating and containing their own and then their child’s fear and anxiety, responding to their child’s bid for attention upon returning to the playroom? Are the mothers able to settle into joint attention (see the definition we have operationalised below) in the play that follows those first moments of reunion as well as they had in quiet play prior to the stressor of separation?

The New York parent–child interaction project (NY-PCIP)

The NY-PCIP was itself a National Institute of Mental Health funded replication and expansion at Columbia University Medical Center of an earlier original study of a referred sample, but this time, within a community paediatrics clinic sample. The study ran from February 2004 until February 2007. Analyses of the wealth of data from this study are ongoing with publications still in preparation and under review. The sample consisted of seventy-seven mothers ages eighteen to forty-eight (mean twenty-nine years, SD 6.8) with children ages twelve to forty-eight months old (mean twenty-eight months, SD 10.7), out of which fifty-eight per cent of boys were included in the study. The majority of mothers and children were Hispanic (eighty-one per cent). The average length of maternal education is twelve to thirteen years. Roughly sixty per cent are single mothers. Fathers’ histories were enquired about but the fathers themselves could not be included in this study.

Protocol

After informed consent and screening (exclusion criteria included active psychosis, intoxication, developmental or physical disabilities
that would preclude performance on experimental tasks), mothers underwent three videotaped interviews and observations.

Visit one focused on the mother’s mental state and psychopathology. Mothers were also interviewed about their mental representations of their child and relationship with their child (Working Model of the Child Interview WMCI) (C. H. Zeanah & Benoit, 1995). A detailed maternal life events history was obtained followed by clinician assessment of trauma-associated psychopathology (i.e., PTSD, dissociative, and depressive symptoms).

Visit two focused on the observation of interactions with the child and on the mother-child relationship assessment that included free-play and challenging structured play tasks that forced maternal scaffolding of the child’s activity, and most importantly, different stressors that would both likely resemble day-to-day sources of child distress; principally, separation-reunion but also, the frustration of forced clean-up and a novel encounter or surprise (i.e., being cared for by a stranger, meeting a furry spider toy that jumps).

Visit three, the “Clinician Assisted Video-feedback Exposure Session (CAVES)” is an experimental intervention that is described further below (Schechter, Myers, Brunelli, Coates, Zeanah, Davies et al., 2006).

**Imaging sub-study**

What happens in the brains of mothers who have been traumatised by violence and maltreatment when they parent young children? With Brad Peterson and his MRI lab at the New York State Psychiatric Institute, and support from the Sackler Institute for Developmental Psychology and the NIH, we conducted a small neuroimaging study that tried to get at what subserves parental perception of child emotion and parental behavioural response in the face of common stresses in parenting a young child, among mothers who are traumatised versus healthy controls. The goal of this sub-study was specifically to understand how mothers’ stress during separation might affect their processing of child emotional communication while watching video clips of their own and unfamiliar children both in a positive affect-eliciting or free-play condition and a negative-affect eliciting or separation condition from visit two. Those mothers interested and eligible to participate were offered an additional consent form and participated in a neuroimaging sub-study which took place between visit two and visit three.
RESULTS OF THE NY-PCIP

Psychological findings

Mothers response to separation and other forms of stress

We found that mothers with IPV-PTSD reported more parenting stress in general on the Parenting Stress Index (t-test [df 1,44]: −2.35; p < 0.05); also see (Schechter, Willheim, Hinojosa, Scholfield-Kleinman, Turner, McCaw et al., 2010). More importantly, during our post-MRI interview revealed that mothers with IPV-PTSD were significantly more stressed by seeing videos of their own and unfamiliar children during separation than controls (Schechter et al., 2012).

Mothers reading of child emotional communication on reunion

Mothers with IPV-related PTSD describe their children much more negatively and in terms that are age-inappropriate than healthy controls in quantitative analyses (Reliford & Schechter, 2009; Schechter, Myers, Brunelli, Coates, Zeanah, Davies et al., 2006). We have also been analysing qualitatively maternal interpretation of child affect upon reunion and find most often confusion between child anger, controllingness vs. child fear, helplessness (Schechter, 2003; Schechter, Myers, Brunelli, Coates, Zeanah, Davies et al., 2006). We note that our findings converge with those of studies in the literature that have characterised maternal attributions towards maltreated children as negative and hostile (Berlin, Appleyard, & Dodge, 2011; Nix et al., 1999). However, the majority of the mothers in our study, while clearly “at-risk”, were not to our knowledge “maltreating” their children. They were rather suffering from having been maltreated, and from related PTSD. They frequently displayed atypical but not outright abusive caregiving behaviour (Schechter et al., 2008). It has been shown that as many as one-third of maltreated parents have been maltreated themselves (Oliver, 1993); but also that most parents who have been maltreated do not maltreat (Oliver, 1993). These findings together with the fact that the studies of mothers of maltreated children that are cited above did not have a control group of traumatised, non-maltreating mothers, suggest that further study of maltreating mothers and their children controlling for the effects of IPV-PTSD is indicated.
**Behavioural findings**

Mothers response to their reading upon reunion

It is in this area that we have the most findings. We have noted that IPV-PTSD diagnosis and symptom severity as mentioned above is significantly associated with parenting stress and that both measures of stress are associated with more “atypical caregiving behaviour” in which the child–parent emotional communication is disrupted (i.e., “disrupted communication”) on the Atypical Maternal Behaviour Instrument (AMBIANCE; Lyons-Ruth, Bronfman, & Parsons, 1999). The AMBIANCE coding system measures dimensions of atypical caregiving behaviour that encompass both “frightening” and “frightened” behaviour as defined by Main & Hesse (1990), but also additional behavioural dimensions including: Discordance of affective communication, avoidance/withdrawal, and role/boundary-confusionn (Lyons-Ruth, Bronfman & Parsons, 1999). The AMBIANCE has shown excellent stability of maternal behaviour over six years and has been predictive of insecure and disorganised attachment across a number of studies (Madigan, Voci, & Benoit, 2011; Moran, Forbes, Evans, Tarabulsy, & Madigan, 2008). The AMBIANCE weights more heavily maternal behaviour with her child upon reunion than during play prior to separation–reunion. We found that greater disrupted communication on the AMBIANCE is associated with less time spent in joint attention during play before and after separation–reunion. However, during play following separation–reunion, greater maternal PTSD severity is associated with less maternal availability to respond to child bids for joint attention (Schechter, Willheim, Hinojosa, Scholfield-Kleinman, Turner, McCaw et al., 2010).

Joint Attention—as many of you will be more familiar with in the context of research specifically on language development and autistic spectrum disorders, is also a crucial focus of evaluation when considering emotion regulation and the development of secondary intersubjectivity beginning at age eight to ten months. Joint Attention is the process by which two individuals alert one another, often non-verbally such as by gaze and-or pointing, to a common focus of attention and reference each other so as to acknowledge their shared focus. It is thus a “triadic skill”, in that it involves two people plus a point of reference, which
may either be an external object or event or an internal state or event (Schechter, Willheim, Hinojosa, Scholfield-Kleinman, Turner, McCaw et al., 2010).

With regards to internal state awareness, we have argued that this capacity is an important prerequisite to a mother’s assisting her child with emotion regulation: jointly attending to the child’s emotional state and being aware of the child’s efforts to read mother’s emotional state. A mother’s ability to consider her own mental state as distinct from that of her toddler’s while at the same time trying to read her young child’s mental states and intentions, requires that the mother not get caught up in the toddler’s assumptions that mental states are equivalent to physical reality (i.e., “psychic equivalence”). For example, if a one-year-old has a mild fall and is unharmed, but panics and fears that he is in mortal danger, the mother must simultaneously consider her own appraisal of safety, while also acknowledging and marking her child’s distress, and then reassuring her child that the physical reality is not nearly as bad as his mental state of panic suggests—and thus that he is not in danger. The toddler’s assumptions that mother will share his tendency to appraise his situation based completely on his feelings are developmentally expected for a young child but not for an adult parent (Fonagy & Luyten, 2009). Similarly, if the mother does not acknowledge an understanding of the child’s perspective—or worse, mocks it, the child is very likely to be left feeling abandoned and misunderstood.

* * *

Disturbances of child–parent attachment

We furthermore noted that greater maternal PTSD severity, is associated with disturbances of child–parent attachment when we analysed data from the Disturbances of Attachment Interview (DAI) (Schechter & Willheim, 2009; Smyke, Zeanah, Fox, & Nelson, 2009). We found that four behaviours in particular: reckless self-endangering behaviour, separation anxiety, hypervigilance, and role-reversal were interestingly and significantly related to one another (Cronbach’s alpha = .75) to form a construct labelled in the literature as “Secure Base Distortion”. This cluster of behaviours were significantly related to the severity of maternal PTSD symptoms (Schechter & Willheim, 2009).
Neuroimaging findings

What do we think is going on in the brain of traumatised mothers during separation that would account for this disruption of mutual emotion and arousal regulation? We have already found that when mothers watch videos of their own child and unfamiliar children during separation (i.e., a stimulus-condition that shows the child in a helpless, and frightening context), as compared with quiet play with mother (i.e., a stimulus-condition that shows the child in a safe and empowered context), the higher cortical areas (medial prefrontal cortex, superior frontal gyrus) that are activated in non-traumatised mothers’ brains (controls) are not activated in the traumatised mothers (PTSD-cases). Traumatised mothers show greater activation in limbic areas associated with hypervigilance and response to contradictory emotional input (i.e., entorhinal and anterior cingulate cortex) (Schechter et al., 2011). These neural activation findings may well help us understand what subserves the disruption of maternal availability for joint attention after separation corresponding to maternal severity of PTSD (Schechter, et al., 2010). They also suggest that the “internal mutual regulation” that under normal circumstances takes place within the brain between higher cortical areas and limbic regions as observed through the microscope of functional brain imaging may be disrupted among traumatised mothers. So, this disruption among traumatised mothers at the level of neural activity in the brain may well be parallel to the behavioural disruption in the “external mutual regulation” of emotion and arousal with their young children that we observe with the naked eye. This is further supported by a post MRI-scan interview that we gave mothers from which we found that traumatised mothers as compared to healthy controls, rate that watching their own and unfamiliar children during separation is significantly more stressful.

We are excited to find that these different types of findings: psychological, behavioural, and neuroimaging findings converge. We also have stress-physiology findings that are still being analysed in New York.

GENEVA STUDY

To further our understanding and follow-up on implications of these promising findings in New York, we are now working on a replication
and expansion of the New York Study Parent–Child Interaction Project in Geneva. We are recruiting a larger sample (N = 120) with one clinical group (IV + PTSD) that is more strictly constrained to mothers who have been victims of domestic violence as well as to have multiple control groups including non-violence exposed and depressed mothers. We also lowered the upper age limit to increase the likelihood of dependence on mother for regulation of distress during separation (eighteen to forty-two months). Finally, to look more closely at child outcomes leading to greater likelihood of the individual children to become more aggressive versus more avoidant, we are conducting a longitudinal follow-up yearly for up to three years, including the use of story-stem completion among other measures.

Towards specific intervention

Given the clear disturbances in many traumatised mothers’ caregiving behaviour and the associated disturbances in young children’s self-regulation of emotion and arousal, we must ask what we can do as clinician’s to help these families. Forms of parent–child psychotherapy that use video-feedback as a way of engaging the parent to focus with the clinician on interactive behaviour have been documented to result in dramatic change in parent–child behaviour in a relatively brief time-period (Robert-Tissot, Cramer, Stern, Rusconi Serpa, Bachmann, Palacio Espasa et al., 1996; Rusconi-Serpa, Sancho Rossignol, & McDonough, 2009; van den Boom, 1994; Zelenko & Benham, 2000).

An intrinsic part of evidence-based efficacious treatments for PTSD (Foa, Dancu, Hembree, Jaycox, Meadows & Street, 1999) is a clinician-guided exposure to traumatic reminders, particularly avoided negative affect and arousal. Interventions for these traumatised mothers and children need to focus on helping them tolerate trauma-associated mental states in their children and supporting them read and respond to their children’s emotional cues.

The Clinician Assisted Video-feedback Exposure Session (CAVES), (Schechter, Myers, Brunelli, Coates, Zeanah, Davies et al., 2006), was designed as an experimental paradigm both to test our hypothesis that traumatised mothers often misread child distress and defensively avoid helpless states of mind and normative aggression that remind them of their experience of violence; and second, to support the ability of mothers with violence-related PTSD to tolerate and integrate the negative, trauma-associate emotions stirred up by routine stresses such
as separation and tantrums in stimulating and modelling mother’s reflecting functioning.

This intervention combines specifically joint attention by subject and clinician to video-feedback of mother–child interaction and, specifically, the exposure of the mother to video-stimuli showing child distress, such as that during separation and reunion. The intervention also involves the clinician’s support and modelling of maternal reflective functioning (RF). As such, the CAVES integrates principles of Interaction Guidance (McDonough, 1995), mentalization-based parent–infant treatments (Slade, Grienenberger, Bernbach, & Levy, 2005) and infant–parent psychotherapy that focuses on mental representations and affects (Beebe, 2003; Lieberman, Van Horn & Ippen, 2005).

The CAVES intervention was applied in New York to thirty-two interpersonal violence-exposed mothers of very young children (from eight to fifty months). The authors observed a significant reduction in the degree of negativity of maternal attributions towards the child. The variable “maternal reflective functioning” the mother’s capacity to think about mental states in herself and her child, accounted for eleven per cent of the variance in reduction of maternal negativity (Schechter, Myers, Brunelli, Coates, Zeanah, Davies et al., 2006).

Setting and techniques of intervention

The video clips are drawn from the second visit during which we film the mother–child interaction paradigm. Four selected short excerpts (30 seconds) from videotaped mother–child interactions are viewed jointly by parent and clinician. The four excerpts alternate likely positively regarded moments (i.e., free-play and reunion) with likely stressful moments (i.e., separation and novel or otherwise distressing moments) in the following order:

a. an optimal moment in order to establish a positive, supportive frame by showing the most joyful, contingent, and mutually responsive moment during mother–child play;
b. a moment of separation (when mother is not in the playroom) to focus the mother and therapist’s attention on a situation that exposes traumatised mothers to avoided mental states of helplessness, distress, and perceived loss of protection.
c. a moment of reunion (when mother returns)
d. novel stimuli (clown and scary toys).
Following each excerpt, in order to stimulate maternal reflective functioning and evaluate changes therein, the mother is asked to think about what she and her child might be thinking or feeling in these four different moments.

* * *

With the participant mother’s permission, we will now present a clinical vignette both to illustrate how the CAVES works and also the kind of mental representations that are elicited through the WMCI before and after the intervention.

**Mme A and her son Flavio (age fourteen months)**

Flavio was first seen by our consult-liaison team when he was hospitalised for non-organic failure-to-thrive at age six months. He was treated, discharged, but returned as his weight had not been maintained. When by nine to ten months of age, it became clear that Flavio had a severe feeding disorder in the context of an attachment disturbance, an infant–parent psychotherapy was initiated with three to four sessions per week on the paediatrics ward. This initial treatment included a dyadic focus plus individual work with both parents and infant. Little progress was observed in terms of the feeding problem as well as the attachment disturbance as Mme A did not seem to be able to link the exchange in one session to the next, no matter how frequent the sessions. Mme A often spoke of a new difficulty or setback. Her negative vision of Flavio and her frustration with him continued. Additionally, during the course of treatment, Flavio’s father withdrew from participation amidst mounting conflict with Flavio’s mother. The couple separated several months into the treatment as Flavio approached twelve months. Mme A felt both liberated and burdened, the latter resulting from her now having to care for Flavio largely alone.

Mme A & Flavio joined our research study when Flavio reached thirteen months and participated over the next six weeks. Mother completed the CAVES and said that she had not imagined that her reactions to her child were as she had seen them in the video. She also did not feel that they were affected by her earlier experience. She thus felt “deeply moved” by the CAVES and and began to feel closer to Flavio. Subsequent dyadic psychotherapy with the same therapists as prior to Mme A’s participation in the research protocol, had already included videofeedback in the form of modified interaction guidance (Rusconi
Serpa, Sancho-Rossignol, & McDonough, 2009). But it had been without a trauma-focus and without awareness of certain interactive behaviors that suggested that Flavio represented a threat to his mother and that his mother also represented a threat to Flavio. Only after the participation in the CAVES and the original therapists reviewing the research tapes with the research team, did the therapists begin to notice significant change in their understanding of the case and in their interpretation of maternal and child interactive behavior that led to improvement in the mother–child relationship and simultaneously in the child’s feeding behavior. This will be discussed in further detail below.

About Mme A

Mme A, was twenty-two at the time of our study, a Genevan woman who was unemployed, and on public assistance. She had just begun training to become a home health-aide when she found out she was pregnant with Flavio and stopped attending. This was in the context of extreme and chronic domestic violence between her parents and her alcoholic father’s otherwise erratic often physically and verbally abusive behaviour with the children. Her mother was not unfortunately a source of comfort; often depressed, Mme A recalls that her mother had a very “negative” and devaluing view of her, and even more so during adolescence. Mme A was often expected to care for her brother who was ten years younger. Mme A left her parents’ home for Flavio’s father at age eighteen. He too had a history of significant domestic violence exposure and went on himself to have many brawls and to have a violent temper.

Pregnancy was a surprise yet “desired”; mother developed peripartum depression; father increasingly irritable on verge of violence in months leading up to Flavio’s initial hospitalisation.

Maternal representations before the CAVES at thirteen months based on the Working Model of the Child Interview (WMCI) responses

So how would you describe Flavio’s personality?

Well … very lively. He’s the nicest! Very affectionate, tender and yes, very active! He is always doing something, touching everything, opening everything. I don’t know … like if he has an object in his hand
and I try to take it, he gets annoyed. He is big for a young child and so he is a bit difficult to manage in fact ... it’s not easy because he acts pretty ... well he knows very well what he wants and what he doesn’t want to show.

* * *

Please pick five adjectives that describe Flavio’s personality:

So, one could say he’s intelligent. Adorable as anything. He has a rather strong personality, but how to describe that better? Well basically, willful. Active then yes one hundred per cent, no doubt! And stubborn as it is the first thing that is definitely him ... He’s like his dad. When it’s that one thing (that he wants), it has to be that one thing and no other!

The comparison of this toddler to adult men that are big, strong, and to be feared, emerges further when the following question is asked:

* * *

Whom does Flavio remind you of?

Well ... my father because my father hit my mother a lot but even more ... That makes me think of my boyfriend and at the same time, my father. Because my father is in fact also someone with a strong personality, imposing, and my boyfriend the same, the father of Flavio therefore reminds me of these two personalities because Flavio is a strong kid. It makes me think a little bit of both indeed. He is very ... everyone tells me that also in fact from his face. He looks like both men ...

Mother was observed to demand that Flavio at sixteen months eat with a large fork that had a bulky toy car attached to make it even more challenging ...

* * *

After the CAVES, mother described Flavio as intelligent, adorable, ... has a strong personality and active. However, we noted an important change: She replaced “willful and stubborn” with “wary”, showing Flavio to be vulnerable like his mother.

Below are key moments excerpted from the CAVES. We present the video stimulus that mother watches and then the interchange between clinician and mother that follows:

Mother watches separation: Mother leaves the room at the sound of the knock on the door and does so without saying anything to Flavio. Flavio becomes very distressed and cries in front of the
door holding a toy cup. Mother is waiting silently just on the other side of the door, holding the stopwatch and waiting three minutes before re-entering.

«Stuck at the door»

TH: What happened in that moment there?
M: The separation … is difficult for him in fact.
TH: Uh huh …
M: So, that’s why before I said that he knew that I was behind the door, because he did not take his toys to come and play actually. He was totally fixed on the door, stuck in fact at the door. So there, it is true that he was not … me I had never seen him like that …
TH: Uh huh …
M: Crying so much in fact.

«Anger»

TH: … What could he have been feeling behind that door?
M: Anger.
TH: It was anger.
M: Yes, I think so.
TH: So, it was anger.
M: … And because he didn’t understand … you see why I had to go and didn’t say anything to him.

«Fear that he attacks me with»

TH: And then about you, do you remember what you were thinking just then?
M: That’s that part that makes me the most nervous.
TH: Yes. Tell me a bit about what you mean by “I felt sick … nervous …”, what did you experience?
M: Um … I was scared that he did not see me the same way because, well, I left anyway (despite his upset), just like that …
TH: You meant exactly what when you say that he did not see you in the same way?
M: he says to himself, “Mommy is mean, she left me all alone”, … then afterwards he sort of attacks me because sometimes he is showing me that his not doing well. And … I was sad, even really sad because I don’t at all like to see him cry during moments like that.
Mother’s history emerges as she is asked to link feelings in separation to her own life.

TH: What are you reminded of in moments like that?
M: Wheew … Me, I was a lot like that.
TH: You?
M: Very irritable, yes. And I would cry and cry and cry. Even as a teenager, yup!
TH: OK.
M: And I would stay behind the door and I would cry and cry and cry. Out of anger.
TH: Yes.
M: Yes.

Mother watches reunion: Mother enters the room holding the stop-watch and picks up Flavio as he approaches her tentatively, loudly crying. He settles down. Yet the two avert each other’s gaze. Seemingly disoriented, mother walks first in one direction and then in the other holding Flavio in one arm.

Reassured.

TH: So, what was he feeling in that moment that we saw … what do you think he was feeling?
M: I would say a sense of relief … relief because I finally came back and took him in my arms … He felt protected even, you see because I was … I finally had him in my arms in order to reassure him. And well, that’s it.

“He loves me”

M: … There I am saying to myself that he loves me because finally, well, I see the reaction that he has when I come back.
TH: Uh huh.
M: … That he feels even protected, secure finally, you see. So, I say to myself, it was comforting to see me.
TH: Uh huh.
M: He was happy.

Mother watches scary toys: An automated dinosaur lifts its head, opens its jaws, and makes a frightening howling sound as Mme. A is stretched out in front of it with Flavio staying still at a distance
from the toy, behind mother’s legs, with a frightened look on his face, observing the toy vigilantly. Mme A appears to be trying to show Flavio that the toy is not truly a danger and she calmly points to it while remaining positioned as a buffer between the child and the toy.

«I see more signs of fear and wariness»

TH: And then when you watch that now how do you feel?
M: It makes me feel strange always because it’s true that … sometimes I am not necessarily aware that he is so attached to me and that … I see his little hints that he is afraid …

TH: Yes.
M: But in that moment it’s true that for example, I saw that …
TH: There you noticed those hints even more.
M: Yes.
TH: … Than during your daily routine when you don’t necessarily notice them so much.
M: During our daily routine, sometimes, he comes to me, yes, but … in fact, I didn’t … think, “Oh, he’s is going to be afraid”

TH: I see.
M: … Sometimes I say to myself: “There are maybe some new novel things and it’ll just happen” but sometimes, yes, sometimes I tell myself : “He is going to be afraid, watch out” and then other times “I don’t think that he’s scared … and I plunge right into it without realising.”

Mother’s history emerges further as she begins to identify with her child …

TH: So what do you recall from that excerpt?
M: Me! That I had been afraid but that I sadly did not have my mother to protect me at those times.
TH: So, it’s, it’s … him, he reminds you of yourself when you were afraid.
M: Like that wary, scared, but me, I was even more (scared) … I was scared of everything.
TH: Do you have specific memories when you were really afraid of everything?
M: Yes. Afraid to tell my mother that I smoked … well, being already a teenager, I mean!
TH: But there the memories of being afraid, like that one ... you were how old? Because you are telling me about when you were an adolescent …

M: Well … for example, at six, when my father started to hit my mother, I was scared, really scared. But … I had not had my mother there to protect me during those times and so I stayed in my room.

TH: So that is when you started to go and lock yourself in your room.

M: Yes (tearful).

Discussion of CAVES and what was mutative

So as we often see among mothers with IPV-PTSD, Mme A during the CAVES is able to “correct” during the CAVES a particular error in her reading of Flavio’s affect that we have observed among many mothers who suffer from IPV-related PTS. Before the CAVES, she labels Flavio’s fearful, helpless state during separation as angry, hostile, and controlling. During the CAVES, she begins to find Flavio to be wary, scared, in need of protection. She furthermore, before the CAVES, had exclusively identified Flavio with his father and her father—both violent men. But by the last sequence of the CAVES, Mme. A has begun to view Flavio as similar to herself, put in a helpless, frightening situation, unsure if there were an adult to protect her from danger in the context of her father’s violent assaults on her mother.

Although we notice, we have not yet completed quantitative analyses of the results in terms of the Reflective Functioning Scale (Slade, Grienenberger, Bernbach, Levy, & Locker, 2005) we observed a tendency towards greater opacity or openness to incertitude regarding her own and Flavio’s mental states. For example, in response to viewing the interaction with the novel, scary toys, Mme A says about herself in relation to Flavio: “… sometimes I am not necessarily aware that he is so attached to me and that … I see his little hints that he is afraid”. In her response, one can appreciate a potentially increasing sense in Mme A’s discourse of Flavio having his own mind and developmental needs.

Yet one can also appreciate that Mme A stops short of imagining the impact of her acknowledged prior lack of awareness of the mentioned factors on Flavio’s mental state and on her caregiving behaviour with him. The CAVES thus can serve as an evaluation tool of potential for
change and areas where further therapeutic work is needed to further mentalization in the service of affect and arousal regulation. The CAVES finally can sensitise both mother and clinicians working with her to the role of maternal trauma and attachment history in the interference with and the promotion of mentalization.

*The CAVES as a jump-start to a deeper trauma-sensitive child–parent psychotherapy*

The child–parent psychotherapy that had begun prior to Mme A and Flavio’s participation in the research had been largely focused on the mother–child interaction during and around feeding. The treatment had already begun to use a modified version of Interaction Guidance (Rusconi Serpa, Sancho Rossignol, & McDonough, 2009) involving two psychologists as therapists, mother and child first during live play and then during video-feedback. The therapists’ had not at all viewed the case from the point of view of maternal-child trauma or maternal PTSD. Mother had been described as personality disordered with features of borderline personality disorder and the child as having met criteria for infantile anorexia. This initial bout of psychotherapy seemed to be “stuck” despite mother’s efforts to take in and imitate the therapist’s interventions. There had been little change in Flavio’s feeding behaviour and food intake such that his weight continued to drop and he required nasogastric feeding.

Once the two therapists at Mme A’s and their own mutual request viewed the videotapes that had been recorded during the research, both therapists became attuned to the traumatic life history of Mme A and its effects on her mental representations of Flavio and their relationship together as well as on her caregiving behaviour. In the following excerpts from the videotaped treatment sessions, we note that both therapists form a dyad in parallel to the mother–child dyad. The two therapists work in tandem observing mother, child, and interaction, focusing on mother’s observations from her perspective as well as communicating their perspectives to the mother with attention to her traumatic symptoms, avoidance, and other psychological defence mechanisms.

Below are key moments excerpted from the modified interaction guidance treatment that followed the research evaluation and CAVES:

* * *
Video excerpt that was seen during a weekly mother–infant psychotherapy session: Mother displayed a startled response during a game in which mother and child pass a ball to one another through a tube that they look into. Mme A challenged her son by raising the tube to make it harder for her son to pass the ball successfully to her. The ball kept rolling back such that her son became frustrated and shot the ball forcefully through the tube. Mother was startled. The startled response is common among PTSD patients who have been victims of physical abuse and assault when presented acutely with a traumatic reminder (i.e., an object approaching the face).

* * *

M: I did not understand why he had shot such a fast-ball at me … there was the normal one and then that one!

TH1: What do you make of that?

M: It surprised me actually …

TH1: At that very moment, what would you say that you were thinking?

M: Honestly, I didn’t even think anything (mother’s laughter)

TH2: I am wondering to myself if you had, well if I put myself in your place … tell me if it is possible that, suddenly the fact that he shot (the ball) strongly, you were a little apprehensive that suddenly as if it were going to flood over. (Aspects that had long been addressed with this therapist during previous sessions)

M: no, not really … no.

TH2: not at that moment.

M: no, I remained surprised at the fact that he sent a hardball my way.

* * *

TH2: That is exactly why I made that remark.

TH1: Could be that it frightened you to have the ball come at you so strongly?

M: I was not expecting that in fact; I was not expecting that ball would come at me so strongly.

* * *
(Th1 explains that children, infants especially can demonstrate abrupt gestures)

**Th1:** To have such an abrupt gesture that can take you by surprise,

**M:** Oh yes, that happens to me! … sometimes, well it’s just like that, but not so much at that moment there, at that moment there it was more that I did not at all expect it in fact. But it is true that there some moments when I am frightened by certain things, indeed yes …

* * *

**Th1:** Like what for example? Do you have memories or things that …

**M:** Like that off the top of my head, no … But if I can think of something, I will tell you. But it is true that that does happen that, well, sometimes, when he wants to for example give me a hug, I get rattled … because I either get scared because sometimes he gives me little slaps but it does not hurt, but it is exactly because I was beaten during, well there you see … (pause)

But it is true that there are moments when his own gestures, make me … make me scared sometimes.

**Th1:** Yeah yeah … Then it … it must be difficult for you.

**M:** Sometimes yes indeed because sometimes I … oh my … I say to myself oh my I am such an idiot that well he wanted to give me a hug and me … I like an idiot put my nose in the air and turn away… (the mother makes the movement of pulling away) and I say to myself, well there you have it I reacted badly once again. But afterwards, I know that it wasn’t deliberately, it’s a reflex.

**Th2:** It is exactly that!

*Identifying the process of change*

The CAVES within a single session of ninety minutes identified Mme A’s specific difficulty in reading Flavio’s emotional communication. Targeting this difficulty led to change. Showing this microprocess effected change in the two psychotherapists’ understanding and approach to the dyad. Within the ongoing treatment, we note that Mme A’s psychological defences do not permit her to sustain the change noted in the CAVES two weeks prior. Yet with gentle but persistent clarifying and confrontation of her defensive avoidance, Mme A quickly is able to
get back to the change noted in the CAVES and to deepen and expand upon it, thus advancing the psychotherapeutic process. The next step is to see if and how Mme A translates these changes into behaviour with Flavio and how he reacts. Interactive behaviour patterns can be difficult to change given that one partner may change, but the other partner may pull to restore a familiar routine. So, dyadic work with mother and child together in the room must continue alongside individual work with each partner. Video-feedback is helpful to bring what has been procedural or “embodied” into focus and awareness in order to effect enduring change.

**CONCLUSIONS**

The goals of the programme of research discussed in this article were to; understand how normative child distress (negative affects, arousal, helplessness) affects the minds and bodies of traumatised caregivers; how then these caregivers read child affective communication and respond to their children; how these responses affect their child during this formative period of social and emotional development below age five.

Our results from prior research in New York and preliminary findings from our current study in Geneva support the need for specific intervention to help traumatised caregivers to confront safely avoided affects and memories, that are associate with caregiver’s experience of interpersonal violence; to support, to elicit, and to model the caregiver’s capacity to jointly attend to child interactive behaviour and the mental states that subserve such behaviour, with the aim of repairing a rupture in affective communication.

Our next step is to carry forward what we observe to be the connection of a very specific error in the reading of child distress: the mistaking of helplessness and fear for rage and willfulness. We think that this error is particularly salient to IPV-PTSD as opposed to other forms of parental psychopathology that impact the parent–child relationship.

On a broader level, we hope that our research and clinical vignette illustrate how the Clinician Assisted Video-feedback Exposure technique when reviewed by the child–parent psychotherapist(s) of the dyad participating in the research protocol can jumpstart an ongoing treatment that is slow to progress or even stuck.
It was only after the two psychotherapists that were seeing Flavio and his mother who were in fact using a different model of video-feedback in the therapy, and focusing on Flavio’s feeding disorder with mealtime sessions, saw the CAVES that change occurred. The two therapists newly appreciated mother’s shift in thinking about Flavio from his being willful to wary. They were thus able (through understanding Mme A’s avoidance of trauma related affects and her own emotional dysregulation), to observe her startle response to her son and her reaction to his seeking proximity. From then on, Mme A’s capacity to tolerate Flavio’s and her own helpless and hostile feelings and to make self-other distinction as well as distinction between these two affects, moved the feeding disorder treatment along. He began to eat more on his own, to enjoy his meals, and the nasogastric tube could be removed.

The team has since begun with patients’ permission to show the CAVES when appropriate to inpatient nursing staff to facilitate more empathic treatment of these children and mothers and to focus on collusion with negative and distorted mental representations of the child and/or of mother herself. As psychoanalysts, it is also crucial not to collude with mother to child “transference” distortions and not to collude with avoidance of affect in our patients. Person and Klar (1994) stated that “trauma must be told.” Psychoanalysts have to be ready to receive the message of trauma and to validate and respond to it, to treat actively parental PTSD and comorbid psychopathology as well as disturbances in the parent–child relationship and developmentally in the case of the child. Psychoanalysts should in our opinion open their doors to trauma-affected patients yet also go out into the community to apply their skills and ways of thinking to individuals from different cultures who otherwise would not likely come into the private office.

*Interrupting cycles of intergenerational violence and trauma*

We are currently manualising a CAVES-based intervention consisting of at least twelve to sixteen sessions called Clinician Assisted Video-feedback Exposure Approach Therapy (CAVEAT). Subsequent research will examine whether observed effects on maternal representations as signalled by her attributions towards her child are sustained and what dosage of frequency as well as whether such changes correspond to measurable changes in caregiver’s reflective functioning, her behavioural response to child distress and the child’s behavioural outcome.
We do not assume that such an intervention specifically for high risk and for intergeneration violent trauma parenting replace a deeper, more comprehensive long term child–parent psychotherapy that relies mainly on in vivo use of words and behavioural observation. Therefore we consider the CAVES to be a potential catalyst or jumpstart to further and deeper psychotherapeutic treatment. We do think that, based on our experience with highly traumatised often dissociative caregivers and their young children, that such caregivers must at first be unable to attend jointly with the therapist to avoided affects and child behaviours that elicit those affects to have any chance to arrive at a psychotherapeutic process that will result in meaningful change in interactive behaviour at a pace that can match the child’s developmental needs.

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CHAPTER SIX

The triadic perspective for parenting and early child development: from research to prevention and therapy

Kai von Klitzing

A triadic perspective in the context of parenthood takes into account the capacity for triadic relationships, or what we have called “triadic capacity” in mothers and fathers. It involves the capacity of each parent to develop an intense relationship with her or his child (whether in internal representations or in reality) without excluding either themselves or their partners from the relationship with the infant. Such a capacity also means that the intimate relationship between the parents can develop further, even when the child is integrated as a third member of the family. A mother with high triadic capacity is able to recognise that the father also has an important relationship to the child, without being overwhelmed by her fear of being excluded. A father with high triadic capacity recognises the mother’s significance, without excluding himself from the relationship between mother and child. As the child grows older, triadic capacity also indicates the ability of parents to accept that the child enters into meaningful relationships with significant others.

This concept, as we have developed it within our research on family relationships and early child development, has also been influential for child psychotherapy. This chapter, after presenting a brief background for this line of thinking in the psychodynamic and family literature, will
outline the dimensions of the triadic concept as we have specified them in our research, provide an overview of past and ongoing studies, and conclude with clinical implications.

**Research on family relationships and early child development**

The following considerations are based on the results of longitudinal developmental research on “early parenthood” and “development of the parent–child relationship” by the working group of von Klitzing and Bürgin (von Klitzing & Bürgin, 2005; von Klitzing, Simoni, Amsler, & Burgin, 1999; von Klitzing, Simoni, & Burgin, 1999; K. von Klitzing & S. Stadelmann, 2011). Psychodynamic interviews with expectant parents explored their ability to include the coming child in the parents’ partnership.

In our theoretical model of Triadic Capacity (von Klitzing, Simoni, & Burgin, 1999) the dynamics of the parental partnership, the parents’ capacity for dialogue, the flexibility and triangularity of parental representations of their future child, and the continuity of the parents’ own experiences of relationships, are all essential dimensions of the triadic capacity. Because this concept is relatively new, we would like to explain these five dimensions in more detail below.

The triadic capacity is essentially associated with parental partnership dynamics. The partnership dynamics are of course also closely related to the individual psychological functioning of each partner. If two individuals are able to see both themselves and their partners as whole persons, with all their positive and negative qualities, they can form a flexible partnership without distorting their perceptions of each other. In contrast, if they tend to project their own unloved qualities onto the others, as though these qualities were part of the other’s rather than their own personalities, they usually form a rigid partnership which is characterised by projections and a lack of individual autonomy (Kernberg, 1987; Ogden, 1979). Closely related to these characteristics of the parental partnership is the parents’ capacity for dialogue and their readiness to engage in it. According to (Spitz, 1963) dialogue between two individuals means dynamic, cognitive and/or affective interchange between the partners. (Lebovici, 1988; Soulé, 1982) have drawn attention to the fact that the parents’ mental representations of their future child have a considerable influence on the quality of later
parent–child interactions. We conclude from our clinical experience of early parent–child psychotherapies that the flexibility of such mental representations is an important prerequisite for a good quality triadic parent–child relationship, because it indicates that the parents have already accepted the child’s growing autonomy. Mental representations are described as flexible if parents can describe them in an emotionally and narratively rich way, and if these representations can be modified by actual experiences.

We call the emerging representations of the future child in the mind of one parent triangular if the partner is also granted space within it. Parents who can integrate this aspect (that their relationship with the child will not be exclusive) into their expectations form mental representations on a triangular level (Abelin, 1971). We also consider the parents’ representations of their own childhood experiences within their families of origin as an essential part of their triadic capacities. In addition to the representations of the parents’ own dyadic relationships to each parent of origin, we also include their representations of their parents’ marital and co-parental (McHale & Rasmussen, 1998) relationships in our theoretical model. The work of (Main, Kaplan, & Cassidy, 1985) has shown that there is no linear correspondence between “good childhood experiences” and “good parenting”. Even negative experiences of relationships in the family of origin do not automatically lead to insoluble problems with one’s own children. More important is the continuity in experience of relationships, for example, the degree to which an individual has worked through conflicts arising in development and thus integrated them into the personality. The qualities of the parents’ representational and relational world described above are strongly interrelated with one another. A partnership free from projective distortions is the basis for the inclusion of the child into the parental relational world as a potentially autonomous third person. Flexibility and triangularity of mental representations about the unborn infant are interdependent ways of characterising the mental representations of the parents. If one parent excludes the partner in his/her fantasies of his/her future relationship with the child, these fantasies tend to become rigid and not modifiable by external experiences. An intensive dialogue between the parents about their thoughts and fantasies of the future infant indicates that they are already including the child as a relevant third person into their mutual relational world on an imaginative level. Adequate resolution and working-through of development-specific triadic conflicts
(especially in relationships with the families of origin), indicated by the quality and narrative coherence of the descriptions of each parent’s own (triadic) childhood experiences, are important prerequisites for the formation of triadic relationships with one’s own partner and the infant.

Following from these theoretical considerations, the following five dimensions of triadic capacity were elaborated and empirically demonstrated in our research to be valid and predictive for the development of the child and the family relationship:

Quality of partnership

If two individuals are able to see both themselves and their partners as whole persons, with all their positive and negative qualities, they can form a flexible partnership without distorting their perceptions of each other. Such open and flexible boundaries of the self and object representations are vital for parenthood because they help to stop the child entering the projection field of parental distortions.

Flexibility

The ability to form a flexible relationship to the child, on the levels reality as well as mental representations (“enfant dans la tête” (Soulé, 1982)). Mental representations are described as flexible if parents can describe them in an emotionally and narratively rich way, and if these representations can be modified by actual experiences. This constellation indicates that during pregnancy, as well as in the further course of development, parents develop rich internal pictures of their (future) child, without setting them up too rigidly. This flexibility of parental representations means that the children encounter their parents as vital partners in relationship, while nevertheless being able to develop autonomously.

Triangularity

We call the emerging representations of the future child in the mind of one parent triangular if the partner is also granted space within it. Parents who can integrate this aspect (that their relationship with the child will not be exclusive) into their expectations form mental representations on a triangular level. Such parents are able to imagine entering
into a relationship with the child and to embellish this relationship with fantasy, while including the third party as well.

**Ability for dialogue**

The parents’ ability to have a dialogue about the child. An intensive dialogue between the parents about their thoughts and fantasies of the (future) infant indicates that they are already including the child as a relevant third person into their mutual relational world on an imaginative as well as a real level.

**Transgenerational coherence**

The parents’ ability to embed their parenthood style in a vividly remembered transgenerational continuity. Their relationship to their own parents, with all its pros and cons, is clearly remembered. Ambivalences do not have to be split off: parents are able to identify with positive role models and at the same time develop critical views of their own parents, without idealising and/or demonising them and thus drawing the child into a transgenerational field of tension.

These definitions and operationalisations were developed in a research context, but are applied also to clinical practice. In our manual for short-term psychoanalytic child therapy, the essential function of triadic capacity is described in the following way: “It is essential to gain a picture of all five dimensions of triadic capacity in the diagnostic phase before therapy commences. A certain degree of triadic capacity on the parents’ part (and the therapist’s) is a prerequisite for being able to work therapeutically. If there is very little triadic capacity, an attempt should be made to improve it through an upstream ‘parental module’, involving parental and family talks. Severely disintegrated triadic constellations manifest themselves in parental disputes about rights of care and access after divorce, in which the other parent cannot be permitted to have a relationship with the child—especially after bitter quarrels within the partnership. The child is then drawn into the tension between the parents, and the therapy may also be crushed in this field of tension”. Göttken & von Klitzing, in press; see also Göttken & von Klitzing, 2011).

Currently we had the chance to evaluate fifty-five school age children—that were more than seventy per cent of a non-clinical sample...
in which we had assessed parental triadic capacities during pregnancy and at the end of the first year (that means eight to nine years before). These were all first time parents who had been recruited during pregnancy and voluntarily participated at this longitudinal study. The assessments were done by videotaped psychodynamic parent interviews and observations of the parents with their one-year-old child (triadic interview; for more details see (von Klitzing, 1996)).

Generally we had hypothesised that the triadic capacity of the parents that we had assessed during the third trimester of pregnancy and at the end of the child’s first year would predict important aspects of family development and child outcome. The higher the parental triadic capacity the more the child would grow in a flexible relational frame with good emotional care but also enough developmentally adequate autonomy. We expected that the flexibility of the triadic relational context would support the children in their capacity to integrate conflicting internal and external forces especially during developmental transitions. When we looked at the age nine year outcome we found that the triadic capacity assessed in the family interview at age one predicted a positive family environment as rated by the parents at age nine. Furthermore we found that that low triadic capacity predicted high levels of children’s symptoms and that high triadic capacity predicted high levels of prosocial behaviour (both qualities assessed by independent ratings of the parents, the teachers, and the children themselves in the Strength and Difficulties Questionnaire), even when the correlations were controlled for parental education, marital quality or psychopathology of the mothers (K. von Klitzing & S. Stadelmann, 2011).

Why are parental triadic capacities during the first year such good predictors for child outcome at school age? One possible explanation could be that parents with good triadic capacities probably develop good family relationships and therefore provide a good family environment for the child and that this then leads to lower levels of emotional problems. This was partly supported by our statistical analysis: when we included current family environment (at age nine) into the regression, the predictive value of triadic capacity was reduced. In other words, this supported a mediation hypothesis that triadic capacity leads to a good family environment that in turn lead to lower levels of symptoms.

In contrast, the mediation hypothesis was not supported with respect to the predictive association between triadic capacity and prosocial
behaviour. The higher the parental triadic capacity at age one, the higher the child’s prosocial behaviour in middle childhood.

This high correlation even held when controlled for the positive family environment at age nine. In other words, good parental triadic capacities predicted positive family environment and children’s positive prosocial behaviour; but both predictive pathways were independent from each other.

How can we understand that? It seems to us that the children’s ability to act prosocially at age nine is more a stable developmental trait and not so much a state which is reactive to the current situation in the family, as emotional problems like anxiety, depressive feelings, or somatic complaints might be. Being prosocial, helping others, and contributing actively to the peer group coherence in the classroom, for example, involves a capacity for empathy, of flexibly dealing with different views, and a motivation for compromises. This quality seems to be built on integration more than on dissociation, and on a symbolising way more than on an acting way of dealing with conflicts. For these qualities, the triadic space in which children grow up seems important.

Clinical research programme

The group of Elisabeth Fivaz in Lausanne has created the Jeu à Trois paradigm (Fivaz-Depeursinge & Corboz-Warnery, 1999). This is a standardised setting for observing family interactions in which parents (fathers and mothers) play with their four month old babies, first each of them separately and then both of them together with the baby. The Fivaz group (Frascarolo, Favez, Carneiro, & Fivaz-Depeursinge, 2004) has identified several patterns of alliances that can be observed in this kind of interaction: one that is functional and two that are dysfunctional. Functional cooperative alliances are those in which all three partners are included in the interaction and none is excluded, in which they keep to their roles (active versus third party), and in which the parents support each other in front of the child. Dysfunctional collusive alliances are defined by competition between the parents. A lack of coordination is observable when one parent interferes with the other parent’s activity. Dysfunctional disordered alliances are characterised by a weak degree of coordination between the partners. Exclusion and or withdrawal from roles are the main patterns. The parents undermine or fail to support each other and the infant is not engaged.
Family alliance is a concept which is closely related to triadic capacity because both involve triads (father—mother—child) and the way how the relationship between these three is regulated (either in internal representations or in observable behaviour) is more important than the quality of the dyads. In contrast to triadic capacity which is assessed by an interview and reflects internal relational representations, family alliance is assessed in a standardised observation task and reflects observable quality of interaction.

Lehman, a member of my research group, has studied a sample of high risk families of adolescent mothers, and she has—in contrast to most of the research in this field—tried to include as many fathers as possible, and she succeeded in nineteen out of forty-five families (Lehmann, Klein, Bergmann, & von Klitzing, 2011). She wanted to know whether one important part of the triadic capacity, the ability to represent the own parents in a flexible positive way, would predict the alliances to be observed in the Jeu à Trois.

Here is an example of a mother’s narrative showing positive parental representation in a coherent: “My own mother is my model. I remember mainly positive experiences, and when I think of things that went wrong, I can see now that I was no choirboy myself … We used to be outdoors a lot and I do not remember very harsh arguments when I was little. My parents tried to make us children happy in the first place before they thought of their own needs and wishes. That’s what I know and try to do as a mother myself … Even though there were times when I didn’t care about anything, my parents remained interested and now I do listen to their advice and appreciate this … Maybe I will be even stricter with my own child—perhaps it’s an advantage to be a young mother and to remember my own childhood and adolescence well …”

This young mother states clearly that she has a positive role model. She reflects on various periods of her mother–daughter experiences and gives positive examples of both parents’ behaviour. She describes her parents’ enduring interest as a positive feature. She also reflects on more difficult points and is able to see her own contribution (Lehmann, Klein, Bergmann & von Klitzing, 2011).

The results showed that all eleven mothers and nine fathers who told very negative/incoherent narratives and descriptions about their own parents also showed dysfunctional family alliances in the Jeu à Trois task, whereas five out of eight mothers and five out of ten fathers with positive coherent narrations succeeded in showing a functional alliance.
with their infants. Of course the high proportion of negative/incoherent narratives in this sample is puzzling. It is probably due to the fact that the study consisted of very high risk adolescent parents.

Research programme involving prevention

Another example from a high risk group of families of our Pro Kind programme (German version of the Nurse Family Partnership by D. Olds), a Home Visitation Programme from pregnancy to age two. This programme was originally created by David Olds (Olds, 2006) and established at several sites in the US, has also been established in three German states and we were asked to perform the scientific evaluation of the sample in Saxonia. We agreed, but only if we were allowed two additional instruments to the battery, one on fathers’ self effectiveness, and one on partnership satisfaction.

Our longitudinal analyses showed that the fathers’ self efficacy (rated by the fathers themselves at six months) and the partnership quality (rated by the mothers at six months) predicted mother’s reciprocity towards her one-year-old babies (measured in a free play interaction task) and also the infant’s behavioural regulation during a Bailey assessment at twelve months. We could also identify predictors of maternal and paternal engagement in the home visitation programme, which then was a good predictor for positive outcome: For the mothers, beside her own educational level, the helping alliance with the home visiting nurse was most important. In contrast for the fathers, their satisfaction in their partnership was the most important predictor for their programme involvement: The more they were satisfied with the partnership relationship, the higher was their programme engagement (Sierau, Lehmann, & Jungmann, 2011). These results show that fathers and triadic relationships do not only matter in high educated middle class families, but also in at risk families facing psychosocial adversities like adolescent pregnancy, poverty, and/or psychiatric illness.

Conclusions

Our research illustrates that the opening and regulation functions of triadic relational experiences are vital aspects of the child’s developmental potential, for example, in gaining a capacity to integrate conflicting internal and external forces during developmental transitions.
The triadic capacity therefore is a developmental dimension which should be addressed in psychotherapies. Psychoanalytic work, as well as relationship based preventive interventions, no matter whether with infants and parents, children, adolescents, or adults open up triadic relational fields. As in psychoanalysis it is not only individual patient present, but also the interpersonal context in which the patient lives, the triadic capacity is a competence which is essential not only for parents, but also for psychoanalysts and the flexibility of their analytic work addressing intrapsychic conflicts and interpersonal relationships.

References


Introduction

Recent developments in different areas of research, psychoanalysis, infant research, cognitive neuroscience, and developmental science, highlight the dynamic, intersubjective sense of personality organised in term of “self-with-other” (Ammaniti & Trentini, 2009).

The evolution of the human species attuned human mothers, both psychologically and neurobiologically, to the smell and the sounds of the baby, and to his expressions and behaviours; in this way, mothers can immediately understand when they need to intervene to protect or feed the baby, who is immature and helpless. At the same time, babies with higher ability in tuning and understanding others have been favoured by natural selection, gaining a better chance of survival. For this reason, human infants are very social from their birth and develop that human-specific ability to read intentions and participate in collaborative activities defined by shared goals and intentions (Tomasello, 1999; Tomasello, Carpenter, Call, Behne & Moll, 2005).

Newborns are able to imitate actions seen on a human face (Meltzoff & Moore, 1977, 1999), showing an early form of intersubjectivity based on cross-modal transferring of form and timing. As human
brain and mind are equipped in order to understand possible intentions of other people by watching their facial expression or their goal-directed actions, intersubjectivity is the main process that allows parents and the child to share feelings and emotions and to develop a mutual coordination (Stern, 1985; Trevarthen, 2005). The temporal coordination of relational behaviours between parents and child, defined as “synchrony” (Gordon & Feldman, 2008), gradually becomes internalised, influencing the infant development through the repeated interactions.

Studies on mother–father–child interactions have also shown that infants are able to detect behaviours exchanged between parents: these aspects highlight the role of triadic coordination in shaping the family alliance (Fivaz-Depeursinge & Corboz-Warnery, 1999; Gordon & Feldman, 2008).

The connection between parents and child develops from pregnancy, when parents have to reorganise their identity including the baby within their relationship, creating an intersubjective matrix (Stern, 2004) which provides a scaffolding for subsequent development (Emde, 2007). Along with such psychological reorganisations, deep changes occur in parental brain, especially in maternal one, sustaining the onset and the maintenance of nurturing behaviours, as well as the sensitivity to infant affective cues (Ammaniti & Gallese, 2014).

In our chapter we will first focus on the contribution of psychoanalysis and infant research in the area of the psychological transformations in the parents’ mind that occur during pregnancy and in the post-natal period. A particular emphasis will be addressed to internal representational scenario of mothers and fathers, who develop in this period a representation of themselves and of the partner as parents, as well as of the future baby. We will illustrate how the foetal image in the ultrasound can interweave with maternal and paternal representations, allowing parents to share conscious fantasies about the baby. In line with these aspects of co-parenting, we will present an observational procedure based on the parental interaction with the image of foetus in the ultrasound which activate parental affiliative processes and intuitive parenting behaviours (Papousek & Papousek, 1987) involved in the transition to parenthood.

We will then illustrate how recent advances in scientific knowledge and technology have encouraged a fertile dialogue between psychoanalysis and neuroscience, which affected especially the field of parenting, where the relation between mind and brain is particularly relevant.
Neurobiological research has identified specific “parental brain circuits” that underpin caregiving behaviours, modulating parents’ attention and responsiveness to infant affective expressions (Kinsley & Lambert, 2006; Mayes, Swain & Leckman, 2005; Panksepp, 1998). We will also evidence how the recent discovery of mirror neurons has revealed the embodied basis of intersubjectivity (Gallese, 2009), providing new insights on the mechanisms of maternal empathy (Lenzi et al., 2009), and on the influence of early attachment experiences in subsequent parental attitude (Lenzi et al., 2012).

Finally, we will conclude discussing the possibility to translate the neuroscientific advances in preventive programmes for high risk families, in order to promote infant wellbeing through the development of parental abilities.

**Parental representations during pregnancy**

Psychoanalysis highlighted the complexity of transformations in the maternal inner world that occur during pregnancy and after the birth of the baby. Maternal representations of the baby are strongly characterised by unconscious and conscious fantasies, giving rise to a phantasmatic baby and an imaginary one (Lebovici & Stoléru, 1983). Specifically, the phantasmatic baby appears in maternal dreams, as expression of her unconscious world, derived primarily from oedipal conflicts with her own parents; the imaginary baby is the conscious and frequently shared construction created by parents, beginning from their perception of the child and from their wishes for her. These images of the baby, which are present during pregnancy, will interact with the baby after the birth, creating a more realistic representation of her. During pregnancy these fantasies influence the perception of the baby, whose vitality can be detected through foetal movements, transformations of maternal body, and ultrasound images.

A central task for pregnant woman is developing a feeling of connection to the child and, at the same time, recognising her separateness. In particular, during pregnancy the mother interprets the movements of foetus as the expression of a specific intentionality, thus demonstrating to have created a mental space for the child. In this way the mother prepares herself to take care of a helpless and immature baby, who needs protection: in other words, she learns “to think for two” (Ammaniti, 2008).
Thus, during pregnancy, the maternal identity is achieved by virtue of significant physical and psychological transformations, as well as deep reorganising processes, which are sustained by mental representations of self as a mother and of the future baby, although still unborn (Ammaniti, Candelori, Pola & Tambelli, 1995; Ammaniti & Tambelli, 2010; Raphael-Leff, 2010; Slade, Cohen, Sadler & Miller, 2009).

This new parental identity is strongly connected to parents’ history and their childhood experiences (Fraiberg, Adelson & Shapiro, 1975; Manzano, Palacio Espasa & Zilkha, 1999). Specifically, the new psychic organisation which takes place in pregnant women—namely the motherhood constellation (Stern, 1995)—implies a deep reworking of the relationship with their own mothers.

During pregnancy, along with the transformations of the feminine identity and the re-elaborations of parental mental representations, the motivational system of caregiving develops: such system represents a subset of parental behaviours specifically designed to promote proximity and comfort when the parent perceives that the child is in real or potential danger (George & Solomon, 1996, 1999).

As a matter of fact, caregiving behaviours are influenced by the mother’s ability to consider the infant as a separated individual with specific needs (Ammaniti & Stern, 1991). The full acknowledgement of infant’s individuality represents the outcome of a progressive disengagement from the total identification processes typical of the early post-partum period and characterising the well-known condition of primary maternal preoccupation (Winnicott, 1956). Such condition has been conceptualised as “almost an illness” that a mother must experience and recover from, in order to guarantee the infant an environment that can meet his physical and psychological needs. Leckman and colleagues (2004) evidenced that such preoccupations develop during the last months of the pregnancy, affecting both the mothers and the fathers (although the last to a reduced extent). This preoccupation heightens parental ability to anticipate the infant’s needs, learn his signals, and gradually develop a sense of the infant as an individual.

During pregnancy, in addition to maternal and paternal transformations and representations of the baby, parents have to renegotiate their roles and define a co-parenting relationship, by developing the triadic capacity, which is defined as “the capacity of fathers and mothers to anticipate the future family relationship without excluding themselves or their partners from the relationship to the infant” (von Klitzing,
Simoni, Amsler & Burgin, 1999, p. 226). It’s useful to underline that the main dimensions of triadic capacity are the flexibility of parental representations and the parents’ ability for dialogue (von Klitzing & Burgin, 2005).

The sharing of conscious fantasies concerning the baby, such as his physical characteristics and temperament, is a central issue of co-parenting during pregnancy, allowing to anticipate the family relationship and shaping the intersubjective matrix (Stern, 2004) in which the infant will develop.

**Studying obstetric ultrasound and the transition to parenthood**

By now, obstetric ultrasound is routinely used in clinical practice, strongly affecting parental representational dynamics: by virtue of it, mothers and fathers have to integrate the foetal image in their representation of the baby during pregnancy (Candelori, Pola & Tambelli, 1991; Missonnier, 1999). Indeed, several researches evidenced that the obstetric ultrasound sustains parents-to-be in sharing conscious fantasies about the baby and their parental identity (Ekelin et al., 2004; Fava Vizziello et al., 1997; Missonnier, 1999).

New techniques in prenatal diagnosis are contributing to the diffusion of three dimensions (3D) and four dimensions (4D) ultrasound in clinical practice, with relevant effects on the psychological dynamics on parents-to-be (Campbell, 2006). Specifically, 4D ultrasound can detect foetal movements giving a more real and vital image of the foetus than the “still” image of the 3D ultrasound.

Obstetric ultrasounds emphasise the main steps of pregnancy, reassuring parents about the baby’s wellbeing (Gourand, 1999) and sustaining their parental representations. It’s important to make a clear distinction between the routine experience of the obstetric ultrasound and the “scan-for-fun” trend, which rather involves an excessive number of ultrasounds and which can flatten parental fantasies about the baby. Nowadays, ultrasounds are commonly used in the obstetrical practice and pregnant couples see the image of the foetus from the beginning of pregnancy. Moreover, the routine ultrasounds mark the main stages of pregnancy: first ensuring the presence of the embryo through the heartbeat; then checking the foetal physical development and revealing her sex; finally monitoring the foetal growth before birth.
Between twenty-three and thirty gestational weeks, 4D ultrasound evidences the foetus facial features (Kurjak et al., 2007) and his babyness (Stern, 1977), a universal trigger of parental behaviours. Furthermore, 4D ultrasound shows some foetal movements, which, representing the expression of foetus’ vitality, produce a strong emotion in parents, allowing them to imagine a mental activity in their child (Piontelli, 2007; Stern, 2010).

As a matter of fact, the images of the foetus and of her development along the pregnancy inevitably influence maternal and paternal representations, getting a symbolic importance (Denis, 1999). In addition, the resonance with the observed foetus, which is activated in parents by the ultrasound, could interweave with the phantasmatic and imaginary baby, which reflect the individual, marital, and past history of the two partners (Missonnier, 1999). These two resonances go on even after the birth of the baby, when parents continue to fantasise about him and about their relationship.

The four dimensional (4D) ultrasound is an innovative tool, which may be useful to detect some parental dynamics, already developed during pregnancy. In addition, 4D ultrasound may be useful to observe some parental and co-parental behaviours that could anticipate interactions between parents and the child after the birth.

We were encouraged in the prospects for eliciting parental representations during pregnancy by the findings of the Lausanne group. In their reported Prenatal Lausanne Trilogue Play (Carneiro et al., 2006), the use of a baby-like doll was shown to activate some intuitive parenting behaviours (Papousek & Papousek, 1987) during pregnancy, both for mothers and fathers. These behaviours have an important role after the baby is born, since they promote parents’ caregiving attitude, infants’ learning abilities, and parent–child relationship (Fivaz-Depeursinge, Frascarolo & Corboz-Warnery, 2010). In addition, the direct observation of coparenting relationships during pregnancy and after the baby’s birth has evidenced a stability of interactive patterns between parents and the child, over time (Bighin, De Palo & Simonelli, 2011; Favez et al., 2006).

We hypothesised that when the two parents observe together the foetus through the 4D ultrasound, they could share conscious fantasies about the son/daughter and interact as co-parents, expanding the joint focus on the baby (Ammaniti, Mazzoni & Menozzi, 2010).
The aim has been to observe co-parenting interactive patterns at seventh months of pregnancy, activated by the foetal image obtained from the last routine 4D ultrasound. In this exploratory study, ecological validity is central: the parents interact with the images of their own baby seen through the 4D ultrasound, rather than with an unfamiliar standardised stimulus.

The study is part of a wider research project, aimed at studying the transition to co-parenthood by means of a multi-method approach (Kerig & Lindhal, 2001; Mazzoni & Tafà, 2007), based on semi-structured interviews, self-report instruments, and direct observation procedures.

To date, eighteen voluntary couples expecting their first child took part in the project; the mean age of the mothers was 32.2 years, which reflects the Italian average age of women at first childbirth (Italian Ministry of Health, 2011); the mean age of the fathers was 33.1 years.

Participants were recruited with the collaboration of two gynaecologists, during mothers’ routine 4D ultrasound between the twenty-fourth and the twenty-eighth week of pregnancy. Couples have been informed in advance about research protocol and they have been asked to sign an informed consent.

All fathers were present during the ultrasound assessment and, together with mothers, viewed the 4D ultrasound. All foetuses were healthy and during the ultrasound gynaecologists were instructed to record a few minutes where the face of the foetus could be clearly seen.

The psychodiagnostic evaluation—carried out through the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1977) and the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977; Italian translation by Pierfederici et al., 1982)—did not evidence any psychological symptoms in both fathers and mothers.

In order to assess parents’ interactions during pregnancy, a modified Prenatal Lausanne Trilogue Play procedure was applied (Carneiro, Corboz-Warnery & Fivaz-Depeursinge, 2006), by using a short video clip of 4D routine ultrasound instead of the baby-like doll of the original procedure (for more details of the procedure, see Ammaniti, Mazzoni & Menozzi, 2010, 2012).

The observations have been performed at the University department, about one week after mothers underwent the ultrasound exam. Parents
were sitting in a triangular configuration (Carneiro, Corboz-Warnery & Fivaz-Depeursinge, 2006), with a computer screen on a round table; on the screen, connected to a laptop, the video clip of the last 4D ultrasound was played; two cameras recorded the parents and the computer screen (see Figure 1 below).

Parents have been asked to “talk to the baby, as if she could listen”; furthermore, coherently with the Lausanne paradigm, they have been instructed to alternate during the talk, applying four different triangular configuration scheme: firstly, a parent talks to the baby while the other maintain a position as third; then the parents switch roles; in the third part they talk to the baby together; finally, they talk between them. The procedure lasts about five minutes; all observations have been video recorded and then codified. Also parents’ dialogues during the procedure have been transcribed verbatim and codified.

Figure 1. Example of the setting of the observational procedure adapted from the Prenatal Lausanne Trilogue Play: an expectant couple interacts with the baby seen through 4D ultrasound.
Results showed that all parents recognised the baby in the 4D ultrasound (in particular, her movements and the specific parts of her body). Furthermore, seven out of eighteen mothers and eleven out of eighteen fathers, labelled themselves as “mum” or “dad” while talking to the child: it can be argued that the foetal image seen in the 4D ultrasound can trigger some indicators of parental identity in primiparous couples. Nevertheless, it’s important to put in evidence that such behaviours were more frequent in fathers than in mothers: these aspects seem to point out a greater need in fathers to reaffirm their parental identity. In mothers, this aspect is present to a lesser extent, maybe because they have already internalised the parental role, by virtue of the bodily and psychological changes of the pregnancy, the physical presence of the foetus and her movements, as well as of the “inner dialogue” (Ammaniti, 2008) they have with the baby. Furthermore, seven out of eighteen mothers and six out of eighteen fathers also labelled the partner as “mum” or “dad”: these behaviours could be considered as specific indicators of the co-parenting process, by which each partner includes the other in the relationship with the baby.

Other interesting data can be evidenced from the analysis of parents’ dialogues. In fact, six out of eighteen mothers and ten out of eighteen fathers talked about similarities between the foetus and themselves; moreover, ten out of eighteen mothers and eight out of eighteen fathers talked about similarities between the foetus and the partner. These behaviours could represent an indicator of the affiliative process, which allows the new baby to be recognised and assimilated by parents. Finally, nine out of eighteen mothers and ten out of eighteen fathers called the foetus by her name, thus showing the presence of a specific representation of the baby’s identity.

These results highlight that the image of foetus in the 4D ultrasound can activate some processes involved in the transition to parenthood, as parental identity, co-parenting relationship, recognition of the child, and her inclusion in the family.

A second step of the research was the exploration of intuitive parenting behaviours (Papousek & Papousek, 1987), through a micro-analytical analysis of mothers’ and fathers’ behaviours during the observational procedure. Results showed that mothers and fathers smiled more to the baby in the ultrasound than to the partner (Table 1); moreover, mothers smiled to the baby more than fathers ($t(17) = 3.09$, $p = .007$).
Another difference between parents is that fathers talked less to the baby in the ultrasound ($M = 11.15$, $SD = 4.56$) than to the partner ($M = 18.45$, $SD = 8.67$), ($t(17) = -3.13$, $p = .006$). These results may confirm the role of the foetal image in the 4D ultrasound in triggering the behaviours that prepare parents to interact with the baby after the birth and thus to build the intersubjectivity process.

Specifically, these data are in line with studies on the Prenatal Lausanne Trilogue Play (Carneiro, Corboz-Warnery & Fivaz-Depeursinge, 2006) which showed that both mothers and fathers are able to manifest intuitive parenting behaviours (Papousek & Papousek, 1987) before the baby’s birth.

Furthermore, differences between mothers and fathers, highlight that pregnant mothers have more confidence to interact with the baby-to-be than fathers. Thus, these behaviours could represent the different way in which men and women become parents (Stern, 1995; Tambelli, Odorisio & Ammaniti, 2010).

Finally, microanalytical analysis of mothers’ and fathers’ behaviours during the observational procedure showed unexpected data: some mothers ($N = 9; 50\%$) and fathers ($N = 5; 27.8\%$) imitated foetal movements while they watched the ultrasound; in particular, these parents imitated the movements that the foetus did with hands, arms, mouth, and tongue. We can hypothesise that parental imitation of foetal movements could play a role in the affiliation process.

Table 1. Maternal and paternal smile while parents interact with baby seen through the 4D ultrasound.

<table>
<thead>
<tr>
<th>Parent</th>
<th>Behaviours</th>
<th>Proportions$^a$</th>
<th>$T$</th>
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</thead>
<tbody>
<tr>
<td>Mothers (N = 18)</td>
<td>Smile at video</td>
<td>$M = 26.04$, $SD = 14.43$</td>
<td>$t(17) = 5.55$, $p &lt; .001$</td>
</tr>
<tr>
<td></td>
<td>Smile at partner</td>
<td>$M = 4.70$, $SD = 4.81$</td>
<td></td>
</tr>
<tr>
<td>Fathers (N = 18)</td>
<td>Smile at video</td>
<td>$M = 19.17$, $SD = 10.96$</td>
<td>$t(17) = 5.78$, $p &lt; .001$</td>
</tr>
<tr>
<td></td>
<td>Smile at partner</td>
<td>$M = 2.53$, $SD = 3.05$</td>
<td></td>
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</tbody>
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Note. $^a$ Proportion was calculated as the total duration of the behaviour in per cent of the total duration of the interaction in seconds.
between parents and child, facilitating parental assimilation of the son/daughter.

As the imitation allows infants to understand other peoples as intentional agents, through the “like-me” process (Meltzoff & Decety, 2003; Meltzoff, 2007), the parental imitation of foetal movements could improve the recognition and assimilation of the son, promoting the inclusion of the new baby in the family. Furthermore, the neurobiological correlate of imitation, in particular the mirror neuron system (see below), highlights the physical and sensorimotor nature of empathy, which relies on resonant mechanisms simulating others’ emotional experiences through an internal imitation (Aglioti & Avenanti, 2006). Thus, the parental imitation of foetal movements not only mirrors baby’s expressions but also sustains parents’ attitude to read the infant’s feeling state from his overt behaviour; this process stimulates in advance the sharing of emotional states between parents and child which preempts the mechanisms of affect attunement after the birth (Stern, 1985). These considerations highlight that the affiliation process is strongly grounded in the body through gestures since pregnancy, in addition to fantasies and mental representations, improving the parents’ connection to their own child.

Despite these preliminary data having to be extended into larger samples, they highlight that parents’ interaction with the foetal image shown in the 4D ultrasound can activate specific parental behaviours, such as smile and talk to the baby. Moreover, mothers and fathers recognised the foetus as their own baby, pointing out similarities with themselves. At the same time parents imitated movements of their baby, assuming a parental identity for themselves and the partner. These issues provide the ground for the development of intersubjective process after the child’s birth.

**Brain bases of parenting behaviour**

From the beginning of his research, Freud tried to build a theoretical model of the mind and of the brain looking for the reciprocal correspondences between the psychological ambit and the neurobiological one. In the *Project* (1895), Freud outlined the value of understanding the biological foundation of the psychodynamic processes, although he was limited by the lack of available knowledge of brain functioning.
In the last decades the interest and concern for the interaction between mind and brain are still present in the psychoanalytical world, also stimulated by recent advances of neurobiology in terms of theoretical models and of instruments of research, for example neuroimaging technology. For this reason, in the last years, there has been a resumption of the original ambitions of the Project, which has stimulated a dynamic dialogue between psychoanalysis and neuroscience, however avoiding too hasty integrations between the two ambits.

An interesting area which has stimulated a fruitful dialogue between psychoanalysts and neurobiologists is the context of parenthood, also facilitated by the fact that during pregnancy not only occur deep psychological changes but also transformations in the body and in the brain, first of all in mothers. We should remember that there is a long tradition in psychoanalytical thinking about dynamics of motherhood, starting from Helene Deutsch and Donald Winnicott to Daniel Stern and Joan Raphael-Leff, who have more recently described, in a cogent way, the internal world and the constellation in mothers, with interesting overlapping with the concept of caregiving system derived from the attachment theory.

Parental mental transformations during pregnancy and postnatal period are sustained by well known physiological and hormonal modifications of the body and by changes in the structure of the brain, as evidenced in the last years.

The knowledge of neurobiological basis of parental behaviour has been widened by the use of functional Magnetic Resonance Imaging (fMRI) experiments, through the exploration of parent brain responses to salient infant cues, including baby cries (Kim et al., 2011; Lorberbaum et al., 1999, 2002; Seifritz et al., 2003; Swain et al., 2008) and visual stimuli (Bartels & Zeki, 2004; Leibenluft, Gobbini, Harrison & Haxby, 2004; Nitschke et al., 2004; Noriuchi, Kikuchi & Senoo, 2008; Ranote et al., 2004; Strathearn, Li & Montague, 2005; Strathearn, Li, Fonagy & Montague, 2008; Strathearn, Fonagy, Amico & Montague, 2009; Swain, Leckman, Mayes, Feldman & Schultz, 2006).

To date, the most of the neuroscientific research has been focused on maternal brain, while few studies have looked for common parental brain responses, by grouping together mothers and fathers: nevertheless, existing data suggest commonalities across sex (Seifritz et al., 2003; Swain et al., 2011 in press). In particular, Seifritz and colleagues (2003) found that parents (both mothers and fathers) activated more to infant
crying than laughing in the right amygdala, while non-parent response was greater for infant laughing then crying. These results suggest a potential change in the amygdala function with being a parent (with a greater sensitivity to infant crying, which is a strong elicitor of caregiving behaviour) and represent the first attempt to include gender and experience-dependent aspects of human parenting.

Overall, data coming from neuroimaging researches indicate that parental brain responses to infant affective expressions are modulated by networks of highly conserved hypothalamic–midbrain–limbic–paralimbic–cortical circuits (for a review, see Swain, 2011). Interestingly, these circuits are also involved in other forms of passionate attachment, such as romantic love (Bartels & Zeki, 2004). By the evolutionary point of view, maternal and romantic loves share a common aim, namely, the maintenance and perpetuation of species; at the same, these different forms of love ensure the formation of deep attachments between individuals that promote a rewarding experience, hence suggesting a tight coupling between the neural systems for reward and the attachment processes.

Between cerebral areas involved in maternal behaviours, the orbitofrontal cortex is particularly significant, since it intervenes in modulating mother’s abilities to decode infant emotional cues in order to respond to them in a sensitive way (Nitschke et al., 2004). Kringlebach and colleagues (2008) have supported these considerations, by evidencing how the orbitofrontal cortex and the right fusiform gyrus act as “a specific neural signature for parental instinct”, responding to the face of an infant in 130 milliseconds. Thus, there are consistent evidences that the orbitofrontal cortex is actively implicated in the socio-emotional behaviours and affect-regulating functions that are specifically involved in mother–infant bonds (Schore, 2003a, b, 2011).

Research has evidenced that also the medial preoptic area of the hypothalamus and the hippocampus play a significant role in maternal behaviours, with the first regulating maternal responses to infant signals, and the last modulating memory and learning. In a pioneering structural brain study, Kim and colleagues (2010) found that the increased grey matter volume in maternal midbrain (including the hypothalamus, the substantia nigra, and the amygdale) was related to maternal positive perception of the baby. Such data are extremely important, since they create a bridge between neurobiological plasticity and affective representations, highlighting the complexity of maternal behaviours.
It’s important to underline that both the structures and the functions of “maternal brain circuits” are affected by the large amounts of hormones secreted during pregnancy, birth, and interaction with the baby (Mayes, Swain & Leckman, 2005; Numan, Rosenblatt & Kiminsaruk, 1997; Panksepp, 1998; Pedersen & Prange, 1979). Research has also shown that, before the birth and in the early post-partum weeks, striking hormonal transformations occur also in men brains, with profiles similar to those observed in women (Berg & Wynne-Edwards, 2001; Elwood & Mason, 1994; Fleming, Corter, Stallings & Steiner, 2002; Gordon, Zagoory-Sharon, Leckman & Feldman, 2010; Storey, Walsh, Quinton & Wynne-Edwards, 2000).

These hormonal changes, in conjunction with the emotional and cognitive re-elaborations which take place during the transition to parenthood, strengthen parental sensitivity to infant affective cues and motivate the onset as well as the maintenance of caregiving behaviours. Our group intends to take account of these hormonal influences in future studies.

Studying brain imaging, the mirror neuron system, and parental empathy

Empathy is a key part of motherhood, since it facilitates the dyadic intersubjective exchange especially during the first year of the baby, when language has not developed yet. In fact, in this developmental stage, maternal responsiveness is based upon the ability to detect and resonate with the infant emotions which are primarily expressed through facial expressions.

The concept of empathy also has an important role in the recent development of psychoanalysis, as it has been stressed by Heinz Kohut in *The Analysis of the Self*. According to Kohut (1971), the analyst through empathy can immerse himself or herself in the perception of the patient’s experience and then reflects upon the nature of that experience. In a similar way, a mother immerses herself empathically in the perception of her child and reflects, trying to understand the mental state of the child.

The recent discovery of mirror neuron system has provided a neurobiological explanation of empathy, considerably contributing to the dialogue between neuroscience and psychology.
Here we report a brief excursus of the findings in this area, in order to offer a comprehensive account of how mirror neuron system can underpin human ability to understand and resonate with the emotions of others.

Mirror neurons are a class of neurons first discovered in a sector of the monkey ventral premotor cortex (area F5), that activate both when the monkey executes a goal-related hand action and when it observes similar actions performed by another individual (Rizzolatti, Fadiga, Gallese & Fogassi, 1996). Neurons with similar properties were also discovered in a sector of the posterior parietal cortex (Fogassi et al., 2005).

It has been proposed that the functional mechanism of mirror neurons could be at the basis of a direct form of action understanding (Rizzolatti & Craighero, 2004; Rizzolatti, Fogassi & Gallese, 2001). Such hypothesis has been first confirmed by Umiltà and colleagues (2001), who found that a subset of F5 mirror neurons was also activated when the final part of the observed action (that is, the hand–object interaction, crucial in triggering the response in full vision) was hidden and therefore only be inferred. In another study, Kohler and colleagues (2002) also evidenced that a particular class of F5 mirror neurons, namely “audio-visual mirror neurons”, could be driven not only by action execution and observation but also by the sound produced by the same action.

Several studies have demonstrated also in the human brain the existence of a somatotopically organised mirror system, involved during imitation (Buccino et al., 2004a; Iacoboni et al., 1999), in the perception of communicative actions (Buccino et al., 2004b), and in the detection of action intentions (Iacoboni et al., 2005).

Research has evidenced the role of mirror neuron system in empathy, allowing individuals to share others’ emotions (Carr, Iacoboni, Dubeau, Mazziotta & Lenzi, 2003) as well as sensations, such as disgust (Wicker et al., 2003), pain (Botvinick et al., 2005; Ebisch et al., 2008; Jackson, Meltzoff & Decety, 2005; Singer et al., 2004), and touch (Blakemore, Bristow, Bird, Frith & Ward, 2005; Keysers et al., 2004).

Human capacity to empathise with others is modulated by simulation mechanisms, which have been defined and embodied since they allow the mapping of observed and executed actions, personally experienced and observed emotions or sensations, within the same neural substrate (Gallese, 2005–2006, 2009). By means of embodied simulation, internal representations of the body states associated
with actions, emotions, and sensations produce an “unmediated resonance” (Goldman & Sripada, 2005) in the observer, as if he or she would be doing a similar action or experiencing a similar emotion or sensation. In this way, the mirror neuron system can be described as one of the neurobiological correlates of intersubjective system, since it represents the innate (and embodied) motivation to be in contact with others’ emotions and to share with them subjective experience (Emde, 2007).

By the psychoanalytical point of view the empathic capacity to put oneself in the shoes of another person is frequently explained through projective identification, which describes an intrapsychic and interpersonal externalisation toward the representation of the other, which is modified by the projection. Nevertheless, the mechanism of embodied simulation connected with the mirror neuron system is better explained through the concept of secondary identification in which, according to Sandler, “the boundary between self and object is not lost, but the subject embodies in the self-representations attributes of the object” (Sandler, 1988, p. 10). By the Kleinian point of view this process could be also defined as introjective identification.

In attempt to study the neurobiological correlates of maternal empathic abilities, some of us used fMRI to explore brain activation in sixteen mothers while imitating or observing/empathising emotional expressions (joy, distress, ambiguous, and neutral) of their own child and those of someone else (see figure 2) (Lenzi et al., 2009).

Results evidenced that the mirror neuron system, the insula and amygdala were more active during emotional expressions and that this circuit was engaged to a greater extent when mothers were interacting with their own child (see figure 3).

In addition, it has been found that right anterior insula response positively correlated with maternal reflective function, that is maternal ability to ascribe the infant mental states, such as intentions, motivations, and feelings (Fonagy et al., 1995; Fonagy, Gergely & Jurist, 2001). Such competence was evaluated by applying the Reflective Function Scale (Fonagy, Steele, Steele & Target, 1998) to the Adult Attachment Interview transcripts (AAI; Main & Goldwyn, 1997; Main, Goldwyn & Hesse, 2003).

It’s important to notice that functional and anatomical data (Carr, Iacoboni, Dubeau, Mazziotta & Lenzi, 2003) evidenced that anterior insula acts as a “relay” between action representation (mediated by
the mirror neuron system) and emotion processing (modulated by the limbic system). Moreover, the anterior insula is a centre of viscero-motor integration, and is considered to be the primary cortical area for the interceptive state of the body (Gallese, Keysers & Rizzolatti, 2004). The increased activity of the anterior insula in more empathic mothers may therefore represent the greater ability to bodily feel the emotions of the infants.

Finally, joy expressions evoked a response mainly in limbic and paralimbic areas. By contrast, ambiguous stimuli elicited a response in left high-order cognitive and motor areas, which might reflect the stronger cognitive effort required to decode the exact emotional meaning of these facial expressions.

The results of this study support the hypothesis that the mirror neurons-insula-limbic system (above all in the right hemisphere) is activated to a greater extent in mothers with greater ability to recognise and interpret their infants’ emotional experience in a meaningful way. These data shed light on a large, fascinating mosaic that constitutes the neural basis of the maternal circuit of empathy.

### Studying brain and parental attachment

According to Ainsworth attachment is more than an overt behaviour, since it is internal, “being built into the nervous system, in the course and as a result of the infant’s experience of his transactions with the mother” (Ainsworth, 1967, p. 429). In line with this perspective, neuroscientific
research is revealing that mother–infant systems are interrelated within a superordinate organisation which allows mutual regulation of cerebral, biochemical, and autonomic processes: through these “hidden” mechanisms, the adult brain works as an external regulatory element that enhances the development of the infant’s immature homeostatic systems (Hofer, 1990).

Neurobiological perspective suggests that infant’s emerging neuropsychological abilities develop within primary significant relationships. These primary affective experiences are stored into implicit memory of infant’s right hemisphere as neural maps of the early emotional exchanges.

Right hemisphere, defined as “the emotive brain,” faces its greatest growth especially during the first eighteen months of life, having a dominant role throughout the first three years of life (Chiron et al., 1997; Schore, 2003a, 2003b). During this period, the highest centres of the right hemisphere, in particular the orbitofrontal cortex—the core of Bowlby’s attachment system—act as a regulatory system, preparing the organism to react to developmental challenges (Wittling, 1997) and to cope with distressing situations (Cerqueira, Almeida & Sousa, 2008; Schore, 2000, 2011). It has been largely stressed that the experience-dependent

Figure 3. Observing/empathising: Own child>Other child. The figure shows the right ventral premotor cortex, which is one of the areas with mirror-like properties activated more during observation of the mother’s own child than during that of someone else’s child. [D = distress; A = ambiguous; J = Joy; N = neutral].
Source: Lenzi et al., 2009.
maturation of the right hemisphere—in particular in the limbic system and mesofrontal regions—is largely influenced by early interpersonal affective experiences (Ammaniti & Trentini, 2009; Minagawa-Kawai et al., 2009; Schore, 2003a, 2003b, 2011; Siegel, 1999). Right interconnections between the amygdala, orbitofrontal cortex, and cingulate cortex provide the necessary integration between feelings, impulses to act, and experiences of the world, including inner experiences of individuals, as well as their actions and emotions. Right cortical areas contain a non-verbal affective lexicon, that is a sort of a “vocabulary” which translates non-verbal affective signs—such as facial expressions, vocal tonality or prosody, smell, pheromones, and automatic gestures—throughout the lifespan (Bowers, Bauer & Heilman, 1993; Brancucci, Lucci, Mazzatenta & Tommasi, 2009).

It is no coincidence that human mothers—both right and left handed ones—and many primates have a lateralised nurturing aptitude, defined by the tendency to hold and cradle the newborns with the left part of the body (Sieratzki & Woll, 1996), and utilise left arms and left hands more frequently than fathers and non-mothers (Horton, 1995). Such predisposition allows the child to be positioned on the side of the body that is contralateral to the right hemisphere (Manning et al., 1997), which is in turn dominant for face, emotion processing, and intuitive reassuring gestures (Bourne & Todd, 2004; Sieratzki & Woll, 1996).

Trevarthen’s studies on protoconversations (1979) precisely explain how developing brain systems can be influenced by early affective exchanges: in fact, during emotional communications, the developing right brain of the infant appears to be pre-adapted to be linked to and regulated by the right brain of the adult (Trevarthen, 1990, 1993).

Researches on animals have documented the importance of early mothering in determining how the daughters will take care of the young (Francis, Diorio, Liu & Meaney, 1999; Harlow, 1963; Levine, 1975; Suomi & Ripp, 1983).

In humans, caregiving system appears fully mature in late adolescence and young-adulthood, when females show thoughtfulness regarding mothering and begin to represent themselves as future parents (George & Solomon, 1996, 1999). Such maturation arises from several transformations that occur during puberty, by virtue of the interactions between hormonal and neurobiological changes, environmental stimuli,
and attachment models (Ammaniti, Van IJzendoorn, Speranza & Tambelli, 2000; Grossmann, Grossmann & Waters, 2005).

During adulthood, the assessment of attachment is carried out by means of the AAI (Main & Goldwyn, 1997; Main, Goldwyn & Hesse, 2003), which classifies individuals as secure/free autonomous, dismissing and preoccupied. Furthermore, two additional classifications are possible: specifically unresolved/disorganised with respect to loss and/or trauma, and cannot classify. Meta-analytical studies indicated that secure and dismissing models are the most represented in nonclinical populations (Bakermans-Kranenburg & Van IJzendoorn, 2009).

Secure people have had childhood experiences with their parents, who guaranteed protection and emotional availability toward their attachment needs. They have worked out childhood relationships, ascribing them a relevant value for their own personal history and their present mental state.

On the contrary, dismissing subjects have had infantile experiences of refusal toward emotional needs and, as adults, seem incapable of valuing their attachment relationships. As mechanisms of defence, they do not show overt affective responses to their memory of early and painful situations and avoid close relationships. They have difficulty in regulating affective states (especially negative ones) and show increased reactivity to stress (Feeney & Kirkpatrick, 1996; Heim & Nemeroff, 1999; Powers, Pietromonaco, Gunlicks & Sayer, 2006).

In order to explore how attachment models affect the brain areas involved in emotion, empathy and caregiving system, some of us (Lenzi et al., 2012) explored brain activity in twenty-three nulliparous young-adult females with secure ($N = 11$) and dismissing attachment models ($N = 12$), as classified by means of the AAI (Main & Goldwyn, 1997; Main, Goldwyn & Hesse, 2003).

Subjects underwent fMRI, whereas imitating or observing/empathising with facial expressions (joy, distress, and neutral) of unknown pre-verbal infants.

Dismissing subjects activated motor, mirror, and limbic brain areas to a significantly greater extent, but deactivated the medial orbitofrontal cortex (the core of attachment system) and the perigenual anterior cingulated cortex (which is critical for the emotional processing, by virtue of its connections with the amygdala) (see figure 4).
During emotional faces, increased activity in dismissing women was seen in the right temporal pole (see figure 5): it is important to notice that neurons in this area are reactivated during autobiographical memory retrieval (Greenberg et al., 2005; Piefke, Weiss, Zilles, Markowitsch & Fink, 2003).

These results, which are apparently contradictory, instead define a two-level neural system in dismissing subjects which is perfectly in keeping with the psychological theory according to which dismissing attachment is characterised by multiple (namely conflicting,
incompatible) working models, operating at two different levels of functioning. The implicit level is defined by nonconscious and non-modulated response of subjects to personal affective experience, due to the reactivation of childhood memories of parental rejection toward their own attachment needs. The explicit level, which is cognitive and overt, is defined by the deactivation of attachment and emotional involvement, and is designed to compensate for the affective dysregulation through mechanisms of defensive exclusion from self-involving affective interactions (Main, 1991).

This study provides a neurobiological evidence of a coherent strategy in dismissing model, which is designed to maintain a “false sense of security” by rejecting the affective components of others’ experiences that might create anxiety.

Figure 5. Observing/empathising and imitation of emotional face. The figure shows the areas which are commonly activated in the two groups during both the empathising and the imitation of the emotional faces (right striatum and right amygdala), as well as the area which is more activated in dismissing than in secure subjects (right temporal pole), with the corresponding plots.
Source: Lenzi et al., 2012.
Conclusions and implications for preventive interventions

Extensive research data are converging to show that interrelated psychological and brain changes occur during the transition to parenthood, going to support both the mothers and the fathers in creating an adaptive intersubjective matrix in which the infant can develop (Emde, 2007). Such transformations are linked to the development of parental behaviours, whose precursors can already be detected during pregnancy, for example by virtue of the disposition of parents to name the baby in the 4D ultrasound and to imitate his/her movements (Ammaniti, Mazzoni & Menozzi, 2010).

After the birth, affectionate contact with the parents activate the infant limbic and mesofrontal regions which undergo developmental changes for years after birth, starting with a primary maturation phase which is specifically lateralised to the right hemisphere (Schore, 2003a, 2003b, 2011). By virtue of such dynamic influences, the quality of parental behaviour may influence the subsequent parental attitude of the adult offspring, by affecting all the brain areas that are involved in caregiving system, attachment and empathy (Lenzi et al., 2012).

Empathy provides a comprehensive account of intersubjective intercourses, enabling individuals to establish a meaningful connection with the others’ emotions. Such competencies are modulated by individual affective regulatory strategies, which vary according to the differences in attachment models (Mikulincer, Shaver, Gillath & Nitzberg, 2005; Thompson & Gullone, 2008). The discovery of mirror neurons system in humans has widened the construct of intersubjectivity, by evidencing its embodied basis mapped on shared neural circuits (Gallese, 2009). Research is beginning to explore the relevance of such mechanisms also in mother–infant relationship, providing fascinating insights for the deepening of the factors involved in maternal responsiveness (Lenzi et al., 2009).

Nevertheless, further studies are needed to explore the correspondences between psychological, biochemical, and neurobiological aspects of parenting (by considering both the mothers and the fathers), especially in clinical populations, where psychopathological and environmental risk factors impact on the quality of parenting (Ammaniti, Tambelli & Odorisio, 2012), exposing the infants to the possibility of psychopathological outcomes since the first months of life (Speranza, Ammaniti & Trentini, 2006). According to the principles of translational
research, the results of laboratory-based studies might be applicable in
the clinical practice with at-risk populations, therefore providing new
suggestions for the assessment of parental mental health risk as well as
resilience profiles, that could be efficiently used in the field of early inter-
vention programmes. Among the preventive intervention programmes
promoting parenting in high risk conditions, home-visiting represents
a very significant approach, aimed at reducing infant abuse and neglect
and limiting the risk of early psychopathological outcomes (Olds et al.,
1999), by empowering positive relational experiences within the family
(Heinicke et al., 1999), often through the reinforcement of parents’ abil-
ity to recognise and reflect on infants’ mental states (Fonagy, 1998; Slade,
2002, 2006). Such aspects can be achieved through the enhancements of
parents’ ability in recognising and responding to infants’ affective cues,
thus welcoming their primary need of security. With respect to these
aspects, the research-intervention carried out by some of us (Ammaniti
et al., 2006) found out that, during the first year of life, home-visiting
can positively act on the primary aspects of mother–child interactions,
empowering maternal sensitivity and dyadic cooperation, through the
decrease of maternal intrusiveness during relational transactions.

Data coming from the integration between psychoanalysis, infant
research, cognitive neuroscience and developmental psychology, are
documenting the influence of perinatal period on infant developmental
trajectories. It’s important to notice that, especially in this specific stage
of life, families come into contact with public health services, meet-
ing several professionals who can recognise the early signs of risk in
parenting: thus the perinatal period can be considered as a privileged
opportunity which allows to plan preventive interventions aimed at
sustaining emerging parental abilities as well as infant wellbeing.

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The First Steps: a culture-sensitive preventive developmental guidance for immigrant parents and infants

Patrick Meurs

Many children that are currently participating in preventive developmental guidance programmes in the major towns of the Western world are growing up in cultural or subcultural environments that differ substantially from those of white middle class families. In that perspective, the ability of the prevention worker to take into account very different cultural practices and scripts involving child development and parenting is of great importance (Emde & Spicer, 2000). This ability, referred to as “cultural sensitivity”, has been worked out systematically in the Belgian prevention project we have called The First Steps. After describing the history of that project as well as the specific ports of entry we have in the target group of socially disadvantaged immigrant families, we will provide a section on culture-sensitive adaptations of psychoanalytic concepts and methods. This will be followed by a description of our empirical research, indicating how our studies on vulnerable developmental lines in immigrant children have shown effects of a targeted preventive intervention on their developmental profiles.
Setting up the First Steps project

History of the project

The First Steps programme has been running now for fourteen years, in seven different Belgian cities. The districts the programme was implemented in are characterised by a multi-ethnic population, formed by several waves of immigration from widely varying sources, and by a socio-economic situation of poverty. Since the early nineteen sixties, these immigrants came to western-Europe for economic reasons (economic immigration). They came chiefly from the area around the Mediterranean Sea. Turkish, Moroccan, Spanish, Italian, Greek and Portuguese immigrants have become the most prominent groups in these quarters. Since 1980 onwards, immigration for economical reasons has become almost impossible; therefore, new Turkish and Moroccan immigrants come to Europe for family reunification or family formation (marital immigration). Besides this, there are new groups of immigrants coming in for political reasons (exile, asylum-seekers, political refugees). The latter group of immigrants comes from many different directions; Latin-Americans from the 1970s, Eastern Europeans, specifically from the former Yugoslavia and former Soviet Union from the 1990s. Since 2000 there are more immigrants from sub-Saharan Africa and, since 2002, more Iranians, Kurdish, Somali, Bhutanese and Nepalese asylum-seekers also arrived, as did Algerian, Iraqi and Afghan or, nowadays, Syrian families, not infrequently bringing with them a history of suppression, civil war, and terror as a result of dictatorship, political instability or far-reaching lawlessness in their countries of origin. After a risky escape and a trek for which they sometimes had to pay very much to slave-runners, it is not uncommon that in these recent waves of exile, fathers are separated from mothers and children, both trying to find exile in different European countries in the hope that after the obtaining of official documents by one of them, the family can be reunited again sometime later. Most of them only find a temporary shelter, or become illegal residents, with no official documents and no clear future orientation, while their families risk being split up more permanently, dispersed over different European countries.

Against this background, children often experience the early onset of developmental problems. Studies on immigrant children starting elementary school, at age six, have shown that they lag behind in terms of language acquisition and cognitive development (Moro, 1994; Johnson-Powell & Yamamoto, 1997). From the age of three or four (the entrance
in to kindergarten/preschool) this delay in early cognitive/linguistic development, combined to a less stimulating home environment before the entrance in to kindergarten/preschool, sets the scene for a not so insubstantial number of immigrant children that are showing evidence of early learning problems. These are all too often a developmental fore-runner of emotional difficulties in girls and behavioural problems in boys that clearly increase in immigrant children from the age of ten onwards (Spencer, 1998; Meurs & Jullian, 2008). The departure from normal academic pathways becomes very clear by the third year of school and during adolescence, but the process sets in much earlier. As a result of our empirical research on the first signs of developmental vulnerability in immigrant children (Meurs, Jullian & Ferrant, 2000; Meurs & Jullian, 2004) some policymakers in Belgium started to invest in our early intervention programme.

Our preventive programme has been built up around the preschool developmental phase. Parents from Mediterranean cultures are not in the habit of systematically placing their infants in crèches, nor with babysitters during the first three years of life; if they seek help for the earliest form of care, they likely look for it in the wider family context or with grandparents. Care in crèches or with childminders is also difficult to afford for underprivileged immigrant parents. The First Steps offers an important compensatory and unique extra-familial learning environment for immigrant children who mostly remain at home until age three. It is mainly an infancy programme, with parents and infants (from birth to three) meeting regularly in the centres of our project. Beside this, home-visits for the most isolated families are also part of the project.

For parents with children aged between three and six years old, a follow-up programme is provided, called The Second Steps. This involves fortnightly or monthly meetings which are absolutely essential for consolidating certain effects of the early programme. In Belgium, children between the ages of three and six usually go to school; therefore during this period the parents mostly come to the meetings without their children.

*Finding windows for relationship-based developmental guidance in “The First Steps”*

The preventive project of the First Steps is educational/developmental in nature and contains supplementary emphases on language
acquisition, healthy nutrition, and feeding attitudes. These supplementary domains are explicitly included in the programme, since many young immigrant parents ask for advice or help in respect of the problems their children are faced within language development ("bi—or trilinguism", selective mutism) and in respect of the difficulties they experience while structuring the eating situation at the table (Meurs, Jullian & Ferrant, 2000).

These different sub-fields—education/development, parenting, language acquisition, and nutrition—serve equally well as windows on the early relational dynamics within which children develop (Crockenberg & Leerkes, 2000). If problems arise in one or more of these sub-fields, the affectively relational bond between mother and child also presents a preferential window for intervention: early relationship-based intervention (Emde & Robinson, 2000; Emde, Korfmancher & Kubicek, 1999).

**Reaching out for the “hard to reach” non-western families**

In order to reach the target group to the greatest extent possible, information is disseminated at various levels. First, the building or location where a First Steps programme is running, also preferably houses the local prenatal and postnatal care centres run by the organisations recognised by the Belgian government in this field. As a result of this shared location, more than ninety percent of those in the target group—pregnant and new mothers and their partners from this quarter—come into very early contact with the prevention programmes. Second, a regular presence in the crèches, nursery schools, and waiting rooms of general practitioners in the quarter also means that many parents can become familiar with the project. Third, it is of the greatest importance for the participation of immigrant mothers in the project, that some key figures in their immigrant community become enthusiastic about this project. These key figures are often people who are contacted by other immigrant families with concerns and problems; they open doors to the families that most need preventive support. Fourth, we know that parents that are much in favour of our programme will let the good news spread within their neighbourhood. Oral transmission of information on the programme is important in many cultures of origin of the mothers in our programme. By these different channels the First Steps meeting rooms are more visible and accessible for the most hard-to-reach or isolated families of our target group.
Adapting psychoanalytic concepts and methods to intercultural environments and non-western families

Group work as a method: cultural meanings of mothers’ group meetings

The groups in the First Steps consist of six to eight parents and their children, meeting together every week for two hours, in the presence of three developmental guiders.

A major source of inspiration for this project comes from the initiative taken by the French psychoanalyst Françoise Dolto in parts of Paris, with Les maisons (Ou)vertes: open houses where parents come to talk about upbringing and development. These houses are designed to be places of welcome, places for meeting, with space for play/recreation, spaces where parents can talk in the presence of their children and can share questions, concerns, joy, and sadness about children and parenthood (Dolto, 1985).

Dolto’s idea of sharing affectively loaded relational experiences by parents is, moreover, highly suited for placement within a multicultural perspective. In Mediterranean or in other non-western cultures, for instance, it is usual to meet together as parents and to chat about family matters. In Turkish, these meetings are referred to by the term “dertlesmek” (the sharing by mothers of sorrow and joy, of complex affects and concerns on raising children, Devisch & Gailly, 1985). Similar concepts exist in Moroccan culture (“taimoën”), in Algerian Berber culture (“k’bir a’tay”), etc.

The meeting room as a multicultural and a transitional space: adaptations of the analytic frame

The surface area of the meeting room in The First Steps is ideally approximately between sixty-five and 100 m². The room is divided into three sections of about equal size: one for meetings between parents, one for children to play, and one for interaction between parents and children. Chairs are provided for the parents, with low benches in between. These are the chairs and benches that are customary in Northern-African countries bordering the Mediterranean Sea—the Magreb countries—and in Asia Minor. In between the chairs and benches that are crafted in middle-oriental style, are small low tables with all kinds of bowls and tea sets. Due to this, the set-up of the meeting room is in some ways
analogous to the room in which guests are received in Mediterranean and other non-western cultures. The small tables can also serve as work-benches for the children, if they want to draw, do puzzles or play near their parents. In addition, the meeting room for parents also has corners where food can be cooked or where children can be cared for.

Several play areas are provided for the children, equipped with toys suited specifically to various ages between birth and three. Each child also has an individual drawer where all kinds of drawings can be kept, as well as clay models, things they have made themselves or brought along. The toys in the children’s corners include a lot of dolls, as well as human figures with widely varying clothing and racial features. Furthermore, there is also a wide range of animals, drawing materials, building blocks, construction material, cars, a farm, a garage, a kitchen, a doll’s house, a castle, etc. Activity sets and pushchairs are provided for the very smallest children. The room also has a wall cabinet with children’s books in various languages, as well as books without text. Reading children’s books together or reading stories aloud is an important activity mothers and children can share with each other; illiterate mothers—who initially avoided the book corner—can also get involved in telling stories, using the books without text.

Between the play areas for the children and the meeting room for the parents is a transitory intermediate space for interaction between parents and children. This part of the room is where floortime (Greenspan, 1997) takes place: explicit attention is devoted to bringing about and maintaining communication between parent and baby. Stimulated by the developmental counsellor the parents learn to look at interaction with their children in a new way, in order to recognise the positive aspects more explicitly and to reinforce them. This interactional exercise in the intermediate room is strongly reminiscent of the interaction guidance (McDonough, 1995, 2000) and the Watch, wait and wonder programme (Muir, Lojkasek & Cohen, 1999).

Developmental guiders as facilitating environmental figures with different cultural backgrounds

The topics brought up for discussion during the group sessions are not fixed in advance. The participants define them jointly. The counsellor is present and fulfils the functions primarily of “welcoming”, “containment” and “listening with an analytic ear”. He functions as a facilitating environmental figure. Three counsellors are present during
a group meeting; they have very different cultural backgrounds and speak several languages.

Through the developmental counsellor’s concern for the complex multicultural issues within the families and the “development promoting context” of the meetings, he facilitates the coming up of questions about education, child development, and parenting in the difficult socio-economic life circumstances of these families as well as in the complex sociocultural context of immigration. The counsellor repeatedly reminds the group that it meets each week at a fixed time and that certain matters which could not be fully discussed can be brought up again the next time.

Quite often these parents refer to some cultural differences in holding practices in the first year of life, and, in expected and/or allowed individuation of the child in the second and third year. For example, seen through the eyes of a Westerner, African mothers engage less in face-to-face interaction in the first year of life while holding the baby on the back for hours, Moroccan mothers seem to speak to their baby too loud (an element that often is misinterpreted, by the Western counsellor, as being harsh or angry), rural parents from Anatolia (Turkey) seem neglectful for their attitude of leaving a newborn more on its own. Also many poor parents, at night, take their child in bed for quite a long period (some as long as breastfeeding is done during the night, which is often much longer than in Western families; some because they cannot afford themselves a house where every child soon has its own bed or sleeping room; some to prevent their child from awakening others in their non-isolated noisy apartments where different families live on a few square metres).

The psychodynamics of migration: working through the loss of the containing cultural meaning system

Garza-Guerrero (1974), and, Grinberg & Grinberg (1989) describe immigration as a far-reaching shock or change, more specifically as a loss of cultural self-evidence. Culture as a supportive basis and as a symbolic system which imparts meaning—in brief, culture as “containment” (Bion, 1962)—is lost in immigration to a greater or lesser extent. Immigrants can process this loss in a creative way; the results of this processing have been described as the emergence of a bi-cultural (LaFramboise, 1993) or twin identity (Werbner & Modood, 1997), a multiple, hybrid (Akhtar, 1999) or mixed identity (Akin, 2002), a kind of intercultural
competence. The less creative processing is expressed, on the one hand, in an obstinate clinging to everything from there-and-then (“rigid cultural container”, Grinberg & Grinberg, 1989), which impedes any change in cultural identity and practices. On the other hand, it is all too easy to be absorbed in a new cultural identity, without leaving room for putting down roots in the culture of origin (“manic reaction to loss of cultural containment”, Grinberg & Grinberg, 1989, p. 89).

Specific waves of migration, specific vulnerabilities

First Steps is providing immigrant families a potential space (Winnicott, 1971) for playing, meeting, and reflecting on “development, education, parenthood and family issues”.

An example of a culture-sensitive translation of well-known analytically informed prevention methods and principles is with regard to the concept of “ghosts in the nursery” (Fraiberg, Adelson & Shapiro, 1975). A lot of today’s second-generation immigrant Turkish or Moroccan young mothers came to western-Europe from the time they had to go to school. In their own infancy, they have been “motherless”; as a baby they have been boarded out, twenty or thirty years ago, for care by an aunt in Turkey or Morocco while their own mother and father were far away in western-Europe. Now that these second-generation immigrant women are having children themselves, these hidden feelings of loss, of having been left behind, and, of extremely missing your own mother, are reawakened and can act as a ‘ghost in the nursery’. Conflictive and unresolved early care and attachment experiences with the grandparents can eclipse the potential richness of the here-and-now relationship between the mother and her baby of the next generation. Another subgroup of young immigrant mothers has more recently come to Belgium as imported brides; they leave their own mother behind in the homeland. Caring for your baby when your own mother is living far away, also leads to feelings of isolation.

Still another group of mothers hasn’t had the opportunity to mourn over the loss of their family and the support system in the homeland, in the context of exile. This, combined to the energy consuming post-traumatic stress syndrome and the survival struggle the family is engaged in, is leaving less opportunity to activate “angels in the nursery” (Liebermann, Padron, Van Horn & Harris, 2005), to be
emotionally available for the baby or to set the firm limits a toddler needs.

A prevention worker has to have an insight in the specificities of these migration waves to foresee what kind of ghosts in the nursery could arise. Young immigrant mothers have lived courageously—for example—with these images of “not-being-with your own mother”, but in the period of motherhood constellation (Stern, 1995) these representations of “motherlessness” can break through as ghosts in the nursery and prime the process of emergence of postpartum pathology.

**Immigrant fathers in a transgenerational perspective**

In an intergenerational perspective, the fathers are faced with other problems than the mothers. Fathers of the first generation were highly focused on going back (the remigration perspective) and, in that respect, did not have the intention of showing their children a way into the broader Western society. However, as soon as they realised that migration had become more permanent, it was not so easy for them to change course. The second-generation fathers are not infrequently just as insecure, either because they could not make the grade in Western Europe or because, as imported bridegrooms, they have just arrived from their country of origin and it takes them quite some time to find their own way in a different cultural environment. The insecurities of immigrant fathers are often discussed in the groups within all kinds of upbringing issues. Confronted with questions or problems during upbringing, some immigrant fathers simply tend to withdraw or to be unable to react; some overreact and switch between absence and inadequate harsh discipline.

Yet, more and more of them start to realise the problem: they need to be an identification figure for the trajectory of their third-generation children into Western society, while they themselves did not have an identification possibility in their fathers of the first generation, with respect to this.

**Empirical research on First Steps**

In the past fourteen years we have conducted several studies on this prevention programme. Since 2000, more than 870 immigrant families have participated in the meeting groups of First Steps. 544 of them came for more than three months, 423 more than six months, 267 more than
one year. 168 of the 870 participating families came for three years or more.

We found thirty-two nationalities among the 870 participating families. The two largest sub-groups were families from Moroccan (23%) or Turkish origin (21%), almost all of them Islamic. All together, families with an Islamic religious background make up to seventy per cent of the participants. There is an enormous need for developmental guidance and educational support among these families (Meurs & Jullian, 2008).

First we wanted to detect the developmental domains that are at risk in our target group (study one), by comparing the developmental outcomes of immigrant children to non-immigrant children, including socio-economical level as an additional variable in our design (Meurs, Luyten & Jullian, 2005). Thereafter, we were interested in the effects of the First Steps early preventive intervention: was vulnerability or risk in the children of our target group—immigrant children growing up in conditions of poverty reduced (study two) after participation in the programme? (Meurs, Jullian & Vliegen, 2006) We conclude this empirical research section of our chapter with study three, a recently started study on long-term effects of the First Steps on the school trajectory of the participating children.

Study one: developmental profiles of immigrant children growing up in poverty

The aim of this study was to detect the most vulnerable developmental domains of immigrant children, by using development scales as a research tool (see Meurs, Luyten & Jullian 2005). After determining the most vulnerable developmental lines of the children involved, we can better target our preventive intervention. In summary, the method was to use assessments with the KID (Kent Infant Development Scale, Reuter & Beckett, 1985) for children between birth and eighteen months and the BSID (Bailey Scales of Infant Development II; Bayley, 1993) in the follow-up period between eighteen months and age four. The participants were 492 children who were observed at age four months, eight months, and twelve months. In a follow-up study 454 of them were observed at eighteen, twenty-four, thirty-six months and five and a half years. The design included group comparisons of developmental outcomes within a repeated measurements design. All the children belonged to one of
Table 1. Developmental scores (means in stead of mean and standard deviations) for immigrant and non-immigrant children, middle class or low socio-economical status, at four, eight and twelve months, measured with KID (Kent Infant Development Scale).

<table>
<thead>
<tr>
<th>Group</th>
<th>Age</th>
<th>Non-immigrant middle class (n = 116)</th>
<th>Non-immigrant low SES (n = 112)</th>
<th>Immigrant, middle class (n = 112)</th>
<th>Immigrant, low SES (n = 118)</th>
<th>F (3, 488)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General developmental outcome</td>
<td>4m</td>
<td>75.0a</td>
<td>63.3b</td>
<td>75.3a</td>
<td>63.6b</td>
<td>180.5****</td>
</tr>
<tr>
<td></td>
<td>8m</td>
<td>145.3a</td>
<td>130.8c</td>
<td>142.9b</td>
<td>126.1d</td>
<td>261.4****</td>
</tr>
<tr>
<td></td>
<td>12m</td>
<td>208.8a</td>
<td>191.0c</td>
<td>195.7b</td>
<td>176.9d</td>
<td>377.6****</td>
</tr>
<tr>
<td>Cognitive development</td>
<td>4m</td>
<td>17.1a</td>
<td>14.2b</td>
<td>17.0a</td>
<td>14.6b</td>
<td>148.4****</td>
</tr>
<tr>
<td></td>
<td>8m</td>
<td>33.6a</td>
<td>29.1b</td>
<td>29.7b</td>
<td>26.7c</td>
<td>175.1****</td>
</tr>
<tr>
<td></td>
<td>12m</td>
<td>44.7a</td>
<td>37.4c</td>
<td>40.3b</td>
<td>34.9d</td>
<td>217.7****</td>
</tr>
<tr>
<td>Motor development</td>
<td>4m</td>
<td>19.8a</td>
<td>19.7a</td>
<td>19.4a</td>
<td>19.0a</td>
<td>4.8ns</td>
</tr>
<tr>
<td></td>
<td>8m</td>
<td>43.4a</td>
<td>43.5a</td>
<td>42.8a</td>
<td>40.8b</td>
<td>7.3**</td>
</tr>
<tr>
<td></td>
<td>12m</td>
<td>64.3a</td>
<td>64.7a</td>
<td>62.2b</td>
<td>60.0b</td>
<td>13.9***</td>
</tr>
<tr>
<td>Communicative/linguistic development</td>
<td>4m</td>
<td>11.9a</td>
<td>10.7b</td>
<td>14.9a</td>
<td>10.8b</td>
<td>36.0****</td>
</tr>
<tr>
<td></td>
<td>8m</td>
<td>22.7a</td>
<td>19.0b</td>
<td>19.0b</td>
<td>17.2c</td>
<td>153.9****</td>
</tr>
<tr>
<td></td>
<td>12m</td>
<td>31.1a</td>
<td>23.7c</td>
<td>25.4b</td>
<td>22.6d</td>
<td>422.9****</td>
</tr>
<tr>
<td>Development of capability to manage for one’s self</td>
<td>4m</td>
<td>11.2a</td>
<td>09.7b</td>
<td>11.2b</td>
<td>09.9b</td>
<td>17.0***</td>
</tr>
<tr>
<td></td>
<td>8m</td>
<td>21.4a</td>
<td>18.0b</td>
<td>20.6a</td>
<td>18.7b</td>
<td>51.9****</td>
</tr>
<tr>
<td></td>
<td>12m</td>
<td>31.0a</td>
<td>28.3b</td>
<td>30.0a</td>
<td>27.2b</td>
<td>46.8****</td>
</tr>
<tr>
<td>Socio-emotional development</td>
<td>4m</td>
<td>16.1a</td>
<td>12.9b</td>
<td>16.3a</td>
<td>14.0b</td>
<td>105.8****</td>
</tr>
<tr>
<td></td>
<td>8m</td>
<td>32.3a</td>
<td>24.6c</td>
<td>31.9a</td>
<td>27.5b</td>
<td>212.9****</td>
</tr>
<tr>
<td></td>
<td>12m</td>
<td>41.6a</td>
<td>31.4c</td>
<td>40.9a</td>
<td>35.4b</td>
<td>227.3****</td>
</tr>
</tbody>
</table>

Notes: Developmental scores accompanied by a different letter code, are statistically significantly different.

Values of standard deviations (SD) can be found in: Meurs, Luyten & Vliegen (2005).

* p < .05, ** p < .01, *** p < .001, **** p < .0001.
four groups: middle class non-immigrant, middle class immigrant, low socio-economic status (SES) non-immigrant and low SES immigrant.

As can be seen in Table 1, at the age of four months the subgroup of children living in poverty already had a significant delay in development compared to the subgroup of middle class children, in all developmental domains except motor development. For example, for general development, the mean scores 75.1 and 63.5 differ significantly, $t = 4.11$, $p < .05$). At the age of eight months this delay was confirmed and found in all developmental domains. At the age of twelve months, for the first time, the subgroup of immigrant children, had a lower developmental score than the subgroup of non-immigrant children ($X = 200.8$ vs. $X = 185.2$, $t = 4.44$, $p < .01$; effect size = 0.43, $p < .001$), especially for cognition and communication/linguistic (pre-verbal) development. The negative impact of belonging to an immigrant group (in contrast to the impact of poverty) was not significant for all developmental lines, but it was significant for cognition and communication/language development. This negative impact becomes clear when verbal development starts, starting at the end of the first year of life and during the beginning of the second year. The effect size of this negative impact of immigrant group status was smaller, compared to the effect size of poverty (effect size of poverty at twelve months = .91; compared to effect size of immigrant group status = .43).

At the age of eighteen months the significant differences found in the first year of life continued. As can be seen in Table 2, the vulnerability of immigrant children in early mental development (mainly for cognition and early linguistic skills) was apparent: both, the immigrant children from middle class and from low SES had a lower score than socio-economically comparable non-immigrant children. The delay in development of children growing up in poverty was also apparent, and low SES immigrant children seemed to combine both vulnerabilities.

The developmental outcomes for social adaptive development provide a contrast to the above results. At age three (thirty-six months), middle class immigrant children had a score that was not significantly different from the middle class non-immigrant children. The immigrant children with low SES have even a significantly better score than the non-immigrant children of low SES. We interpret this to mean that, from birth to three, socio-emotional development seems to be better buffered in immigrant families than cognitive or language development. In the subgroup of poverty children, the non-immigrants had a significantly
lower outcome for socio-emotional development than the immigrants, probably because in the group of low SES immigrant children the social ties in Mediterranean families living in disadvantaged quarters remain somewhat stronger, when compared to the lack of social support in Belgian families living in poverty.

When considering the developmental outcomes in Tables 1 and 2, we realised that without targeted preventive intervention, the vulnerabilities at age three (cognition and language in immigrant children; general development/all developmental domains in conditions of poverty) could become continuing developmental problems. At age three—in Belgium the entrance of preschools—immigrant children in poverty stand to have developmental outcomes that middle class children reach approximately between half a year and nine months before. One could say that many immigrant children will be able to catch up but too many develop symptoms, psychosomatic complaints, or, selective mutism when confronted with a new language and other communication/linguistic codes at school. Moreover, all too often immigrant children are considered as too immature to enter primary school at age six and

Table 2. Developmental scores (means in stead of mean and standard deviations) for immigrant and non-immigrant children, from middle class or low socio-economical status, at eighteen, twenty-four and thirty-six months, measured with BSID (Bailey Scales Infant Development).

<table>
<thead>
<tr>
<th>F (3, 488)</th>
<th>Non-immigrant middle class (n = 116)</th>
<th>Non-immigrant low SES (n = 112)</th>
<th>Immigrant middle class (n = 112)</th>
<th>Immigrant low SES (n = 118)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental development</td>
<td>18m 110a 24m 133a 36m 157a</td>
<td>104b 122b 144c</td>
<td>105b 127a,b 149b</td>
<td>95c 114c 135d</td>
</tr>
<tr>
<td>Motor development</td>
<td>18m 76a 24m 86a 36m 102a</td>
<td>72a 82a,b 93b</td>
<td>74a 86a 101a</td>
<td>67b 78b 90b</td>
</tr>
<tr>
<td>Social-adaptive behaviour</td>
<td>36m 115a</td>
<td>104c</td>
<td>117a</td>
<td>110b</td>
</tr>
</tbody>
</table>

When considering the developmental outcomes in Tables 1 and 2, we realised that without targeted preventive intervention, the vulnerabilities at age three (cognition and language in immigrant children; general development/all developmental domains in conditions of poverty) could become continuing developmental problems. At age three—in Belgium the entrance of preschools—immigrant children in poverty stand to have developmental outcomes that middle class children reach approximately between half a year and nine months before. One could say that many immigrant children will be able to catch up but too many develop symptoms, psychosomatic complaints, or, selective mutism when confronted with a new language and other communication/linguistic codes at school. Moreover, all too often immigrant children are considered as too immature to enter primary school at age six and
are advised to wait a year, but we observed that this does not resolve the problem of school success. We therefore concluded that immigrant children need another kind of intervention, a prevention programme, starting early. It is for this reason that we set up the First Steps programme, with an emphasis for some on early cognitive and linguistic stimulation, and for others with an emphasis on general developmentally informed prevention.

Study two: impact of First Steps early prevention on development at risk

The aim of this study was to detect whether participation in the First Steps once-weekly development and education oriented prevention programme during a three year period could lead to a significant reduction of developmental delay in low SES immigrant children, the most vulnerable subgroup in our former study. Developmental risk categories were investigated, using DDST (Denver Development Screening Test, Frankenburg & Dodds, 1969) at the age of eight months, at forty-two months and at seventy-two months. Children were placed under the heading of normal variance of development when their developmental level is within the normal range for all domains. Normal variance of development means that a child behaves and reacts like ninety per cent of their age group. A low risk profile means a delay in one developmental domain, a delay that is maintained at re-evaluation four weeks later. A high risk profile requires a delay in more than one developmental domain, a delay that is maintained in re-evaluation four weeks later.1

In the intervention group, 118 immigrant children of low SES that entered the First Steps programme after the age of eight months participated. A control group of 105 low SES immigrant families, not participating in the First Steps, were followed-up in the same developmental period. These families were selected within the same quarters and were matched with the families of the intervention group for ethnic background, family size, migration history, as well as for the criteria of poverty that are used by the Flemish Government: The children in the control group were also matched with the intervention children for age and for gender (approximately 50% boys, 50% girls).

By doing so, we set up a quasi-experimental design as within the naturalistic conditions of this study, it was impossible to set up a randomised clinical trial.
As can be seen in Table 3, at the age of 8 months there were no differences between groups in the risk categories. However, at 42 months (which is six months after the end of the programme), significant differences appeared between the intervention group and the control group. At age six, both sub-groups of low SES immigrant children are faced with an increase in risk profiles. In the First Steps group, this increase is mainly an increase in mild risk profiles, while in the control group the increase is mainly in the high risk level.

We concluded that the developmental risk of low SES immigrant children can be significantly reduced by this kind of preventive intervention. Without this targeted prevention, around thirty per cent of low SES immigrant children kept raising developmental concerns at forty-two months. Moreover, there was in the control group a tendency towards more high risk profiles at the age of six years (19% vs. 3% in the intervention group). It seemed to us that the first steps intervention programme clearly had a buffering effect on developmental risk in the subgroup of low SES immigrant children that in study one were identified as most vulnerable. Three years after intervention (which stopped at age three), there is again an increase in developmental risk in low SES children (from 11% to 20%), fortunately most of them only in a mild risk

Table 3. Number of normal developmental profiles, mild risk profiles and high risk profiles in immigrant children living in conditions of poverty, at age eight months, forty-two months and seventy-two months, either or not participating in First Steps. (Denver Development Screening Test).

<table>
<thead>
<tr>
<th></th>
<th>8 months</th>
<th></th>
<th></th>
<th>42 months</th>
<th></th>
<th></th>
<th>72 months</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No risk</td>
<td>Mild</td>
<td>High</td>
<td>No risk</td>
<td>Mild</td>
<td>High</td>
<td>No risk</td>
<td>Mild</td>
<td>High</td>
</tr>
<tr>
<td>First Steps</td>
<td>84 (70%)</td>
<td>23 (21%)</td>
<td>11 (9%)</td>
<td>105 (89%)</td>
<td>13 (11%)</td>
<td>0 (0%)</td>
<td>94 (80%)</td>
<td>20 (17%)</td>
<td>4 (3%)</td>
</tr>
<tr>
<td>group (n = 118)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>72 (68%)</td>
<td>25 (24%)</td>
<td>8 (8%)</td>
<td>71 (67%)</td>
<td>24 (24%)</td>
<td>10 (9%)</td>
<td>62 (59%)</td>
<td>23 (22%)</td>
<td>20 (19%)</td>
</tr>
<tr>
<td>(n = 105)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * = significant difference ($\alpha = .05$).
condition. Early prevention can work, but it isn’t magic (see also Emde, 2003).

Study three: follow-up study of the school trajectory of immigrant children in poverty

The aim of this recent and ongoing study was to detect whether the immigrant children of low SES that participated in The First Steps followed less problematic pathways at school, compared to low SES immigrant children that were not in the prevention programme. The first children that started in our programme are now thirteen or fourteen years old; we therefore sought to learn whether the favourable effects on developmental scales could also be found in academic achievement years later.

Fifty-eight children that participated in the First Steps programme in the period 2000–2003 and that also participated in study two were contacted again for follow-up research. Forty-eight of them agreed to be included in this new study. A small comparison group consists of twenty-eight low SES immigrant children that did not enter the project in 2000 and that had not participated in study two. The comparison children in study three were matched with those of the intervention group for age, ethnic background, gender (62% boys, 38% girls), familial income and living conditions.

Our results included school records at ages six, eleven and thirteen/fourteen years. At age six, at entry in grade school, eight per cent of the children in the prevention group were diagnosed as immature or were advised not to enter grade-school yet, compared to fifteen per cent in the control group. At age ten/eleven, we discerned the same tendency. A significantly smaller number of children in the intervention group had learning difficulties, compared to the control group (12% vs. 36%). At age thirteen (at the end of the second year in secondary school) we found that for those who reached secondary school, only six per cent were advised for the lower level of technical school (vs. 35% in the comparison group). In the preliminary data analysis of this follow-up study, we found that not only more First Steps children at age twelve reached General Secondary School in Belgium (75% vs. 58% in the comparison group), but also that after two years of this highest school level more First steps children were allowed to continue on their schooling pathway than in the comparison group. Further analysis also indicated that ten or
twelve years after the first participation in our programme, sixty-three per cent of the First Steps families no longer fit the conditions of poverty, whereas in the control group this was only so for eighteen per cent of the families. The explanations for this striking finding still need to be investigated, including the possible contribution of early developmental guidance programmes to these larger changes. It may be that an early intervention such as First Steps acts as a kind of catalyst that supports larger change influences for families that live in difficult circumstances.

We are seeing encouraging and consistent trends from our prevention efforts in this follow-up. Still, this part of our empirical research has its limitations, since it does not result from a planned randomised impact study. Nonetheless as a pilot study in the domain of long-term impact designs it offers us valuable hypotheses and gives us an idea of “the way ahead”.

**Conclusions**

We hope in the future to be able to identify mediating and moderating variables contributing to the developmental outcomes we have observed. The relevant outcomes include academic achievement, mental health, resilience and socio-economic improvements for immigrant children and their parents who have started in unfavourable socio-economic life conditions.

In another study we have begun, we are interviewing parents about how this early intervention had influenced their attitudes of upbringing. The testimony of one of the mothers from our first prevention group is illustrative: “Since I followed your programme, I think that when my child is starting to have problems, I now know that there is something for us … I go in search for that, instead of thinking that we are forgotten in this society, instead of waiting until problems outgrow us.”

From this statement we might speculate that change could be taking place at the level of security and attachment representations among those immigrant parents living in precarious conditions. We need further research to confirm that such a change occurs, as well as changes in attitudes towards the broader Western society and its institutions. From other interviews, we are finding that mothers feel that they are more able to take responsibility for the developmental course of their children, and seem to have an increased sense of agency resulting from interactions and meetings in the First Steps groups. Partly due to the
preventive support they had early in the course of becoming a parent, they perceive raising children more as a shared responsibility and make use of memories/representations of early support for their family as a kind of basic trust image. This image helps them to take responsibility, when in the course of their child’s development things become more complex and difficult. Instead of feeling lost at difficult times, representations of an earlier experience of support can act as an anchor, or a point of reference, thereby making a difference. Through this, we see The First Steps project as offering children and parents in immigrant families of low socio-economic status more of a fair chance in going forward (Bekman, 2003; Emde, 2003; Sameroff & Fiese, 2000; Brooks-Gunn, 2003; Kagitçibasi & Meurs, 2006; Kagitçibasi, Sunar & Bekman, 2001).

Overall, it can be said that our preventive programme is psychoanalytically informed. It has an emphasis on working through inner conflicts and ambivalence about participation and integration in Western society, as well as on mentalising emotions and thoughts that hinder such a process. We can say that “ghosts in the nursery” are often identified, depending on the specific wave of immigration; additionally, experiences of loss due to migration are remembered. At the heart of First Steps is the long-term group work where potential and reflective space is offered, a space for playing, talking and “weaving” different cultures into containing envelopes (Meurs & Cluckers, 1999). We believe this kind of containment enables these immigrant families to thrive in a better way and to grasp the opportunities for integration that life offers, not only for parents but for their children who seek their way into the broader society.

**Note**

1. The DDST is a screening instrument that was not explicitly intended to be used in outcome studies, although many early investigators outside of the US did use it for outcome (for a discussion, see: Frankenburg, Emde & Sullivan, 1985). By using this instrument in our impact study, we wanted to estimate risk categories, rather than assessing developmental outcomes. In our ongoing and future impact studies, we will be returning to the Bailey scales for assessing developmental outcomes.
References


This chapter describes our psychoanalytically informed early parenting intervention project, which began in 1970, and its follow-up after nineteen, thirty-two and thirty-seven years. The intervention, involving ten mothers and sixteen children, began in infancy with twice a week two hour session and continued for five years. Longitudinal observations and reflections, as well as personal conclusions of the author are presented.

In 1969 the team of the Early Child Development Program in the department of Psychiatry at the Medical College of PA/Eastern Pennsylvania Psychiatric Institute (EPPI) developed a project to observe mothers and their newborn infants for the purpose of a longitudinal research project. We had developed procedures and a protocol to record and to film relevant mother–infant interactional observational data to test the hypothesis that qualitative aspects of the mother–child relationship would correspond qualitatively with the development of specified adaptive ego functions in their child, assuming average-expectable neonatal endowment in the child. The staff committed to two hour observation sessions, twice a week, and a once weekly conference to discuss procedures, observations, and eventually inferences to which these led.
The Medical College’s children’s unit being well regarded in the community, we called for volunteers from the surrounding community. Forty-eight mothers presented themselves; of this group, we selected the mothers who at the time were pregnant and there were seven among them. Three more mothers with infants less than one month old soon joined the project, for a total of ten. These ten families constituted the study group. None of these pregnant mothers was a primipara; several of them already had two or more children—a fact that eliminated the considerable effects of being a first time mother. Four of them had been teen mothers. Two had not finished high school; only one had finished college, a nurse. These ten mothers eventually gave birth to seventeen children, thirteen girls and four boys during the course of the seven year study period. Five families were from “lower socioeconomic” and five were from “lower middle socioeconomic” groupings. The “lower socioeconomic” mothers lived in a Philadelphia Housing Project, for the most part inhabited by welfare recipients. The “lower middle socioeconomic” mothers lived in the blue-collar neighbourhood in which the Medical College is located; the fathers who earned modest incomes were variously employed; for instance they included a factory worker, a policeman, and a store attendant. Because we enrolled volunteers when they were pregnant, we could not predict the gender of the child; as a result, the boys/girls distribution was uneven. All the children were free from significant disabilities but one who suffered from severe cerebral palsy. Let me note parenthetically that given that this seriously compromised infant was the second baby born to one of the project mothers, we did not exclude her from coming to the project although we did not include her in the research sample. (For a detailed description of the project, its structure, its anthropological-psychoanalytic frame, its method, subjects, and the description of findings as well as the hypotheses and theoretical considerations the study generated, see Parens 1979 [2008]).

We started in September 1970. The ten mothers and their eleven infants (one mother had twins) met twice a week for two hour sessions, in a group setting, where we began our anthropological-style observational research. The mothers and children were free to act as they wished; no assignments were made; no formal challenges were presented. The mothers talked among themselves and with the research staff while they tended to their infants and other children. Toys, milk, and coffee, doughnuts or the like were available. The base site of our “observational laboratory” was the day room of our children’s unit
where there were comfortable enough couches and living room type chairs; there was a large walk-in closet modestly stocked with basic toys for young children.

I informed the mothers that while we were doing some observational research, I was also teaching child development to trainees and that we were enormously appreciative of the mothers giving us an opportunity to learn about normal child development by directly observing their children over time; the mothers seemed quite accepting of this dual function. In addition, being in large measure a clinician, I decided that we would proceed as participant observers and told the mothers that as we proceed we would try to answer any questions they have about their child. Thus, while the staff recorded observations, I, the principal investigator, was teaching child development to fellows in child psychiatry who sat in peripherally on the observational sessions. Once we got going, child analysis candidates joined the observation periphery.

Within three months, the mothers’ interest in my comments to the trainees about their kids’ behaviours grew. Following several requests by the mothers that I tell them too what I was telling the child psychiatry and psychoanalysis students, we decided to address the students and the mothers jointly regarding the meaning of the children’s behaviours, what elicited them, etc. The mothers began to ask how their infants’ and children’s behaviours could best be dealt with to insure their healthy emotional development. Within months the mothers’ behaviours toward their children seemed to be impacted by our discussions. They gave us the impression that we were doing some unanticipated “parenting education”.

Eighteen months into the project, one of the group mothers confirmed this. She decided to gather some of her neighbours to share with them “some the things she was learning at EPPI.” We learned about this when she asked me to come to her house, “because some the mothers were asking questions she couldn’t be sure how to answer!” She thereby confirmed that we seemed to have fallen upon a potentially productive method for parenting education.

Expressions by several mothers like “I wish I had known this before I had my children” led us in conference to consider developing formal materials for “Parenting Education” focused on the emotional development of children. The rewards of the potential for optimising emotional child development seemed far-reaching.

In time, we developed three sets of materials grouped under the title, *Parenting for Emotional Growth* (Parens, Scattergood, Duff & Singletary,
1997; Parens, 2010). Following this we developed a further set of workshops (Parens & Rose-Itkoff, 1997a, 1997b).

The mothers and children attended the group over a seven year period. Some of the mothers had two, one had three children while in the project. When of age, the children went to school. The interactions of the mothers, the children, and the research staff, rather quickly became friendly, mutually respecting, and serious fun. Over time the benefits to the mothers and their children, and what the research team learned, were well beyond expectations.

**Nineteen year follow-up study**

A follow-up study after nineteen years (Parens, 1993) showed that the sixteen children of our project fared meaningfully better than the populations from which they came. From our analyses of extensive questionnaires and semi-structured interviews of mothers and children, we found differences that impressed us in a number of domains of adaptive development. These are summarised below.

**Trouble with the law**

Looking at the question of trouble with “authorities”, we looked at two polar categories, one distinctly troublesome, the other only mildly so. None of the youngsters had any brushes with legal authorities; nor did they receive suspensions from school. By contrast, nearly twelve per cent of this age-population was arrested in the United States (U. S.) in 1985 (U. S. Department of Education, 1988) and the rate of school suspensions in Philadelphia was greater than twenty per cent per year (*Philadelphia Inquirer*, 1988a).

**Drug abuse**

Of the fifteen study subjects, one used metamphetamines (seven per cent), but there was no evidence of alcohol or illicit drug use in any of the other subjects. In the U. S. population of high school seniors, 65.3 per cent are reported to use alcohol while 27.1 per cent reported using other illicit drugs (U. S. Department of Education, 1988).

**School performance**

One out of fifteen subjects (seven per cent) dropped out of high school near the end of the eleventh grade due to pregnancy and her intention to
take care of her baby. The cerebral palsied child was retarded and went to a school for retarded children where her progress was considered good. All the other children achieved grade level. At the time of this follow-up, in the general population from which they came, about forty per cent dropped out of high school (Philadelphia Inquirer, 1988a; U. S. Department of Education, 1988). The study follow-up occurred when only six of the subjects were of college age. Four of these six subjects entered college. One left college after one semester due to financial problems, but hoped to return. Several of the younger children did express interest in going to college in the follow-up interview. By contrast, in their community, twenty per cent of high school graduates entered college.

**Teenage pregnancy (including boys’ involvement)**

Twelve of the subjects were fourteen years old and older at nineteen year follow-up; of these, two became pregnant, which over the fourteen to eighteen year period represents a rate of thirteen per cent. Some studies at the time reported that ten per cent of girls this age become pregnant each year (Philadelphia Inquirer, 1988b). Thus for comparison, with a yearly incidence of ten per cent over a four-year period, the incidence of pregnancy over this four-year period could be at least twenty per cent.

Although this study sample was small, it did draw its subjects from a significantly disadvantaged neighbourhood. At the very least, this study meaningfully supports the efficacy of this type of intervention. In addition, a cost analysis taking into account the cost of the programme, the cost of criminal acts, police costs, judicial process and incarceration, welfare, child protective costs, life time earnings, drug abuse and treatment costs is likely to demonstrate the economic merits of such programmes. In addition to these economic benefits, this programme clearly helped avert considerable human suffering. As with our other findings, replication with larger populations is needed to further affirm the effectiveness of such supportive-educational intervention.

**Aggression profiles**

Because I found striking behavioural evidence that challenged the theory of aggression with which I came into the project, for reasons that became clear to me only many years later, I felt compelled to study the development of aggression in our subjects which led to my putting aside the death-instinct-based theory of aggression and to propose a revision of the psychoanalytic theory of aggression (Parens, 1979 [2008]).
Because our behavioural findings, limited as they are, suggested that the children’s aggressive behaviours had been positively impacted by their mothers’ optimising parenting, I wanted to measure their profiles nineteen years after the start of the project. I should note that while we did not specifically test for the correlation of qualitative aspects of the mother–child relationship with the development of aggression in the child, our day to day observations over seven years of the mother’s handling their children’s experiencing and aggressive behaviours, strongly suggested that the way they dealt with them strongly contributed to the development of their children’s aggression profiles. I have presented and discussed findings from a number of mental health researchers that strongly support the positive correlation of qualitative aspects of parenting, attachment, and aggression profiles in the children (Parens, 1987; Parens, 2011, see Chapters One to Three).

The instrument we used to attempt to assess the children’s aggression profiles suited my revision of theory well. Using the Fitzgibbons Anger Inventory (FAI) (Fitzgibbons, 1984), which Fitzgibbons developed independently, we set out in our nineteen year follow-up to evaluate our kids’ aggression profiles. Fitzgibbons (1984) measured levels of aggression (mild, moderate, and severe) categorised into four dynamic-behavioural parameters: overall anger, violence potential, passive aggression, and trust/mistrust. The FAI test population scores were derived from samples of adolescents in two communities comparable to those from which the subjects came. That is to say, Fitzgibbons tested his instrument in two neighbourhoods that consisted mostly of lower socioeconomic and lower middle socioeconomic populations. Fitzgibbons considered “moderate” to be an indicator of potentially troublesome behaviour. Of these four parameters, two of them, “manifest anger” and “violence potential” are directly relevant to the question, “How likely are these children to become problems for themselves and society?” It is in fact along these two parameters that our subjects fared more favourably, that is fell in the “mild” range, than did the test populations which tended on average to fall in the “moderate” range.

Changes in the mothers’ functioning as parents and as individuals

Impressed with the changes for the better over time of the mothers’ parenting strategies, we attempted to document these changes. We evaluated changes in parenting by assessments on four parameters
we believe to be determinants of parenting that are growth-promoting versus growth-disturbing (Parenting Activity Scale, Parens, Singletary, Bockoven, Skivone & Schramm, 1986): First, the mother’s psychological grasp/understanding of her child’s behaviours and needs, and the tasks of child rearing to optimise her child’s development; Second, the shift in the balance of her loving and hating her child, much of which grows out of the mother’s feeling her efforts to succeed/fail as reflected in her child’s success/failure in development and adaptation; Third, the manifest and subjective feeling of the mother’s evolving effectiveness as a parent; and fourth the degree to which her functioning as a parent has contributed to her overall feelings of self-worth.

Two assessments were made; one by the mothers and one by four senior staff members (clinicians-researchers) of the Early Child Development Program (ECDP). Assessments were made on a ten point scale (one = least/worst, ten = most/best); each figure represents the mean for the mothers as a group. Ten mothers participated for an average of 4.4 years (median 4.1 years) for two to four hours weekly; average attendance over the duration of the project was seventy-nine per cent.

Table 1. Changes in parent functioning.

<table>
<thead>
<tr>
<th>Change in Parenting Parameters (Means) on ten-point Scale</th>
<th>Parent Self-Ratings (n = 8*)</th>
<th>Stat. Sig. (Wilcoxon)</th>
<th>ECDP Staff (4) Ratings (n = 10)</th>
<th>Stat. Sig. (Wilcoxon)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Diff.</td>
<td>Before</td>
</tr>
<tr>
<td>Understanding child &amp; rearing</td>
<td>3.2</td>
<td>8.6</td>
<td>5.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Shift in ambivalence</td>
<td>3.2</td>
<td>8.4</td>
<td>5.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Effectiveness of parenting</td>
<td>3.4</td>
<td>8.7</td>
<td>5.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Self-worth and competence</td>
<td>3.4</td>
<td>9</td>
<td>5.6</td>
<td>4.1</td>
</tr>
</tbody>
</table>

* One mother did not return self-rating; one other mother lost to the project (returned to work) was included in staff evaluation (in the project only one year, her changes were minimal).
As can be seen in the table, mothers’ self-assessments indicate a rate of change toward growth-promoting functioning of more than five points for each of the four parameters (p < 0.02 for each). The results from the four ECDP staff assessors indicated an average positive change of nearly four points for three parameters, and nearly three points on the fourth parameter, a change on the growth-promoting versus growth-disturbing axis from a pre-experience assessment mean of 4.3 to a post-experience assessment mean of 7.7 (p < 0.01 for each). Again we asked: are these data clinically significant? As already mentioned, in conference after conference, clinically we felt that the mothers’ parenting functions were changing in a growth-promoting direction. Each staff member recorded her/his assessment blind; consensus was then obtained “in conference”; moreover, this was experienced as an easy task, since most assessments were in notable agreement. Since we evaluated parenting along the growth-promoting to growth-disturbing axis on a ten-point scale, we concluded there was a significant shift toward growth-promoting parenting. Most importantly, the mothers’ subjective sense of their much-improved parenting experience was indicated by their more than five point shift on their self assessment scale.

**Follow-up studies thirty-two and thirty-seven years after the start of the project**

The next follow-up occurred in 2002, thirty-two years after the start of the project (Parens et al., 2005). Seven of the ten mothers, and six of the sixteen grown child-subjects came. Mothers also brought some of their other grown offspring who were not among our project subjects. We could no longer reach one mother. Interestingly, at this reunion the now-grown child-subjects did not bring their own children. This “reunion” (as it was seen by the mothers) was striking for the warmth and pleasure expressed in seeing each other, among the mothers, the now-grown children, and the remaining research staff as well. Videotaped interviews with the mothers and some of the grown children, (excerpts of which are available in a DVD (Parens, 2008)), were most welcomed by them. In addition, much was also learned in individual conversations. However, our efforts to gather follow-up data paralleling the nineteen year follow-up did not succeed due to short-handed staffing and our limited ability then to do so. Our next and last follow-up occurred thirty-seven years after the project started, in June 2007.
Of the ten mothers, again seven came, though not the same seven as in 2002. So did five of the grown child subjects. Two of these also brought their own children. Again, live interviews with mothers and their grown offspring were recorded, and again, due to research capability limitations, we could not pursue the study in wished-for detail, but we believe video interviews lent strong support to a meaningful continuation of many of the nineteen year follow-up findings. These are summarised below, first from comments of the mothers and their children and, second, from reflections of the staff.

Salient issues addressed by mothers and their grown children

In the videoed interviews—only non-directive open-ended questions (as one might pose in an analytic context) were asked. Mothers expressed the following issues that had been discussed with them, and that they valued in parenting their children over the years. These included: Talking to and listening to your child; Setting limits constructively; and helping mothers (and the grown children) not abuse their own children; furthermore both generations saw the needs and benefits of showing affection and respect for their child.

In addition what mothers expressed directly, we inferred the following benefits from being in the project were indicated in their interviews. First, it gave the mothers and the grown children a sense of what is “growth-promoting” parenting; second, it made it possible for these mothers to not rear their children the way they were raised. They gave evidence of feeling that the way they reared their children was more positive and constructive than what they got; one mother quipped that had she not been in the programme she might have killed one of her kids; another one said, had she not been in the programme she’d be in jail. Third, mothers felt they understood (growth-promoting) parenting better; and as a result that they had become more competent parents with more of a sense of confidence. Fourth, what parents said seemed to encourage more formal parenting education. Some stated that it to be required in schools—because they wished that they had known what they learned in the project before they had their own children. Finally, what was especially gratifying, and not really anticipated by us, were the comments of pleasure expressed by the mothers that their now-grown children were raising their own children using parenting principles the mothers learned and applied in the project. It seemed that what had found valuable,
they transmitted to their children—and the children in turn took it on as growth-promoting parenting.

**Issues thought most important by the project staff**

Among the many parenting issues discussed, the following were some the staff felt most helped the mothers and their children. Perhaps foremost was the importance of developing secure, affectionate, respectful relationships. The need for affectionate physical contact, for talking with and listening to their children, for answering their reasonable (i.e., not too personal) questions truthfully, are essential for forming secure relationships. We can’t tell people how to love their children, that has to come from within the parent; but we can tell them what will facilitate their interactions which are likely to yield feelings of love. Explanations of what causes separation anxiety, stranger anxiety, regressions as part of normal development (as we see during the “rapprochement” sub phase of separation–individuation (Mahler, Pine & Bergman, 1975)), led, according to staff, to a reduction of negative feelings that mothers’ experienced when these occurred and often led to their dealing with them constructively.

Another important issue was understanding and dealing with children’s aggression constructively. We observed many times that experiences of excessive psychic pain seemed to be generating hostility in their children. We talked about and documented with them that anger and hostility are not signs of badness or evil, but rather are reactions to emotional pain. This in time led the mothers’ to handling their children’s anger and hostility in growth-promoting ways. In a related vein, setting limits constructively was one of the most frequent topics addressed. We discussed the evidence for the child’s actions seeming to be driven by the development of a sense of self and autonomy. Setting limits, needed in all children, is as difficult as it is exactly because it challenges the child’s emerging sense of autonomy: “No, you can’t do what you want to do; you have to do what I want you to do!” And battles of wills usually start there, not because the child is stubborn, but because the parent may be stepping on the child’s developing sense of self.

With regards to respectful, sympathetic, but contingently firm limit-setting, comes the child developing a sense of responsibility, of reasonable behaviour, of reasonable compliance. Staff indicated that this understanding in time often evolved into, child-appropriate limits setting with adaptive compliance in the kids.
Still another issue concerned how to optimise their children’s sexual development. Talking with parents about their two to five-year-olds’ sexual development as one sees it in their behaviours made parents uncomfortable. They tended to explain children’s sexual behaviours as accidental or meaningless behaviours. But when we set their young child’s sexual development in the context of the biological mandate to preserve the species, they were able to put it in a context that takes it away from masturbation and “fooling around”. This facilitated the mothers’ being able to ask questions and talk about sexual activities in their young children, including when children’s behaviours self touching, and interest in their genitals were observed and they had questions about these. Similarly in time, we talked meaningfully about toilet training.

Finally, an issue considered important was how to help a child cope with trauma. We had a number of opportunities to talk about a parent getting hurt in an accident, about set backs in the family, even about one child’s father dying, and how these affect children, and given that it does, we talked about how to help children cope. Points made included, talking about their being upset, having parents answer their child’s questions as best they can and truthfully; and about letting the child feel whatever the child feels, comforting, reassuring, and being realistic. In the end, one of the best things we can do for our children is to help them learn to cope with whatever comes their way, whatever happens to them—and a lot of things will.

Limitations of the study and lessons learned

Despite its small sample (ten mothers and sixteen children) the same mother–child pairs and the same research staff met twice weekly for a period of over five years, in two hour group sessions. Attendance over the course of the study was at a rate of seventy-five per cent (highly successful for such a population), and attendance improved as the project went on. Throughout, records of observations were recorded on paper and film and staff conferencing took place once weekly for integrating observations and inferences. The ambience of staff and study participants evolved into a warm, reciprocally respectful community, and we considered it important that the context continued with the same environment, individuals and open discussions over the years. Also important to us was that the same research team could continue with its psychoanalytically informed study of caregiving and childhood development over the first five years of life. Also, as noted above, we
believe the participants in long-term follow-up interviews described some meaningful benefits. The study also contributed to useful parenting education materials as indicated in the references.

Still, our early parenting preventive intervention study had major limitations. This was not designed as an experimental study. Our participants were volunteers from a high risk environment and we had no designated control group, using only convenience data available at the time for comparisons of outcomes and context. Thus possible selection factors of our volunteers, not assessed in this study, make generalisations about specific outcomes and implementations in other settings uncertain. Our intervention, focusing on mothers and their children did not focus on fathers—I should note that this study was carried out from 1970 to 1977, in a different epoch with regard to family life. Another limitation of our small sample study was its cost. Not only did the potential cost from our intensive intervention prevent us from obtaining a larger sample, but it also could present a barrier for future applications.

In addition to the lessons learned indicated by the project staff, a number of general conclusions have emerged from my immersion in the study and my years of clinical work. The first is that hostility and hate are generated in humans by experiences of excessive psychic pain; not by an inborn disposition to destroy one self or others. Therewith the potential exists for both, the intensification of hostility and hate in humans by means of abuses and neglect, but also for the mitigation of hostility and hate by considerate, reasonable and responsible child rearing and human interactions (see Parens, 1979 [2008]; Parens, 1993; Parens, 2011). A second is that child development-optimising parenting strategies can be developed and applied in various settings with parents as well as with other child caregivers, daycare workers and teachers (Parens et al., in Parens, 2010). Third is that useful educational materials, ones that emphasise growth promoting as compared with “growth-disturbing” parenting, and apply meaningful psychoanalytic knowledge, can be developed, as our group has done.

Notes

1. Written independently by team research observers.
2. The video was at first taken by myself with a hand-held movie camera, and when they became available, a research team member also took additional footage with another video camera.
3. These four books are available on a CD (Parens, 2010).
4. I came to recognise why the infants’ aggressive behaviours had such a magnetic pull on me during the period, in 2002-3, when I was writing my Holocaust memoirs (Parens, 2004). Prior to that time I had no explanation as to why I was so compelled to pursue that study of aggression for which we had not prepared; indeed, I abandoned the direct correlation study with which we got into the project. Interestingly though, by a wide detour we did nonetheless come to such a correlation: between the qualitative aspects of the mother–child relationship and their children’s adaptation and their aggression profiles (Parens, 2011).

5. Evidenced in nineteen year follow-up study (see above; and in Parens, 1993).

6. The duration of the project including the mothers and their in-project-born children extended over a period of seven years; this allowed each child–mother pair to be seen over a five year period.

References


CHAPTER TEN

German perspectives on Henri Parens’ pioneering work in Philadelphia: the development of attachment-based parenting programmes

Karl Heinz Brisch

When I first met Henri Parens many years ago, I was impressed by his desire to study the development of aggression, and to find out what kinds of interventions would best help children and adolescents to be less aggressive, more sensitive and empathic, and harbour fewer antisocial prejudices. I viewed his work as the fruit of his experience with the Nazi terror in France and the threat of death. Parens managed to flee from a Nazi camp and eventually made his way to the United States, and he tells his story in detail in his biography *Renewal of Life: Healing from the Holocaust* (2004). His experience of naked aggression, hate, and violence provided the impetus to uncover the origins of this hostility, and to find ways to prevent it through parenting.

*The origins of destructive hostile aggression and prevention through parenting*

After the Nazi terror, it was necessary to look for new ways to raise children. There was a tradition in Germany of what educator Katharina Rutschky termed “black pedagogy”, which was based on child-rearing principles of obedience to authority, strict discipline (including
corporal punishment), and self-abnegation. Rutschky (2001) traced this tendency back to writings on child-rearing as far back as the late 1600s, and the practices associated with them came to be identified with Prussian militarism. The Nazis were able to make use of this educational tradition of unquestioning obedience in their rise to power and their campaign of terror and domination. Could a different, more sensitive approach to child-rearing make the kind of totalitarianism represented by the Nazis less likely in the future?

After World War II, the United States established so-called “child guidance clinics” all over Europe. My own department of Paediatric Psychosomatic Medicine and Psychotherapy sprang from just such a clinic in Munich. The purpose of these child guidance clinics was to do consultation and give good child-rearing guidance to new parents in post-World War II Germany. The idea was to prevent the destructive aggression that had characterised the Nazi regime and raise a new generation of children who were brought up with more sensitive and empathic parenting. As a result, the children would be more in contact with their own needs and with the needs of others. In turn, it was hoped that this might strengthen newly democratic states.

This was a gigantic task because authoritarianism had become deeply rooted in German thinking as reflected by the book *Die deutsche Mutter und ihr erstes Kind* (*The German Mother and Her First Child*) by Johanna Haarer (1934), which laid out parenting guidelines. Haarer, who was a paediatrician and pulmonologist, recommended merciless hardening of infants, and she advised parents to subject their infants to extreme early frustration. Until more recently than we perhaps care to admit, German paediatric advice was based on this early infant frustration. For example, a child who was nursed in the evening should be placed on a cot and never held during the night, not even if she cried or needed to be fed or for any other reason because holding children during the night would only spoil them. From this perspective, the fear of being a spoiled baby is still deeply rooted in the German psyche. Even modern parents are very concerned about not spoiling their infant. The outcome of this early hardening and frustration was extreme emotional pain and the development of dissociation and dissociative processes in infants. One should not be surprised that children raised this way tend to lack empathy, exhibit hostility, and destructive aggression, and pass these traits on to future generations.
Window of stress regulation, attachment, and the implications of Parens’ work

Nowadays, we know that the attachment system is activated in a child who cries, regardless of the reason. If an attachment figure comes and is sensitive to the infant’s cues, understands that she is crying out of hunger or anxiety, and co-regulates the anxiety, then the infant’s window of stress regulation will grow. This will have an effect on her later capacity to self-regulate affect. If no attachment person comes, if for example, the child is simply left by herself overnight, as Johanna Haarer advised parents, the child will experience panic, fear of death, and will be in an absolutely desperate state of stressed emotional arousal. In this hyperarousal state, the sympathetic nervous system is maximally activated for fight or flight, and the child exhibits freeze and extreme motor tension. Since infants can neither fight nor flee, they will regress to a more primitive state controlled by a portion of the brain, the limbic system and the brain stem, part of our reptilian evolutionary heritage. If the hyperarousal switches to the parasympathetic nervous system, then a child may collapse, become atonic and enter a dissociative, but floppy state. Both the freeze and the floppy state are characterised by dissociation, and this means that the infant is not experiencing any affect or pain, and that she is no longer conscious of affect, stress, pain, or hyperarousal (Brisch, 2012).

Because of this, a major task of good parenting is to be a good attachment figure who can co-regulate the stressful affective states that the child experiences, to model good co-regulation, and by doing so enable the child to learn to self-regulate affect, whether aggression, frustration, rage, or overwhelming happiness and love.

As I read Parens’ studies on the prevention of aggression, I found the idea of combining observation and intervention very convincing, and when I saw the films that he made I was impressed (Parens, Pollock & Prall, 1974; Parens, 1978). Parens filmed all of his group observation and intervention sessions with mothers and their babies. The interventions involved high risk mothers and the level of intervention was very high. The mothers with their babies came twice a week for two hours of observation and intervention. There was long-term follow-up so that the effects of this early intervention could be observed in terms of their contribution to affect regulation, stress regulation, and the prevention of aggression.
When Henri Parens was a young psychoanalyst, the understanding was that aggression was an innate drive. From his investigations he realised, however, that while hostile destructive aggression could be observed in infants as early as the first year of life, it generally occurred only if the infant had been subjected to extreme frustration of basic needs by his mother or caregiver. It was clear that one consequence of this extreme frustration was extreme emotional pain. From neurobiology and research we now know that physical and emotional pain cause similar reactions in the brain. This means that these children had experienced extreme pain and frustration, and that this led to aggressive and hostile behaviour toward their mother, themselves or others, including other children. In essence, Parens concluded that aggression is not a natural drive, that is, an innate behaviour that can only be modified by education, but that hostile aggressive behaviour in infants develops as a result of massive frustration caused by the caregivers. Based on this understanding, preventive measures become feasible. Parens developed an empathy training programme for parents, teachers, and students as well as curricula for children from preschool to grade twelve (the final year of school). His goal was to teach all involved, teachers, parents, and students to be more sensitive and empathic, and he predicted that this approach should decrease hostile aggression in the group in the future. His results indicated to him that interventions increased prosocial behaviour, and that hostile aggressive behaviour decreased.

German approaches

Based on Henri Parens’ experience, we at the Dr von Hauner Children’s Hospital, in Munich/Germany, developed two attachment-based preventive programmes. The extensive rationale for these programmes based on attachment research is described in several publications of the author (e.g., Brisch, 2007, 2012–2013) and of others (e.g., Zeanah & Emde, 1994). Brief descriptions of the programmes are provided below.

Primary prevention of attachment disorders by means of the SAFE® programme “Safe Attachment Formation for Educators”

The SAFE® programme “Safe Attachment Formation for Educators” was developed specifically to foster the development of secure attachment patterns between parents and children, and to prevent attachment
disorders, particularly the transmission of traumatic patterns across
generations. This is why the programme came to be called SAFE®,
a word that implies that development should be safe for both parents
and children. Parents are informed about and invited to join new SAFE®
groups by flyers placed in pharmacies, doctors’ offices (gynaecologists,
paediatricians), family education and counselling centres, pregnancy
counselling centres, and by press reports. In general, the groups are led
by a facilitator and co-facilitator over the entire period from pregnancy
to the end of the first year of life. The facilitators include midwives, child
therapists, pregnancy counsellors, psychologists, gynaecologists, and
other professionals who are involved in the care of pregnant women,
parents, and infants. The facilitators typically receive training during
a seminar lasting for four days, with several additional days of train-
ing in special topics. This includes supervision and psychodynamic and
attachment-based analysis of what is going on in the SAFE-groups and
advice on how to intervene.

The SAFE® programme consists of four modules: a prenatal mod-
ule during the twentieth to thirty-second week of pregnancy; a post-
natal module during the first to twelfth month after birth; individual
trauma psychotherapy for traumatised parents; and a hotline for crisis
intervention.

Parents meet in parent groups in both the prenatal and postnatal
modules. Groups with parents who are in similar phases of pregnancy
provide an important framework for the entire programme. Group
cohesion develops over the duration of the course, from the twentieth
week of pregnancy to the end of the first year of life. Parents make use
of individual trauma therapy and the hotline as needed.

In the prenatal module, the parent groups meet on four Sundays
during the pregnancy, beginning on about the twentieth week of preg-
nancy, once ultrasound has been performed. Sundays have generally
been found to be excellent days for the course because the parents tend
to be relaxed, and the father in particular is more motivated to join in. In
the prenatal module, facilitators convey certain necessary information,
and the parents and facilitators exchange experiences among them-
selfs. Subjects discussed may include the competencies of the infant
and the parents, parental expectations of the “ideal” baby, the ideal
mother or father, parental fantasies and fears, the prenatal develop-
ment of attachment, and parent–infant interaction. These are illustrated
using videotaped examples, involving feeding, nursing, changing
nappies, playing, and dialogue between parent and child, so as to allow emotional attunement to infant signals. The parents also learn stabilisation and relaxation techniques from the very beginning of the course so that they may better handle stressful situations during the pregnancy and after the birth. Research has shown that fears and stress during pregnancy can have a negative effect on the mother-to-be, making her less able to become attached to her infant, and on the infant himself and his irritability and tolerance for stress. Parents can use the stabilisation and relaxation techniques that they learned prenatally after the birth when they encounter stressful situations with their infant.

After the birth, the parent groups continue with six full day Sunday seminars held during the first, second, third, sixth, ninth, and twelfth month. This means that the parents are supported during this difficult phase of postnatal child development and adaptation, and get help in reorganising their relationship to take into account this new third person. The cohesion of the group is particularly beneficial during the postnatal phase because all of the parents are undergoing a similar developmental process and individual parents may meet outside of group sessions to exchange experiences, and to do things together. The postnatal groups help parents to work through the birth experience, which is not always associated with positive feelings. Unprocessed difficult birthing experiences can have a negative effect on parent–child interactions and attachment and contribute to postpartum depression. Other issues discussed after birth in the intervention groups include parental competencies; triangulation between the mother, father, and child; interactional difficulties with feeding, nursing, sleeping; and the building of an emotional relationship. As the parents bring their babies to the meetings attachment behaviours of parents and infants are observed that include increasing exploratory baby behaviours.

During this time, the parents and their infants are videotaped in interactions involving nappy changing, feeding, nursing, and play. These video sequences are then discussed with both the mother and the father in individual feedback training sessions. The goal is to enable the parents, based on actual experience, to learn to recognise their baby’s signals, to interpret them correctly, and to respond to them appropriately and promptly. Irritation and the parents’ emotional difficulties, misinterpretations, and projections from their own childhood can be recognised in a timely manner at this stage. They can then be discussed and dealt with. If the parents consent, their individual videotaped interactions
with their baby may be used in the group as feedback training for all participants. The parents are generally highly motivated to share their interactions with the group so that everyone can learn from their positive experiences, and so that others in the group can give them tips for fine-tuning their interactional style. Because relationships based on trust have developed among group members, parents have little difficulty openly discussing their anxieties, fears, and interactional difficulties.

A third module involves individual trauma therapy for those who need it. An Adult Attachment Interview (AAI) is conducted with all parents. The specific purpose of this interview is to determine what attachment resources the parents-to-be have, and what traumatic experiences that they have perhaps not yet resolved and may intrude into their relationship with their children. Experience has shown that approximately thirty per cent of parents have such unresolved traumatic experiences that require individual psychotherapy. These unresolved traumatic experiences are particularly important because clinical experience indicates that by their behaviour children can—completely unintentionally—reawaken old traumatic experiences and associated affects in their parents. These are like “ghosts in the nursery” (Fraiberg, Adelson & Shapiro, 1975) that come completely unbidden. For example, a child’s crying, desire for tenderness, tantrums, or even demands for closeness and contact may bring unresolved traumatic experiences bubbling to the surface. If this occurs unchecked and unconsciously, a parent may suddenly find him- or herself in a full-pitched battle on an imaginary stage. In the worst case scenario, the child may become both an actor and victim in an old traumatic script, assigned a role that she never sought. If the attachment interview shows that the parents are bringing unprocessed traumatic experiences into the present, they are informed that these experiences represent a certain risk factor to the extent that they have not yet been worked through. They need to know that events will likely occur during which they may repeat their own traumatic experiences in their relationship with their child, thereby setting in motion a vicious cycle in which the violence they themselves experienced is transmitted to the next generation. One specific goal of the SAFE® programme is to break this vicious cycle. If the parents can be motivated and are ready, we offer them separate individual trauma therapy sessions during the pregnancy to help stabilise them. After the birth, the parents may be helped to work through their traumatic experiences in individual trauma centred psychotherapy using modern techniques such as EMDR.
Our fourth intervention module is the “hotline.” After the birth in particular, all adaptation processes such as going to sleep are often difficult so that parents may for the first time get into trouble when they cannot put their baby to sleep or when he cries inconsolably for hours on end. Clinical experience has shown that parents often seek out help much too late when they find themselves in such stressful situations. At worst, they come into the clinic only after they have already responded violently. The hotline provides parents with the ability to call the SAFE® group facilitator, and to get advice and support immediately. It is an enormous advantage if the parents already know the person answering the hotline from prenatal group meetings in which a relationship of trust has developed. Hotline use by couples varies considerably and specific interventions can be targeted because the group facilitator knows the parents’ individual histories, resources, as well as their risk factors from previous group meetings and the AAI. If the parents are projecting their own unconscious fears and expectations onto their infant, and these projections are the cause of the interactional disorder, this can be recognised early on and treated in parent–infant therapy (Bakermans-Kranenburg, Juffer & Van IJzendoorn, 1998; Beebe, 2003; Bodeewes, 2002; Brisch, 1995; Brisch & Lehmkuhl, 2003; Kühle, Hoch, Rautzenberg & Jansen, 2001; Papoušek, 2000; Schmücker et al., 2005; Zelenko & Benham, 2000).

The programme, as described above, and with its goals of enhancing secure attachment and preventing the repetition of traumatic experiences, was developed in a pilot phase. A prospective, randomised, longitudinal study is currently underway, in which SAFE® group intervention will be compared to a control group that meets for full day seminars on Sundays during the same time period up to the end of the first year of life (Brisch et al., 2012). Further, a variety of adaptations of the programme are available for caregivers working with children in different settings (e.g., foster and adoptive parents, day care workers, preschool teachers and those working in safe houses).

*Babywatching as part of the BASE® programme (Babywatching Against Aggression and Anxiety for Sensitivity and Empathy)*

A number of years ago, I heard that Parens used live mother–baby interaction and observation to promote sensitivity and empathy in children. In our programme, which is based on this work (Parens & Kramer, 1993), three- to six-year-olds as well as school-aged children observe a
mother or father with their infant over a period of about one year. For many single children, this is the first and often only chance to observe milestones in a baby's development over the entire first year of life. The infant is only a few weeks old when the mother visits the children's group for the first time to be observed by preschool children sitting in a circle. This type of participatory interactional observation can begin shortly after birth and continue to when the infant has begun to walk and verbalise. Generally, a mother and her infant visit the pre-school children once a week, and each observation session lasts between twenty and thirty minutes. A teacher generally leads the group, and another teacher guides the observation. A record is kept of the sessions. Under the guidance of the teacher, the children describe what the mother does with her infant and the children then discuss possible motivations for the actions of the mother and infant. The children are also asked to empathise with the mother’s and baby’s emotions by answering questions about feelings. Finally, children answer questions about how they would feel if they were in the position of the mother or the baby.

The behavioural problems of preschool children (n = 50) were analysed before and one year after babywatching in a prospective, randomised design with a comparison group without intervention. Both the teachers and the parents filled out a number of different questionnaires, including the Child Behaviour Checklist (CBCL, Achenbach, 1991), which measures behavioural problems. Results indicated positive effects in the intervention group in comparison with the control group. In the opinion of teachers and parents, both the boys and the girls behaved less aggressively and showed greater attentiveness and less oppositional behaviour after one year. In addition, both the boys and the girls were less fearful and depressed, were less apt to withdraw, and were more emotionally responsive in conflict situations. The girls (but not the boys) in the intervention group, according to the teachers, had fewer physical complaints, and according to their parents they also had fewer sleep disorders. Positive results have also been found using a similar intervention of nine months in a randomised prospective study in Austrian schools by Haneder (2011).

To conclude

In conclusion, we have optimism from the inspiring work of Henri Parens and the experience in our programmes that we can enhance the development of healthy attachment relationships, and prevent
problematic aggressive behaviour in both parents and children. We hope that in Germany—the erstwhile home of black pedagogy—parents will raise their children with greater sensitivity, with a new generation of more empathic parents who have healthy attachment relationships with their infants and have respect for their infants’ physical and emotional needs.

References


PART III

INTERDISCIPLINARY RESEARCH IN FRANKFURT
CHAPTER ELEVEN

Individual Development and Adaptive Education of Children at Risk: objectives and agenda of a transdisciplinary research centre

Marcus Hasselhorn, Ulrike Hartmann, Sonja Reuße, and Andreas Gold

“Children at risk” as a starting point

Various international student assessment studies during the last decades have demonstrated that the probability of academic failure is dramatically heightened among children with low socioeconomic family background and those with a migration background (for example TIMMS, PISA). More than in other countries, children with a migration background living in Germany achieve lower scores in reading literacy: Four out of ten first generation migrants belong to the at-risk group that ranks on the lowest literacy level. In other countries, however, this proportion amounts to about twenty-five per cent, whereas it amounts to about only fourteen per cent among German students without migration background (German National Educational Reporting Consortium, 2007). In view of the fact that the group of migrants below the age of twenty-five, which is of particular interest from an educational policy perspective, accounts for nearly thirty per cent of the population in Germany, the higher risk of academic failure for migrants is a hornet’s nest for the national educational system. Concerns for the future are even more pronounced, as the 2005 Microcensus data showed that thirty-three per cent of the children below the age of six years in
Germany have a migration background. In consequence, the problems of heterogeneity among students as well as the social disparities of academic achievement have been highlighted recently (OECD, 2006). As the PIRLS primary school study (Bos et al., 2003–2004) has shown, early disparities in achievement based on social and ethnic status are much less pronounced than at secondary school level. It is possible to interpret this as an indication that social and ethnic risk factors have no great influence on the development of achievement or on the development of personality attributes that are relevant to achievement during the initial ten years of life. It is more plausible, however, to assume that social and ethnic developmental disadvantages already affect the early levels of education, and that these influences become increasingly evident in children’s academic achievement and social behaviour through cumulative effects.

About three per cent of all children of compulsory school age in Germany attend a special school for children with severe learning handicaps. In addition, in every school year about three per cent of all children of school age in general education schools have to repeat a class, and for several of those pupils retention occurs more than once during their schooling. Although the risk of academic failure is about four times higher for children with problematic socioeconomic family and ethnic background it is also the case that many children without risk background factors equally suffer from the aforementioned learning problems: that is, they may develop learning disabilities and attention problems and have a high probability for academic failure. This seems to indicate that learning disabilities and behavioural problems are not simply a consequence of social risk factors, but are just as likely to develop as a result of risk conditions inherent in the individual.

Although social factors are of significance for the development of academic achievement, many primary school children with severe achievement problems are not from families with a low socioeconomic status or with a migration background. Thus, in addition to social and ethnic factors, individual factors of risk also have to be considered when one tries to explain the emergence of academic failure. From the perspectives of special education, neuroscience, psychology, and psychoanalysis, neurocognitive dysfunction is one of the most relevant non-social, individual risk factors. In a recent epidemiological study with regard to the prevalence of learning disorders in Germany (Fischbach et al., 2013) it was reported that about 13.3 per cent of children in the same age cohort do fulfil the ICD-10 criteria of a learning disorder. 4.6 per cent
of the total sample met the criteria of an isolated disorder in acquiring arithmetic skills. In the same study, the proportion of children with specific reading and/or writing disorders was estimated as even higher at 10.7 per cent, with two per cent of the sample’s children suffering from a combined learning disorder, which is diagnosed when the child’s achievement was very poor in reading and/or spelling and in arithmetic despite normal IQ. According to the applied ICD-10 classification, children were defined as showing a learning disorder if they did not only perform below average in the related scholastic achievement test, but also showed a large discrepancy between their low achievement and their much higher intellectual ability. Irrespective of the prevalence of learning disorders, the proportion of children suffering from Specific Language Impairment (SLI) ranges from six per cent to eight per cent (Grimm, 2000). Moreover, Leuzinger-Bohleber, Fischmann and Rüger (2008) report that in Germany fifteen per cent of the children suffer from severe behavioural problems including hyperactivity and antisocial behaviour. These behavioural disorders occur more frequently in boys than girls. For all of these phenomena, neurocognitive deficits have been identified as a major individual source of poor academic performance and other suboptimal developmental outcomes. In her review of research on the relationship between pupils’ ethnic backgrounds and their academic success Stanat (2006) concluded that immigrant status, socioeconomic background, and intellectual capabilities are widely confounded in the German student population. Analyses to disentangle these confounding variables showed that the background effects could be eliminated, whereas the effects of children’s estimated level of intellectual capabilities, which is closely related to neurocognitive functioning, remained significant.

All in all, the impression emerges from a closer study of the literature that those approaches addressing the social risks for academic failure in children do not bear neurocognitive predispositions in mind. Equally, neurocognitive research programmes on learning disabilities and academic failure are blind to social risk factors. Yet what are the perspectives of an approach focusing on both social as well as neurocognitive risks in children’s academic achievement development?

Traditionally, behavioural genetics has attempted to identify the underlying internal risk conditions of learning disabilities and behavioural disorders. One of the results of this research, for example, is that antisocial and delinquent behaviour cannot be explained by social or genetic risks alone, but rather by their joint incidence
Cadoret, Cain and Crowe (1983), for example, analysed the empirical relationship between delinquent behaviour of adopted youths and the degree of antisocial behaviour shown by their biological mothers and by members of their adoptive families. Delinquent behaviour by the biological mother on record was interpreted as a genetic risk and respective problems in the adoptive family were considered as an environmental risk factor. The results indicated that only the joint incidence of both genetic and environmental risks appeared to result in antisocial behaviour on the part of the adopted youths. However, either one of these two factors in isolation does not increase the risk of antisocial behaviour. Possibly, this interaction between social and genetic risks also applies to the development of academic achievement, self-concept and interests as well as on volitional dispositions (e.g., self-discipline) and on the development of a learning and achievement motivation system. During the last decades, an increased interest in the mechanisms of learning disabilities and behavioural problems can be observed in neuroscience (e.g., Denckla, 1996). Meanwhile specific structures and dynamics of the brain have been identified that provide adequate descriptions of the neurocognitive risks for successful learning and favourable individual development (see below). However, it remains an open question as to whether similar interaction effects such as those observed between genetics and behaviour also exist between neurocognitive and social factors.

Since we are convinced that an adequate answer to these questions requires differentiated concepts from psychology, psychoanalysis, neuroscience, and domain-specific didactics as well as from instructional and educational science we decided to collaborate transdisciplinarily to better understand the pathways and mechanisms of individual development as well as the scope of adaptive education for children at risk for academic failure.

**IDeA—Individual Development and Adaptive Education of Children at Risk**

In 2007, scientists from the German Institute for International Educational Research (DIPF), the Frankfurt Goethe University and the Frankfurt Sigmund-Freud-Institut conceived the idea of a joint venture which would investigate children’s individual development. In the same year, the state of Hessen in Germany announced a call for applications for the
so-called LOEWE initiative (Initiative for the Development of Scientific and Economic Excellence). This programme established in 2008 aims to strengthen the Hessian research landscape by promoting collaborative projects between universities, independent research institutions, and external partners. Given this opportunity, a group of scientists from the German Institute for International Educational Research, the Goethe University and the Sigmund-Freud-Institut developed the framework for IDeA—a centre for Research on Individual Development and Adaptive Education of Children at Risk. The innovative idea was to combine longitudinal developmental research with experimental studies on educational interventions, and to focus on children with an increased probability for academic failure. In July 2008, the LOEWE Center IDeA was established with some longitudinal studies investigating the social and cognitive factors influencing children’s developmental pathways. Today, the centre incorporates more than a hundred scientists from various disciplines such as psychology, psycholinguistics, psychoanalysis, neuroscience, linguistics, several didactics, sociology, and educational science. IDeA thus has become a multidisciplinary joint venture conducting both comprehensive longitudinal studies and cross-sectional focused empirical studies. The establishment of the IDeA Center in Frankfurt significantly contributes to a structured and interdisciplinary scientific exchange about issues concerning children at risk for developing academic difficulties.

The general research objective of IDeA is the empirical investigation of children’s individual development. The centre mainly concentrates on conducting systematic research on elementary and primary education with a special focus on different risk factors for children’s academic success, that is, on certain socio-emotional and (neuro-) cognitive factors that are assumed to increase the probability for academic failure. The main aim is to establish adaptive educational strategies that promote individual learning success and thus increase each child’s academic opportunities. In addition to the individual’s developmental perspective, issues surrounding the term “children at risk” and the concept of “adaptivity” constitute major research foci of the IDeA Center.

Structure of the IDeA Center

The IDeA Center is structured into four interactive research domains, which allows for the complementary study of the two main research foci “children at risk” and “adaptivity”. The research domain one
“Resources and limitations of successful learning” investigates the cognitive development in children with and without social and (neuro-)cognitive risks for academic achievement. From 2008 on, three comprehensive longitudinal studies focusing on neurobehavioral mechanisms of reading and arithmetic skills (ReAL; e.g., Linkersdörfer, Lonnemann, Lindberg, Hasselhorn & Fiebach, 2012), language development (MILA; e.g., Schulz & Friedmann, 2011) and mathematical thinking (erStMaL; e.g., Krummheuer, 2012) have been implemented. Furthermore, several experimental studies with children suffering from Attention Deficit and Hyperactivity Disorder (ADHD; e.g., Gawrilow, Gollwitzer & Oettingen, 2011; Rauch, Gold & Schmitt, 2012) have been started.

One major focus of the research domain two “Diagnostics and prevention” is the investigation of children’s cognitive risk factors for academic achievement, and in particular the risks of working memory deficits on school success (ANNA; e.g., Preßler, Krajewski & Hasselhorn, 2013, Kosmos; e.g., Rietz, Hasselhorn & Labuhn, 2012; WorID; e.g., Poloczek, Büttner & Hasselhorn, 2012). This focus on diagnostics is complemented by two studies examining prevention programmes of antisocial behaviour in children in kindergarten and school (EVA and PaSS; e.g., Grumm, Hein & Fingerle, 2011).

Research domain three “Adaptive learning environments” aims at identifying methods to provide adaptive learning environments and testing the effectiveness of adaptive teaching strategies for supporting the children’s individual learning needs in a large-scaled intervention study (IGEL). Additional projects implementing adaptive education have also been started. The research domain four “Professionalisation of educators” is closely related to research domain three, and deals with the topics of professional education and educational environments. Meanwhile, a total number of more than thirty empirical research projects are running under the umbrella of the IDeA Center.

“The general research objective of the IDeA Center is the empirical reconstruction of individual development and adaptive education of children at risk. Starting with the first application for the incorporation of the LOEWE Center IDeA, the overarching goal was to establish adaptive educational strategies that optimise individual learning success and thus

“Children at risk” and “adaptivity”—two research foci shared by the four research domains
increase each child’s academic opportunities. However, in addition to the individual’s developmental perspective, issues surrounding the term “children at risk” and/or the concept of “adaptivity” have become of major interest for all the research domains within the centre. The broad range of disciplines that collaborate in IDeA challenges us to clarify the theoretical background of these concepts, since different disciplines take diverse perspectives and work with differential definitions on the concepts of “children at risk” and “adaptivity”. From the onset of the IDeA Center in 2008 and the beginning of our efforts to build up a multidisciplinary joint venture, its members have discussed whether it is possible to identify a conceptualisation of these terms that would be productive both within and across the involved disciplines. Although discussions are still ongoing and by no means self-contained, some outlines for a useful framework have already become apparent. The table below provides a brief description of the stipulations regarding the term “children at risk” that we considered crucial to the research projects at the IDeA Center. Accordingly, children are considered to be “at risk” whenever they are either (seriously) affected by maladaptive social backgrounds and/or are suffering from substantial (neuro-) cognitive limitations in a way that increases the probability for academic failure (see figure 1). This working assumption underlies the research conducted at the centre.

Based on this assumption, the division of the centre into four research domains interacting with the two main research foci is easy to understand. While the academic success of “children at risk” is the key topic of much of the empirical work in all four research domains of the centre, the focus on children at risk is predominantly targeted by research

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<th>Maladaptive social factors and/or Substantial (neuro-) cognitive factors</th>
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domains one ("resources and limitations of successful learning") and two ("diagnostics and prevention"). Examining the "individual development (of children)" the research domains three ("adaptive learning environments") and four ("professionalisation of educators") approach this key issue from a different angle. These research domains incorporate the concept of "adaptivity" to a larger extent focusing in particular on how to handle risks and developmental tasks adaptively. Note that the term "adaptivity" is used here in a superordinate way in order to denote the quality of interactions taking place within educational settings between relevant adults (parents, nursery teachers, and teachers) and the individual child. The enormous individual differences within learning groups in educational settings present the challenging starting point of all IDeA projects. Aiming to provide sophisticated empirical contributions to the underdeveloped field of professionalisation of educators, we address several important competencies such as "coping with heterogeneity", "the ability to diagnose special needs" and "competencies to allocate individualised incentives for learning". Even though our working assumption on adaptivity is widely accepted, an explicit definition is still needed to provide a concept of adaptivity beyond a theoretically vague initial "guiding principle".

**Ongoing discussions and future prospects of the IDeA Center**

Currently, as different longitudinal and experimental studies on children at risk and their developmental pathways are under way or coming to an end, discussions at the centre increasingly focus on the transdisciplinary notion to integrate the studies’ preliminary results from different theoretical perspectives. All of the studies conducted at the centre have assessed both social and cognitive factors to find links between them. Empirical studies from the broader field of educational research indicate a strong relationship between cognitive and social outcomes in childhood as well as in later life. For example, psychoanalytical studies suggest a strong link between attachment in early childhood and later cognitive engagement and grade point average (e.g., Atashrouz, Pakdaman & Asgari, 2008; Jacobsen & Hofmann, 1997; Moss & St.-Laurent, 2001). Researchers at the IDeA Center aim to come to a systematic theoretical and empirical investigation of the interactions between socio-emotional and (neuro-) cognitive factors of children at risk.
Second, research on educators and teachers indicates the immense challenges these professions face when they are confronted with enormous individual differences in the children they educate (e.g., Beck et al., 2008; Woolfolk Hoy, Davis & Pape, 2006). Initial results show that teachers with high pedagogical content knowledge can deal more adaptively with comprehension problems, and can provide more constructive support according to individual needs. However, these findings are at present limited to research on the subject of mathematics with elementary and secondary school children (Baumert et al., 2010; Hill et al., 2008; Kunter & Voss, 2011). The IDeA Center with its interdisciplinary structure offers a unique opportunity to bridge the gap between research on children’s individual prerequisites and the actions of educators in kindergartens, schools, and families.

Other efforts at the centre include the increased integration of neuroscientific research methods into the study of normal and impaired cognitive development. Also, the diagnostic tools developed within the projects of research domain two (diagnostics and prevention) shall be extended to be used for formative assessment to monitor changes in individual development triggered by prevention or intervention approaches.

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In this chapter I want to give a report on the prevention projects in preschool institutions of the city of Frankfurt/Main that we—the Sigmund-Freud-Institut and the Anna-Freud-Institut¹—over a period of almost ten years have jointly conducted since 2003. More exactly, I will speak from the child analytic perspective and with this restriction—will mention the history of the projects, the ideas behind the fundamental positions and goals, the development of analytically based concepts and thereby also the upcoming questions and problems that we have to deal with during the implementation of the projects. (A comprehensive report by Marianne Leuzinger-Bohleber et al. was published in October 2011 in Psyche under the title “Early prevention of psychosocial disturbances in children at risk”. The scientific part of the projects are presented in the chapters by Leuzinger-Bohleber; Neubert et al. and Lebiger-Vogel et al. in this volume).

The idea to become active in the area of early prevention was proceeded by an interdisciplinary DFG (German Research Foundation) study on individual and institutional accounts dealing with conflicts
of dissocial, uneducable adolescents that was conducted between 1999 and 2005 by the Frankfurt Institute for Social Research (Institut für Sozialforschung) in cooperation with the Institute for Psychoanalytic Child and Adolescent Psychotherapy. In this study of six detailed single case studies, the sociologists studied the respective institutional sides of the aggressive spiral of conflict describing in case studies how the situations systematically escalated and ended in the suspension of the teenagers from junior high school.

In a parallel enquiry the group of psychoanalytic child psychotherapists studied the psychodynamics of the adolescents by means of analytic initial interviews, wrote their specific case studies and formulated hypothesis about which problems and conflicts could have played a role in view of the assumed unconscious transference and the prompted countertransference in the schools. In a third step the interplay of the sociological and the psychoanalytic perspectives were brought together in a common case study. I cannot go into more detail about this study now, published in two volumes with the title “The Disrupter and the Disrupted” (von Freyberg & Wolff 2005–2006). It is, however, interesting to note in the framework of a conference on research that these individual case studies—a method of research that is no longer in vogue—were more or less not taken note of by the profession of empirical researchers but became widely read even now six years later in the broad field of psychological, educational, and social work experts and in the respective institutions of professional training and further education as exemplary case studies for the reflection of one’s own work. Since psychoanalysis is seen not only by some psychologists but also among some teachers and social workers as supposedly out-dated and thus not acknowledged, its still prevailing merit for a more profound understanding of the individual case but also for patterns of interaction in the educational context was surprising, impacting like a new finding.

For this study on the uneducable, Marianne Leuzinger-Bohleber, at that time still a full time professor for psychoanalysis in Kassel, was one of the three submitters at the German Research Foundation (DFG) and she participated regularly in the case conferences of the study.

This first joint research laid the foundation for the subsequent creative and intense cooperation of our two institutes. Whereby the impetus for the content of the development of early prevention projects resulted from the distinct diagnostic findings in all of the
examined cases of the uneducable adolescents, that severe psychic developmental disturbances had become apparent already in preschool and grade school, and that in these early phases, most likely the most trusting contacts were possible between the preschool and school teachers and the parents, whereas they broke down in the course of time—contaminated by mutual accusations—due to the destructive, escalating conflicts. It was also clear to us that the teenagers we had examined did in fact have severe psychic disorders to some part with often underlying, early, also “cumulative traumata” that actually were in need of immediate treatment. At the same time it became apparent to what extent such adolescents with extreme externalising disorders had to reinterpret their actual defeat every time into “victories” against the school that had danced to their tunes. They had at the same time accumulated such a secondary gain from their illness that the path to psychotherapy was absolutely blocked: for that it was too late.

After Marianne Leuzinger-Bohleber became the Director of the Sigmund-Freud-Institut in 2002, she made it her goal to realise the idea of early prevention. First, we developed the Frankfurter Prevention Study in 2003. The diagnosis “ADHS” was at its zenith in the media, and the criticism grew against the steadily increasing number of prescriptions for Methylphenidat. The Frankfurter Prevention Study with the goal of the psychic and psychosocial integration of children with behavioural problems had something to set against it: namely, to want to understand these children and their behaviour in order to encounter them on this basis in another way in preschool. We were lucky to find a responsible official in the administration of Frankfurt with knowledge about psychoanalysis, whom granted us access to the day-care centres of the city. Thus, we could conduct the Frankfurter Prevention Study in fourteen randomly chosen Frankfurter day-care centres and prove that, through the implementation of the psychoanalytic concept, aggression, and anxieties of the children had been statistically significantly reduced and that hyperactivity, too, had decreased, though only in the girls. This latter fact was not too surprising to us as psychoanalysts, after all, girls react in preschool age more directly to the increased emotional contact of the, for the most part, women as contact persons and can identify with them, while with the boys the theme is more one of manly-active differentiation. Furthermore, “hyperactivity” is an imprecise category and as for the prognosis, only alarming in connection with increased aggressiveness—that had also decreased among the boys. On the
whole, it was possible to clearly improve the psychosocial integration of the children. These results were relevant since they complement the findings of other studies, that approximately fifteen per cent of preschool children show, already at this early age, unsocial, conspicuous behaviour—with the corresponding bad prognosis for their further development. The door for the further establishment of psychoanalytic prevention projects in the preschools of the city was open—not, of course, to a financial support system—an ever exhausting and—in view of the wealth of this country: annoying problem.

In the years of the Frankfurter Prevention Study we could gain important experiences for the further project development in the social field of preschool. Since were active in randomly chosen day-care centres, we had to do with institutions in different sections of the city and with children and families from a multitude of countries of origin and social classes and with different kinds of problems. Nevertheless, our main point of attention remained the difficult children, be they anxious, loud, aggressive, or mute. We could make our first experiences with our psychoanalytically based concept. This contained three blocks in the prevention study:

1. Case supervision of the professional team, of teachers in the day-care centre, every two weeks;
2. Weekly, the presence for four hours of our psychoanalytically schooled colleagues as participating observers in the daily routine of the preschool, including the weekly case supervision for these colleagues.
3. With the special permission of the health insurance companies along with a corresponding indication in specially justified individual cases: from child psychotherapies with concurrent work with the parents in the preschool itself by psychoanalytic child therapists in private practice.

Before I now discuss the follow-up projects and the further concept development, I would like to explicate the fundamental positions and goals that resulted under the child analytic perspective from the reflection of the experiences made in the Frankfurter Prevention Study and that guide the further concept development. Psychoanalytic child psychotherapists are accustomed, so to say, by nature to think in systems; than in the individual treatment of children they always have to do
with families and must also consider the rest of the social environment of a child with respect to its influence on the psychic development. Probably for this reason it was possible in the scope of several years to win over a highly motivated group of child analytic colleagues, to partially leave their practices to cooperate in the studies, prevention projects as well as on their continual reflection, thereby taking part in experiments with uncertain outcomes. In the case of the prevention projects we have no other choice because here we are mainly interested in children, who would not have come to our practices, and accordingly would never have been brought by their parents for a myriad of inner and outer reasons.

The negligence of children, as a rule, first has an impact in the public discussion in our society when it has grown to dramatic, possibly deadly proportions and consequences in individual cases. The phenomenon of negligence of children has, however, when one includes the emotional negligence in family relationships, already arrived in the often-cited centre of our society. In extreme cases we speak here of prosperity neglect. Generally wide spread and with serious consequences, however, it is a deprivation that is outwardly not conspicuous, that has to do with the avoidance of arguments about everyday conflicts: what on the surface appears as attention, generous indulgence, perhaps also as pampering, is the fault often of adults under growing time pressure, existential insecurity, and coupled with stress. In a deeper sense, however, we have to do with a minimising of the parental function and along with it, a superficial relationship to the child: the parents want to feel that they are “loving parents” during their short time together and do not want to have to argue with their child. Conflicts have, however, a fundamental meaning especially as to the emotional perception of the self and the object, the integration of aggressive urges, the ability of self regulation and self protection. A child, that as it grows up, does not encounter in small everyday situations more or less serious dissent with his parents and can thus experience that it can in fact get very angry but that with the cooperation of everyone “all is good again”, will be a victim of his drives and aggressive impulses and will deny them when he does not act on them, turn them against himself, displace them onto others or even have to freeze his feelings, affects and impulses with the possible consequence of paralysing passivity or of an especially threatening, because cold, inclination to violence.
Parents, who themselves feel—after preschool teachers made them aware of it—that something is not going well at home; those that have a certain ability of introspection and can make a connection to their own childhood experiences with perhaps especially stern parents, will be able to find counselling for themselves; and just this fact is an indication that they see the necessity of changing something, maybe even themselves.

Often, however, the parents themselves are so burdened that they have no time left for their child and for what it needs from its parents. Often these neglected children meet up with adults in public institutions that also do not have the necessary capacity for the conflicts that are so important. The deprivation at home is followed by the structural deprivation in the preschool and later in the school.

Our considerations have to do with the question whether and how our preschool teachers in their institutions can counterbalance negligence instead of repeating it. Difficult children are often children that are difficult to handle because they automatically enact with adults in similar parental functions their unfinished psychic themes and conflicts for which they have not found partners in their parents to whom they can address these themes. In the analytic psychotherapy we use the recognisable transference and countertransference reactions and place them in the centre of our observations and our own introspection in order to understand and further the therapeutic process. In the educational context of the preschool such transference and countertransference reactions likewise arise directly, but they have only a distractive effect because they take place unconsciously in both parties and the understanding approach is missing. This leads—as is to be expected—to the situation that not seldom the preschool teacher feels personally hurt by the attack or the disobedience of the child and at the same time intervenes angrily and helplessly or turns away and thereby, without noticing it, inflicts something on the child, yet once again, that it already unfortunately knows from home.

The prevention of psychosocial disturbances of development occurs, according to psychoanalytic findings, normally and most soundly through the encouragement of feelings of self worth and relationships of connectedness and love in early childhood. A child that has the experience of attention and love by his attachment figures with all his confusing feelings, fears and conflicts, internalises these good experiences and can transfer them to others—that is, it will gradually not have to
openly act out its drives and aggressive impulses. But when parents are not capable of giving their child this experience in adequate measure, then the experiences of relationships that the child has with the preschool teachers have an even more important function. Often it is long clear in the preschool that the family of a disturbed child can be the reason behind its distress but that they, despite ever so many appeals, will not be able to really change the conditions.

It must be seen as an important chance when such a child can make emotionally significant, good experiences that can alternatively sidestep the frail or even highly emotionally bad experiences at home. Additionally, it is then necessary that the good experiences with an adult in preschool are intensive enough and are continual.

During the Frankfurter Prevention Study we experienced the insufficient conditions for this purpose in the preschool institutions starting with bad pay, lack of personnel, large numbers of staff on sick leave with the circular argument that children’s groups were too large, and leading to other excessive demands on the personnel as to further education and training, above all in the work with parents, as well as the lack of regular meetings for case supervision. Especially the last—even if it can in no way balance out the other deficits—is as an acknowledged instrument, actually an indispensable prerequisite that guarantees quality in view of an everyday work situation with children, that is characterised by the permanent pressure to act quickly in turbulent, difficult and in any case unclear situations. Supervision can—and actually must regularly—set a free time space against it, a free space to professionally step aside, stop short, review, and jointly reflect in the team. It represents, in this way, not only a safe outer room through the in depth attention to a child, but at the same time the inner spaces of the teachers, with which she works unnoticed day for day, that thus can be cared for and protected, if nothing else through the attention given to the negative and shamefully experienced own emotional reactions that often give important cues for a good educational course of action. Then, exactly these inner spaces and the development of the capacity of empathy and rehearsal behaviour are what the neglected children are missing and they finally need adults who have something to spare for them, something that increasingly comes too short in families: time, quiet, attention, and empathy—especially when the negative, aggressive and not so loving sides of their children appear.

The regular case supervision of the day-care teams every two weeks is for this reason the basic component of our three preschool projects
until now. It takes place after everyday work in an appropriately restful setting. Of course, psychoanalytic case conferences are no magic potion and they are not able to give rules for behaviour for the daily educational routine. Their worth is something else: By means of intensely giving attention mentally to one child—with the joint participation of all the preschool teachers with all their senses, it is our experience that it is almost always possible to understand the child more profoundly and to then encounter it on a different level in the everyday situation. The process of this development and, in the end, the experience of the care, interest and respect from the supervisor strengthen the self-confidence and the professionalism of the teachers—even in view of the often-feared talks with the parents. Thereby, the cohesion of the team and their common responsibility—especially with their individually different views, capabilities, and idiosyncrasies—are strengthened. Finally, as if only in passing, psychoanalytic knowledge about the ups and downs of psychic development in childhood is concretely conveyed.

In the following I would only like to mention the changes that we have made in the projects that followed. The first project following immediately after the prevention study in 2007 we called Starthilfe (Jump Start) and offered to implement it in ten preschool institutions. It was funded by a foundation with the requirement, that the city of Frankfurt take over the costs of the project after a maximal three year trial period of our psychoanalytic method of prevention—the responsible official of the city administration was still very committed to our work.

The first change, that had to do externally with the discontinuation of the research requirements, concerned the framework of the project: the choice of the preschool institutions. Since the required choice due to statistical criteria was eliminated, we could send an announcement with a lengthy description of the project to all preschool institutions and interested day-care directors could place their bids to take part on the project for at least one year. This voluntary nature fits very well to the psychoanalytic approach: Interest and motivation make the joint in depth work easier especially on difficult situations and conditions and the latent conflicting situations that underlie them, and for which there are no easy answers even though one wishes them.

The more crucial conceptual changes and improvements that we had made in the project Starthilfe had to do with the weekly presence in the preschools themselves. During the prevention study this was taken over by the group of young scientists, most of whom had a degree in psychology, with additional students near the end of their
studies, which were psychoanalytically educated, for the most part through intense, closely monitored case supervision. The stance of participatory observation is difficult and complicated in many ways. It has nothing to do with a kind of secret investigation. Our model was based on psychoanalytic baby watching which takes places at the beginning of the training at the Institute for Psychoanalytic Child and Adolescent Psychotherapy. From these experiences with the observation of babies in the manner of emotional caring and open receptiveness, that is an old tradition, we know how beneficially effective just the presence, the joining in on all that happens, and the inner involvement of a familiar observer can be also in difficult situations and phases of development, without this person doing anything, knowing anything better or even intervening. To be able to be a participatory observer („teilnehmender Beobachter“) in this manner has some prerequisites. During the preparation of Starthilfe we were lucky that one of the participating foundations had an interest in supporting the training thus helping us to solve our problem: The cooperation as a “participating observant and counsellor” was offered as a scholarship for the participating trainees in the Institute for Psychoanalytic Child and Adolescent Psychotherapy. That meant that we could now send colleagues in the day-care centres that already had experience with our special manner of participatory observation, well grounded in their own training analysis, in baby watching and supplemented by their knowledge of psychoanalytic theory, above all of theories of child development. It is also beneficial that these colleagues in the project profit from the cooperation in the preschools for their training as psychoanalytic child therapists, they experience much about the psychosocial developmental phenomena in kindergarten age and about the meaning and the problems of institutional support. Starthilfe is now in its fifth year and we can say that the connection between the psychoanalytic child training and the cooperation in the project has proven to be very good and that the regular presence of the colleagues for four hours every week in their day-care centre has almost always been accepted. The direct and regular, increasingly emotional contact that furthers knowledge about the individual children and their familial and social backgrounds on the one hand, and on the other the developing cooperation with the professional teams and finally the sensitive implementation of an easy going, everyday practice coupled with support of the colleagues in the single preschools have had a positive effect on the emotional
climate: children and preschool teachers have the experience of being respected and held in high esteem.

Additionally—and of extreme importance—is the regular conference with the respective preschool teachers, generally at the end of the observation even though it is often difficult to find the time. The mutual reflection on the observations furthers noticeably the concentration just on the difficult everyday situation, the understanding of the conscious and unconscious themes that are expressed, as well as needs, fears, and conflicts. The talk about the different points of view supports, evidently “all by itself”, the search for possible satisfaction of the needs of single children—or their restriction, after the solving of conflicts, but also for the best fitting stimulation of its observed inclinations and talents. Most often, the children that are most in a state of greatest need, are the focus of the observation. Having a good person to talk to is of inestimable value, one who shares the helplessness but through the search for an approach through understanding, does not leave it at this.

More than this, the colleagues in the project offer to assist in the search for fitting measures of help or with the preparation of parent conferences or also to participate on them. They participate also on parents’ group conferences if wished and if possible, for example, with discussion about questions of childhood development, raising children or how children become accustomed to the preschool. Thus, in the five years of its implementation, Starthilfe has become a project that has a sophisticated structure and will be adopted in the future by the city of Frankfurt—whereby we will more and more set the emphasis on crèche and day-care institutions, that take children in the especially sensitive age under three years.

In the Starthilfe-project we had to do without the third block of the Frankfurter Prevention Study: the offer of child psychotherapy in the preschool by child analysts in private practice. This offer was bound, because of legal reasons in the German health system, to an exemption that is only possible in connection with research.

In our third project: Frühe Schritte (Early Steps), that we have conducted over three years parallel to the Starthilfe-Project, we have come back to this concept. At the end of 2008 the SFI was given the chance to conduct in the frame of the IDeA Research Center a comparative study of two proven approaches of early prevention in each of seven day-care centres, and this time exactly aimed at neighbourhoods of the city that have proportionately more social problems. The study has
been in process for three years and just recently has been prolonged for another three years. The advantages and disadvantages are to be compared as well as the short and long-term effects of; first, the less costly and broadly accepted, well evaluated violence prevention programme Faustlos (Second Step) for preschool children that places emphasis on the cognitive learning of self and perception of others, of feelings and thoughts, in which pictures of various social and conflict situations are presented, discussed, and played in role play situations; and second our approach based on the experiences until now of the psychoanalytic prevention project, that we have called Frühe Schritte (Early Steps) that involves considerably more effort and expenditures than the first mentioned programme.

The concepts of this, in the meantime, third psychoanalytic prevention project for day-care centres are based on the basic ideas and goals of the others: namely, at an early point of time to recognise children with special developmental risks in the preschools themselves, the sociocultural context and familial problems underlying them and to study the results for the primary relationships and the psychic development of the child offering diagnostic, supportive measures and psychotherapeutic options or to help install them, that the child needs, and that means exactly there where it spends a greater part of the day and has the important attachment figures that are important for his development: In the preschool. Also Frühe Schritte follows a double procedure: For one, the preschool teachers should be regularly sensitised and schooled to perceive the central meaning of the emotional relationship between them and the individual child for its development—and also for its cognitive development and language acquisition—and especially to recognise and to reflect on it in the daily situation, especially in the conflicting and even negative forms so that the child can feel good in the preschool and the teachers for their part can be satisfied with their work: things that are mutually dependent. Secondly, children and parents should have the possibility of receiving direct psychoanalytic counselling and therapeutic support.

The case supervision of the preschool teams every two weeks have, of course, an important place in the project Frühe Schritte. The difference to the concrete offer of the Frankfurter Prevention Study and of Starthilfe is that the presence in the everyday routine of the preschool is carried out by an experienced psychoanalytic child therapist, who visits one to two mornings a week. She offers acute counselling for the
professional personnel during the workday with the possibility, for example, of exiting from an intense conflict situation to discuss it professionally; additionally this counselling offer with a low threshold is also available for the parents; furthermore, regular diagnostic sessions and in individual cases, child therapies can take place.

With the project Frühe Schritte we find ourselves, other than in Starthilfe completely in neighbourhoods with disproportionately large social problems and with the attendant high proportion of immigrants and thus in an unknown world with which we have seldom been in contact before and never would have been. Our personnel must have seemed to be foreign objects there, not only as representatives of another social class and culture, but also with their concepts of the good effects of open, friendly caring and of the meaning of protected spaces. Leuzinger-Bohleber (2011) coined the phrase: “outreaching Psychoanalysis” (“aufsuchende Psychoanalyse”). It seems to be positive when we leave our very own place of origin: the private practice in which patients come to us, actively taking a step into the outside world in order to care for patients who just do not come to us. What happens, however, when we are strangers to them, our verbal understanding seems impossible and our interest produces mostly shame and our caring, distrust? It took a long time of more or less helpless presence until the therapists could find their place in the day-care centres—and essentially, after three years the search is still going on.

First of all, there was concretely no room that the day-care centre saved for counselling and could give it to our use; we had to improvise: sometimes there was a room in the day-care centre, or a broom closet for materials that could be used temporarily for our purposes. But unrelated to these conditions, there seemed to be something like a ban on communication that was easiest to be overcome with the teachers allowing the concept of acute counselling to take hold. The offer of counselling for parents simply was not of interest, and thus we took our experiences from Starthilfe of the simple approach of accompanying the daily situations in the preschool with which it was possible, as if by chance and as a matter of course, to come into contact with the parents and in the beginning tried out different forms of our presence. We had to consider that, if it later came to counselling and therapeutic contacts with the parents, it would be important in another way to have a safe space in order to protect the confidentiality. The therapists should not be omnipresent and linked to the preschool.
In addition, the day-care centres were each different from one another, not only in the question of the quarters, but also in their personnel and management structure as in their way of working—each day-care centre is, so to say, at another level, an individual “case” with its own difficulties. The regular meetings of the peer consulting conferences of the therapists was and is therefore an important place where not only, through the discussion of the concept development and individual counselling cases but also where disappointment, degradation, excessive demands, and hopelessness could be expressed, shared, and contained in order then to create new ideas and discuss them together. Until now it was thus possible, despite all difficulties, to very slowly implement in these three years our planned action: namely, the acute counselling of preschool teachers and parents—most often the mothers—as well as a few individual therapies of children, but also other approaches were initiated: for example, professional meetings for the preschool teachers on certain highly relevant themes or a monthly breakfast for parents in the presence of the therapists. Also the presence of the therapists in the foyer of the day-care centre in the morning when the children were brought, proved for all involved to be a possibility for a first encounter, to size one another up and for the initiation of feelings of security, and what we have now discovered as a completely new analytic field of research is the value of informal talks in passing.

We had the experience with the first counselling sessions with mothers in the day-care centre that the usual, open analytic stance easily led these mothers to yield up too quickly and too much about themselves—and then did not take advantage of the next appointment. The hypothesis seems evident that in view of a possible weak, or because of traumata weakened psychic defence, any constraint of these mothers concerning overwhelming memories does not hold in the contact with an empathetic person. Also the therapist can be overwhelmed and cannot set anything against the flow—as she herself has only a transient position and no stable framework for her job. Naturally, there can be many other outward reasons for the break off of contact after too much candour behind closed doors: for example, mistrust that something leaks out and—a very usual fear—possible threat of the youth welfare office or other agencies; or also of shame that not only the therapist but also the preschool teachers could find out or also the husband. The uncertainty in assessing such questions is systematically intensified through the problems of verbal understanding and also by
the fact that the fathers are seldom present in the day-care centres thus leaving a vast room for fantasies.

In the course of such reflections we looked at the threshold talks that in the beginning were “only” a means to the end of starting a “real talk”. Then it occurred to us that it is only possible with some mothers to take up contact with the therapist under the condition of the threshold, to first just perhaps make a hint with which the therapist should concern herself, later then maybe to check the eye contact, perhaps then also to seek a further short talk, then to allow once a question of the therapist and an idea from her. Sometimes the therapist somehow gets the feeling it would be a good idea to make an offer for an appointment with more time. Sometimes it seems better to just let things be as they are, with what is possible in the threshold talks, at times even what is mainly possible in eye to eye contact and with that which each of the two parties can do something with, what she can and will accept. It is our preliminary impression that it can be an important process that gains momentum in this, at first, seemingly inadequate setting, and that it is almost hardly perceptible to recognise that a mother looks differently—or at all—at her child when she says goodbye.

Since both projects Starthilfe and Frühe Schritte are being conducted at the same time, it is obvious that comparisons are made and the pros and cons of the different procedures are considered concerning the presence in the day-care centre. The special function of the therapist with her own separate area of work in the day-care centre potentially has, as to another aspect, the regrettable result in the total realm of the day-care centre, that the therapist is also seen by the directors as the professional for the individual case. All other structural aspects, which the therapist also notices and to which she, with focus on the furthering of development of children automatically has an opinion about, are withheld from her, for example, when the day-care centre changes the group concept to one of an open concept. That is different in the Starthilfe project possibly because the colleagues there, still in training as child therapists, do not elicit such strong feelings of rivalry and additionally their area of work of participatory observation of individual children automatically includes the structure of the day-care agency and the general patterns of interaction. Conversely, we have more and more the impression in the Frühe Schritte project that the climate of the day-care centre has changed and that the teachers see the children from another angle, and that this is perhaps more meaningful than the therapy of several
individual children. The question remains to be answered if, due also to our limited resources, the most important goal of our psychoanalytic prevention is the qualification of the teachers plus the director so that they can be good, real objects that further the development of each individual child. This qualification occurs in the case supervision; and it happens in everyday situations in the presence of an inwardly participating Third and her analytically schooled view of the individual, difficult child and his world that has been formed by his life story and that of his parents—without disregarding the situation of the involved adults, parents and teachers. It is also an all-comprehensive qualification focused on the human factor in the day-care centre, also and more than ever, when the impression forces itself upon one, as in the Frühe Schritte project, that here humanity has the ugly stamp of the squalor of the world.

Our work is then not to lose sight of this even when it means an unreasonable demand on the teachers; and at the same time to look for the causes and to find, behind all of the insufferableness, good human traits, that is, to discover in one child, beside all the noisiness and intolerableness, the traits that point to a minimum of good experiences in his early relationships. For it is important to tie onto these good experiences, and only there, in the inner life of a child, can new, good experiences of relationships be sustainably docked onto to affect alteration.

Winnicott (1956) wrote in his work about the “Antisocial Tendency” that such difficult children do not primarily need therapy but good support and that therapy can only be successful “when it takes place in addition to the good care in an especially qualified institution” (Winnicott, 1956). We could be on the right path.

I would like to mention that in the meantime—stimulated and encouraged by the described projects—we have developed a further early prevention project with an elaborate research design that we have called Erste Schritte (First Steps) which we began about one year ago. This project, under the general management of Marianne Leuzinger-Bohleber and the clinical project responsibility of Claudia Burkhardt-Mussmann, concerns itself with the earliest mother–child–relationship and addresses expectant and young migrant mothers with babies, who participate in language and integration courses that are obligatory for immigrants in Germany. It is also a highly interesting and touching—and naturally difficult—project that will be more thoroughly presented by Lebiger-Vogel et al in this volume.
Notes

1. Celebrating 40 years of existing “Institut für analytische Kinder- und Jugendlichen-Psychotherapie” it was renamed in Anna Freud Institut in 2013.

2. In this context I would like to publicly express my thanks and great respect: without her social dedication as a psychoanalyst and researcher, without her consequence and energy, her optimism and fast tempo in compiling our first thoughts into a finished concept for an application—and for her great ability to convince sponsors with the presence of her research experience and at the same time with inserted, touching psychoanalytic case studies, not one of our so well conceptualised projects would have taken place!

3. In the following, the German word „Kindergarten“ will be translated to „preschool“, the word „Kita“(=Kindertagesstätte) to „day-care centre“.

4. We would like to thank Crespo-Foundation, Ursula Ströher Stiftung, Stiftung Polytechnische Gesellschaft Frankfurt am Main, Zinnkann-Stiftung.

5. Center for Research on Individual Development and Adaptive Education of Children at Risk, an institutional cooperation between the German Institute for International Educational Research (DIPF), Goethe Universität Frankfurt and the Sigmund-Freud-Institut.

References


CHAPTER THIRTEEN

Early prevention in day-care centres with children at risk—the EVA research project

Verena Neubert, Katrin Luise Laezer, Lorena Hartmann, Tamara Fischmann, and Marianne Leuzinger-Bohleber

Contextual framework of the EVA project

Research on early intervention and prevention with so-called “children at risk” is the major aim of the IDeA Center (Individual Development and Adaptive Education of Children at Risk). IDeA is a research cooperation of the Johann-Wolfgang-Goethe University in Frankfurt am Main, the German Institute for International Educational Research (DIPF) and Sigmund-Freud-Institut (SFI). The centre is an interdisciplinary research centre financed by the LOEWE initiative (Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz), a huge promotional programme fostering excellent research in the federal state Hessen. About 150 scientists are engaged in thirty-four research projects from seven different disciplines dealing with social and neurocognitive risks in the development of children.1

The EVA project (Evaluation of two different prevention programmes with children of a high risk population) is one of the larger projects concentrating on the evaluation of two different early prevention programmes in day-care centres with children coming from deprived neighbourhoods in Frankfurt am Main. The aim of this article is to give a short introduction on research on early prevention done
at the Sigmund-Freud-Institut. At first a short overview on the design, methods and results of the Frankfurt Prevention Study (FP) is given. Subsequently the continuation study of the FP, the EVA study, will be introduced. The chapter is ending with the first results of EVA and a perspective on ongoing research on risk factors and early prevention at the Sigmund-Freud-Institut.

**The Frankfurt Prevention Study**

The Frankfurt Prevention Study (FP) is a controlled, representative, prospective study that has been carried out by the Sigmund-Freud-Institut between 2003 and 2006. Fourteen municipal day-care centres in Frankfurt am Main took part. The representative sample contained of 1,000 children (N = 500 for the intervention group and N = 500 for the control group). The study design and the results are published nationally and internationally by now (Leuzinger-Bohleber, 2010a, 2010b; Leuzinger-Bohleber et al., 2008a; Leuzinger-Bohleber, Fischmann & Vogel, 2008b; Leuzinger-Bohleber & Fischmann, 2010; Leuzinger-Bohleber et al., 2011). The major aim of the FP was to evaluate a psychoanalytic prevention programme developed by the Frankfurt group round Marianne Leuzinger-Bohleber. The main hypothesis of the FP was that a two-year psychoanalytic intervention programme (without the use of medication) reduces the number of children with psychosocial disintegration in the first year of primary school in a statistically significant way.

**Design and sample selection**

In the spring of 2004 the intervention started in fourteen different day-care centres. The psychoanalytic intervention programme consisted of different parts: a psychoanalytic fourteen-day-case supervision for the teachers, weekly counselling offers through experienced team members of the Sigmund-Freud-Institut, intensive work with the parents and in severe cases the offer for psychoanalytic child psychotherapy within the institutions.

To evaluate the prevention programme within a representative sample of 1,000 children (N = 500 for the intervention group and N = 500 for the untreated control group), a representative baseline survey was carried out in 2003. All the municipal day-care centres of Frankfurt (N = 114) caring for 2,700 children who came into the institutions as
three- or four-year-olds in the autumn of 2003 participated. On the basis of social indicators (like the rate of persons receiving social welfare and the percentage of migrants living in particular areas) and the number of children with high scores of aggression, hyperactivity, and anxiety the day-care centres were allocated to different clusters. Afterwards two institutions of each cluster were randomly chosen, one for the intervention, one for the control group. This baseline assessment and the resulting clusters are also the ground on which the sample selection of the EVA study is based.

Results

The most important finding of the FP is that through the psychoanalytic intervention the aggression and anxiety scores of children decreased in a significant way. Only for the girls the hyperactivity scores also declined. On the basis of these results the EVA study, which we will explain in more detail in the following, was designed.

Early prevention—the EVA study

The EVA study is a replication study of the Frankfurt Prevention Study. EVA evaluates the two different early prevention programmes Early Steps and Faustlos² and their individual effectiveness in a sample of children coming from deprived neighbourhoods. The composition of the sample is the most important distinctive feature between both studies. Whereas the FP was conducted in a representative sample of all municipal day-care centres in Frankfurt, the EVA study clearly focuses on a high risk sample. There are several reasons for choosing a high risk sample for the realisation of EVA we will describe in the following.

An initial literature review by Laezer and colleagues (in press) reveals that the socio economic status (SES) of a family is an important predictor of mental health problems and increases the risk of developing psychopathologies in children (Bøe, Overland, Lundervold, & Hysing, 2011; Hölling, Kurth, Rothenberger, Becker & Schlack, 2008; Merikangas et al., 2010; Reijneveld, Brugman, Verhulst & Verloove-Vanhorick, 2005). There is also a positive correlation between childhood SES, intelligence and academic achievement (Friedrich & Siegert, 2009; Guo & Mullan-Harris, 2000; Sirin, 2005). Moreover effects of area socioeconomic disadvantage can be identified as predicting child
psychopathology via family characteristics. This finding is supported by the result that neighbourhood deprivation of children is related to emotional and behavioural problems and influences school readiness (Flouri, Mavroveli & Tzavidis, 2011; Hanson et al., 2011). Especially in the environment of families coming from a psychosocial disadvantaged background, a cumulation of developmental problems and vulnerabilities can be observed quite often. Many risk factors do not appear isolated, but accumulate in particular families and children (Laucht, 2009). A disadvantageous development can often be anticipated in the early parent–child–relationship (Laucht, 2009). Children whose attachment classification is identified as disorganised are the most at-risk for later behaviour problems, including clinical levels of externalising and/or aggressive symptoms, hostility in the classroom as well as poor academic achievements (Dozier, Stovall, Albus & Bates, 2001; Green, Stanley, Smith & Goldwyn, 2000; Lyons-Ruth, Alpern & Repacholi, 1993; Moss, Cyr & Dubois-Comtois, 2004; Moss et al., 2006; Solomon, George & De Jong, 1995; Stacks & Oshio, 2009).

However, the parent–child–relationship can not only be considered as a risk factor for the child’s development but might also be a resource. A secure attachment in infancy can be a protective factor and is associated with optimal infant development and prosocial outcomes including higher levels of social competence, more advanced emotional understanding, higher cognitive and language skills, and less dependence on adults (Belsky & Fearon, 2002; Bohlin, Hagekull & Rydell, 2001; Leuzinger-Bohleber, 2009; Spieker, Nelson, Petras, Jolley & Barnard, 2003; Stacks & Oshio, 2009; Weinfield, Sroufe, Egeland & Carlson, 1999).

One explanation of the connection between a difficult psychosocial situation and the attachment quality of the child is that a child who grows up in a family suffering from social or financial poverty is permanently under the influence stress (Egeland, 2006). Egeland, Pianta and Sroufe could show that it is possible to predict the development of children’s social-emotional and behavioural competencies in the first class by knowing the family’s stressful experiences in the preschool age of the child (Pianta, Egeland & Sroufe, 1992).

Obviously, neighbourhood deprivation and family or parent characteristics seem to influence the children’s cognitive and emotional development, whereas a secure attachment style can act as a protective factor for the child’s development. These findings were taken into account by conceptualizing the EVA study. The study focuses on children who
suffer from disadvantaged life circumstances and we want to support these children so that in some cases it may be possible to achieve a change in the attachment type. If we can offer these children stable alternate relationships we assume that a change from an insecure to a secure attachment can be achieved.

**Design**

EVA is an evaluation study of Early Steps and Faustlos (second steps) which implements a cluster randomised controlled trial design registered in the German Clinical Trials Register with its number DRKS-ID: DRKS00003500 (a summary of the design is submitted to TRIAL by Laezer, Leuzinger-Bohleber, Fischmann & Rüger, 2012). The main research question aims at the differential effectiveness of the two different early prevention programmes in a high risk sample: Which influences do both interventions have on the children’s behaviour (e.g., aggression, anxiety and hyperactivity)? Do the interventions have an influence on the attachment type of the children and is it possible to change an insecure into a secure attachment through the programmes?

We hypothesised that the psychoanalytic oriented programme Early Steps meets the needs of children coming from many different problematic family situations better than the more standardised and narrow approach of Faustlos. Resulting from that, Early Steps would have a better outcome concerning the dimensions of behaviour and attachment security (Leuzinger-Bohleber & Fischmann, 2010; Leuzinger-Bohleber et al., 2011).

**Early Steps**

The psychoanalytic prevention programme Early Steps has a broad approach and consists of six different modules.

- One part of Early Steps is a psychoanalytic fourteen-day case supervision for the teachers in the day-care centres conducted by an experienced psychoanalytic supervisor. The aim of the supervision is to enable the teachers to develop a deep understanding of the unconscious conflicts and motives of the children and to help them handle difficult conflicts and situations.
• Another central module is the weekly presence of an experienced psychoanalytic child and adolescent psychotherapist in the institution who offers counselling to parents and teachers. Due to our experience the threshold to enter a psychotherapeutic practice is often too high for families from a high risk background. That is why talks in passing became of immense importance in the therapeutic work with the parents of our sample.

• The therapist is also able to take children into therapy in the institution, which is possible through an exceptional permission that the SFI received for the EVA project. Through this permission we wanted to increase the possibility that the families are willing to take part in a therapy, if necessary.

• A further part of the prevention programme is the individual caring for children during the transition from day-care centre to primary school. Experienced students accompany and support children with difficult attachment types during the transitional phase. Every student meets with one child once a week and fulfills the child’s needs for an alternate stable relationship. The students are supported by a two-week-supervision where they are able to reflect on the child’s needs and family situation.

• Early Steps also comprises Faustlos, which will be administered to the children in the second year of the intervention. Therefore the teachers get a special training to administer Faustlos to the group of children who take part in the study.

Faustlos

Faustlos is a standardised prevention curriculum which aims at the reduction of impulsive and aggressive behaviour and the increase of social emotional competence in children at preschool age. It consists of three main parts: the development of empathy, the impulse control and the handling of conflicts and anger (Cierpka & Schick 2004, 2006; Cierpka, 2009).

The programme is divided into twenty-eight lessons, which are administered to the children by their teachers. Faustlos does not focus on the single child but on a group of children. The main goal is to teach the children to identify with the feelings of other children, to take over their perspectives and to react in an empathic way. Impulsive or aggressive behaviour shall decrease through the teaching of problem solving.
strategies and the practicing of prosocial behaviour in role-plays (Cierpka & Schick, 2004).

In the EVA study every day-care centre team took part in training for the administration of Faustlos before they performed it in their institutions.

Sample selection

Both of the two different interventions are administered in seven municipal day-care centres in Frankfurt. To identify the high risk population we used the cluster analysis of the Frankfurt Prevention study where all of the 114 municipal day-care centres in Frankfurt were clustered among the criteria of social structure (measured by the percentage of children for whom the city of Frankfurt paid the day-care), the percentage of migrants living in the districts and aggression, anxiety and hyperactivity scores of the children (measured by the Verhaltensbeurteilungsbo- gen, Döpfner, Berner, Fleischmann & Schmidt, 1993). On the basis of this cluster analysis only clusters with a problematic social structure and high scores on aggression, anxiety, and hyperactivity were chosen to randomise fourteen day-care centres to the two different interventions. By choosing the clusters also statistical data on child poverty in the city of Frankfurt was considered (Jacobs, 2010). For ethical reasons we decided not to have an untreated control group but to compare the two different programmes to each other. We had to offer some support to all of the children coming from such a risky background.

Within the fourteen day-care centres all families with children of the age of three to under five were asked to take part in the study. Altogether 307 families decided to participate. There were no significant differences between the two intervention groups concerning age or gender at the baseline measurement point, before intervention started (age: t = .351; p = .73; n = 307; gender: $\chi^2 = 1.841; p = .17; n = 307$).

In figure 1 you can see the full design of the EVA study. We use a multi-perspective way of looking at the children. Teachers, parents, and children are examined with quantitative and also with qualitative methods.

There are two main measurement points, t1-pre before the intervention started and t3-post after two years. At the first measurement point the teachers and parents filled out questionnaires concerning the children’s behaviour. The parents filled out the Strength and Difficulties Questionnaire (SDQ) (Goodman, 1997; Goodman & Scott,
The teachers also filled out the SDQ, but additionally the Teacher Report Form of the Child Behavior Checklist (C-TRF) (Achenbach & Edelbrock, 1983; Achenbach, 1997; Achenbach & Rescorla, 2010; Elting, 2003). Another instrument we used with the teachers was a questionnaire on resilience, which is called “Positive Entwicklung im Kindergartenalltag” (PERIK) (Mayr & Ulrich, 2009a; Mayr & Ulrich, 2009b). The teachers were also asked to describe a child of their own choice accurately. From those narratives we collected data on the teachers reflective functioning, which we measured via the Reflective-Self-Functioning-Scale (RFSF) (Daudert, 2001; Dornes, 2004; Fonagy, Target, Steele, & Steele, 1998). The children’s attachment classification was measured by the Manchester Child Attachment Story Task (MCAST) which is one of our major instruments. The MCAST is a story stem completion task method (Barone et al., 2009; Green, Stanley, Smith & Goldwyn, 2000; Wai Wan & Green, 2010) for children between three and eight years. The interviewer starts to play a vignette in a doll-house-play, which contains an attachment relevant distress (e.g., the child doll wakes up in the middle of the night and has a horrible dream or the child doll is hurting its knee) and asks the child to complete the story. The test situations are videotaped and afterwards coded by trained raters into thirty-three categories. The independent and blinded reliability test of twenty videos through five raters of EVA (concerning the attachment classification A vs. B vs. C vs. D) resulted in Fleiss’ Kappa = 0.62 (95% CI = 0.55–0.70).
The verbal IQ of the children is used as a control variable and therefore captured by the Hannover-Wechsler-Intelligenztest für das Vorschulalter—III (HAWIVA) (Ricken, Fritz, Schuck & Preuß, 2007). At the measurement point t3-post the same instruments were used for the teachers and children, but for the parents we did an additional interview to get an impression of the family’s living circumstances and possible risk factors in the children’s environments. These factors are: family structure (e.g., divorce, adoption, single parent status), migration history of the family, education and job of the parents, living circumstances, severe illnesses of the child/within the family (Neubert & Laezer, 2011). Due to the fact that we conducted semi-structured interviews there was always the possibility for the parents to tell their own family history and also report about their own experiences and trauma. The parent’s everyday stress was measured by the Everyday-Stressors-Index (ESI) (Jäkel & Leyendecker, 2008). We added the interview at the t3-post measurement point when a certain level of mutual trust had been established so that even intimate topics could be discussed.

First impressions of the living circumstances of “children at risk”—parts of the interviews with parents

To give a short impression of the problems and conflicts the families in our study are dealing with, we will give a short description of two families of our sample. The information comes from the interview with the parents we conducted on the measurement point t3-post.

Simon—“Nobody can comfort him, nothing, nothing, nothing…”

Simon is six years old and lives with his single mum who came from Africa to Germany at the age of nineteen years while she was working as an au pair. She fell in love with Simon’s father and stayed in Germany. She described that there was a lot of trouble between her and Simon’s father during pregnancy. Simon’s parents broke up before their son was born. After the break-up the mother decided to stay in Germany. The mother made her university-entrance diploma in Africa, but did not participate in job training or academic studies afterwards. At the moment of the interview (2012) she had no job and received social welfare payment.

She reported that when Simon was a baby he was always very hungry, but she could not breastfeed him, because she did not have enough
milk. When he was ten months old the mother had to go to hospital because of diabetes. Simon stayed with a day nanny who left him alone for two days and nights. When he was four years old he was swimming with his mum and nearly drowned. Simon had to be reanimated and stayed in the hospital for a week. Simon’s mother has breakdowns because of the diabetes and her son had to call the ambulance four times, to save her life.

She described that Simon cried a lot and nobody can comfort him then. He cries even more when she hugs him and she does not know what to do, she can just wait until he calms down himself. In the day-care centre Simon goes from teacher to teacher “Nobody can comfort him, nothing, nothing, nothing ....”. Some time Simon has “Flashs” for example, when he is watching TV. Then he stands up, goes to the kitchen door, just stays there, saying nothing and after a while goes back to the TV.

*Yusuf—“A lot of stress, a lot of struggle ... His life was always like that”*

Yusuf is eight years old. He lived with his ten-year-old sister and his mother, the parents split up when Yusuf was eight months old. The mother reports that the relationship with the father was very stressful for her. A friend of the mother who is translating for us during the meeting describes Yusuf’s life circumstances: “A lot of stress, a lot of struggle ... His life was always like that”.

Both parents had Turkish citizenship and they got to know each other in Turkey. The father lived in Germany already and was on a holiday visit there. After the marriage the parents moved to Germany although the mother had never left her country before and did not speak or understand a single German word. For the following four years she stayed at home and was not allowed to leave the flat. The mother was fetched up by the police three times during those four years and brought to a shelter for battered women, but she always returned to her husband. At the moment Yusuf has no contact with his father. After the split of his parents he saw his father three times but the contact was prohibited due to the fact that the father appeared to the meetings drunk.

The mother describes Yusuf’s behaviour as aggressive and confused. He always tried to get his own way and started screaming and crying when she does not follow his instructions. She felt very helpless in these situations.
Preliminary results

First results of the baseline attachment classification at the measurement point t1-pre clearly demonstrate that the EVA study is examining a special sample with a high percentage of children at risk. Out of 307 children and a missing data rate of twenty-two per cent we could analyse 241 MCAST videos and make an attachment classification for those children. There were no significant differences between the intervention group concerning this drop-out rate ($\chi^2 = 5.383; p = .146; n = 241$).

Taking a look at the distribution of attachment types in the EVA sample we can claim a very low percentage of children with a secure attachment style (twenty-nine per cent). Twenty-six per cent of the children are insecure-disorganised attached which is typical for children who have suffered severe trauma and loss. Thirty-three per cent of the children in the EVA sample show an insecure-avoidant and twelve per cent an insecure-ambivalent attachment classification (see also table 1).

Table 1: MCAST Baseline attachment classifications.

<table>
<thead>
<tr>
<th>Sample</th>
<th>$N_{\text{children}}$</th>
<th>Insecure-avoidant (A)</th>
<th>Secure (B)</th>
<th>Insecure-ambivalent (C)</th>
<th>Insecure-disorganised (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVA study baseline</td>
<td>241</td>
<td>34</td>
<td>35</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Early Steps n.s.</td>
<td>134</td>
<td>38</td>
<td>32</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Faustlos n.s.</td>
<td>107</td>
<td>28</td>
<td>32</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>West Europe (9 samples, Van IJzendoorn &amp; Kroonenberg, 1988)</td>
<td>510</td>
<td>28</td>
<td>66</td>
<td>6</td>
<td>–</td>
</tr>
<tr>
<td>USA (21 samples, Van IJzendoorn et al., 1992)</td>
<td>1584</td>
<td>21</td>
<td>67</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td>Israel Cities (Sagi et al., 2002)</td>
<td>758</td>
<td>3</td>
<td>72</td>
<td>21</td>
<td>3</td>
</tr>
</tbody>
</table>

The data collection of the EVA study is completed now. At the moment the data of measurement t3-post is analysed and connected with our findings of measurement t1-pre.
Conclusions and further studies

First results hint to the fact that we are examining a sample of children at risk in the EVA study. The distribution of the attachment styles at measurement point t1-pre is highly unusual in comparison to representative samples (see table 1 above). Further data of EVA is going to be analysed soon so that we will have more details about the attachment styles of the children at the different measurement points and about changes of their attachment types after the intervention.

One further interest resulting from the distribution of attachment types is the connection between attachment and risk factors on the level of the single child. Up to now we only had a look at risk factors on the level of the cluster analyses. Moreover through the interviews we are conducting with the parents we will gain a better insight of the living circumstances of the families in our sample. This will enable us to describe in more detail the environmental contexts in which the children coming from deprived neighbourhoods in Frankfurt am Main grow up. Is there a connection between disadvantageous life circumstances and the children’s attachment insecurity? The deepened knowledge of so-called risk factors in the children’s surroundings will also help us to better understand the fit of the programmes with this families and maybe even to modify and improving our prevention work in an adequate way.

Another perspective we want to look at is the role of attachment as a factor mediating the connection between risk factors the children are facing and their behavioural problems. A study by Belsky and Fearon (2002) found that especially avoidant children are the most vulnerable ones for developing behavioural disorders as a function of risk. Disorganised children didn’t differ from secure ones with regard to their behavioural problems when there were more than three risk factors in the children’s environments. This is a quite interesting finding. We want to look to see if we can replicate this finding in our EVA sample by assessing risk factors in our high risk population and comparing securely attached to disorganised attached children with respect to their behavioural problems. We want to know how far the protective force of a secure attachment reaches and how strong the influence of a cumulation of risk factors can be. How many risk factors can be balanced through a secure attachment pattern?

The EVA project is a large, still ongoing research endeavour realised in a research network including PhD students, post doctoral students,
advanced researchers as well as experienced child psychoanalysts. We are looking forward to investigating and publishing many different aspects of this prevention project in the future.

Notes

1. For further information have a look at: www.idea-frankfurt.eu/
2. Faustlos is the German version of the prevention programme Second Step and was adapted to the German language area by the Heidelberg group round Manfred Cierpka (Cierpka & Schick, 2004, 2006; Cierpka, 2009).
3. The missing data rate of twenty-two per cent comes about of a longer absence of children, the denial to do the MCAST doll-play during administration and the failing to meet the rating criteria.
4. The results presented in this article are preliminary ones because data controlling is not already completed (08.09.2013).

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CHAPTER FOURTEEN

First Steps: an integration project for infants with an immigrant background—conceptualisation and first impressions

Judith Lebiger-Vogel, Annette Busse, Korinna Fritzemeyer, Claudia Burkhardt-Mussmann, Luca-Sandra Paul, and Marianne Leuzinger-Bohleber

Starting point and development of First Steps

First Steps—the most recent project of what can be called a tradition of prevention projects at the Sigmund-Freud-Institut in collaboration with the Institute for Psychoanalytical Child and Adolescent Psychotherapy (IAKJP, Frankfurt/Main)—sets its starting point in addressing what has become one of the most urgent social responsibilities in Germany: integrating children with an immigrant background (see Wolff Chapter Twelve in this volume).

Although politicians and most parts of society have begun to understand that Germany has become a country of immigration and quite a number of projects supporting children with an immigrant background exist (see e.g., Friedrich & Siegert, 2009; see also Hertel, Eickhorst, Kachler, Zeidler & Cierpka; and Andresen in this volume), these children are still educationally disadvantaged and are more likely to live in high risk environments. In 2010, forty-eight per cent of children living in families with an immigrant background grew up exposed to at least one situation of risk such as unemployed, low income earning or educationally disadvantaged parents (National Education Report, 2012). Particularly children with a Turkish background are prone
to live in situations of risk—seventy-one per cent are exposed to at least one and twelve per cent to all three of the risk factors mentioned above. Although the number of immigrant children who participate (successfully) in the educational system has constantly risen since 2005, the current national education report indicates that the discrepancy between children with and without an immigrant background is a relative one and has not dissipated. Children with an immigrant background still belong to the group of the so-called “losers of education” in Germany.

Still, it needs to be kept in mind that it is not the immigration background per se that puts children at risk of becoming disadvantaged. It is rather the factors that are associated with their parents’ migration, psychological factors due to the different phases of migration on the one hand and socioeconomic factors such as low socioeconomic status, unemployment, insecure institutional status etc. that create difficult developmental environments for children. In order to offer suitable support, all these different factors need to be considered and seen as specific challenges which children from immigrant families face.

Political reactions to the clarion call of the early Programme for International Student Assessment (PISA) studies and the late realisation that Germany has become an immigration country but had missed out to socially integrate its former “guest workers” included the nationwide implementation of integration and German language courses in 2004. In 2007, courses became compulsory, nonattendance being penalised. This development led to intensive discussions until today as it is not understood whether integration can be made a (one-way) “duty” demanding positive results in German culture and language. Also being discussed is whether the requirement of language course certificates prior to family unification for immigrants living in Germany (e.g., marriage) reflect separation and discrimination tendencies of German politics (Bade, 2010; news.de 2010; weltonline, 2011). In order not to exclude mothers from participating in these courses, some integration courses offer childcare for children up to the age of three. A pilot study to First Steps, conducted in 2008/09, showed that about one third of all female integration course participants became pregnant during the course, dropped out of courses and unfortunately rarely returned for completion, factors that put these women at risk of not gaining the “required” cultural competencies—including knowledge of
German—and thus becoming socially isolated, with the corresponding consequences for their children. This is where First Steps, implemented in Frankfurt, seeks to step in as will be described below. The preliminary study furthermore revealed that, mostly due to very limited personal and financial resources, language or integration centres hardly have the possibility to offer high quality childcare while the mothers are attending the language courses. To the contrary, children are often only more or less “kept safe” while their mothers attend integration and language courses—another momentum in the development of First Steps as it makes use of the so far unused possibility to promote integration of children from the very start before integration deficits can occur by addressing their mothers (and fathers), who are attending integration courses. In contrast, respectively in addition to the often recommended placement of very young children in day care institutions as aimed at in Germany’s National Integration Plan (2008), First Steps seeks to promote parents’ parenting (caretaking) capacities and their motivation to integrate for the good of their children.

**Goals of First Steps on the individual level**

Language competencies may be an important gateway to a foreign culture and one of the discussed reasons for the poor results in the PISA studies of children with an immigrant background is the language spoken at the child’s home (Prenzel et al., 2007), but discussions about integration and programmes to promote integration must not solely focus on successful language acquisition. It must rather be understood what kind of support will facilitate immigrants’ motivation to actively participate in the immigration country’s society, allowing them and their children to develop a sense of active belonging and citizenship in the true sense of integration rather than assimilation (Leuzinger-Bohleber, 2009; Esser, 2004).

*From pregnancy on …*

Results of the Frankfurt prevention study (Leuzinger-Bohleber et al., 2011) indicated that reasons for poor or missing early integration among children might indeed lie beyond language barriers and rather be associated with a potential disruption of “natural attachment” in the course of migration. The following two assumptions guided the development
of First Steps and may help to understand the disruption potential of attachment in the process of migration and young motherhood: On the one hand we know that both, the experience of migration, for example acquiring cultural competencies right at the beginning of immigration (Sluzki, 2001), as well as entering maternity are stressful and vulnerable phases (Stern, 2007) and when coinciding stress load might be particularly high. On the other hand we noticed especially young parents’ genuine wish that their child should lead a good life, a fact which means an enormous chance for the wish that the child (and the whole family) might be included in the country of immigration in the future. Mothers’ growing worries about giving birth in the last trimester can also result in an opening of immigrant families towards the immigrant country’s society during this phase. However, if experiences during this vulnerable phase are dominated by disappointments and frustration, mothers might withdraw socially. The need to actively process their new situation as immigrants and being psychologically fragile due to early motherhood at the same time bring about the danger of giving up both tasks or favouring one of the two and ignoring the other. If so, mothers will always feel that they have failed—one way or another; a feeling that contributes to the associations of migration, isolation and depression as we have learnt from the Frankfurt prevention study even without taking into account traumatic stress due to political persecution, torture as well as other dramatic losses.

Furthermore we know that if a child—closely attached to its primary caregivers—unconsciously notices that its parents, especially the mother, suffer from severe homesickness or have not really “arrived” at the country of immigration emotionally, the child will perceive turning to the culture and language of the immigration country as a betrayal and turning away from his parents or mother. Oftentimes this kind of loyalty conflict keeps children with an immigrant background from successfully learning the language of the immigration country and integrating psycho-socially (Leuzinger-Bohleber, 2009; see also King, 2007). Unconsciously they identify with their parents’ losses, possibly leading to behaviour problems (e.g., hyperactivity), school failure and/or depression if not processed thoroughly. In order to prevent intergenerational transmission of depressive reactions due to unprocessed grief, First Steps seeks to support all three processes—acquiring cultural competencies, mourning losses as well as becoming a mother—at the same time.
Promoting mother–child interaction—early precedents of language development

From a psychoanalytical point of view there are reasons for not solely focusing on language acquisition: A multitude of studies based on empirical psychoanalytical development and attachment research show how central the meaning of preverbal antecedents of language acquisition within the first eighteen months are for language development and for cognitive development in general (e.g., Stern, 1990; Berlin, Zeanah & Liebermann, 2008; Brisch, 2010). The voice of the mother, her speech melody and speech rhythm, but also emotional contact and, last but not least, attachment, provide sensual, interwoven experiences, which, taken up by a child in its primary relationship with its mother or father, guide both, early first and secondary language acquisition (Leuzinger-Bohleber, 2009). In case of disturbances of preverbal early communication, these disturbances can manifest in language acquisition. As interactions of infants with their depressive mothers are amply investigated (e.g., Beebe & Lachmann, 2002) we know that these babies develop a severely limited repertoire of nonverbal and verbal expressions and communication. Language acquisition as well as the development of communicative, social competencies cannot be fully understood when not looked at within the context of early relationship experiences—a point of view in support of neurobiological and epigenetic research (cf. Damasio, 1999; Panksepp, 1998; Bauer, 2011; in this volume: Ammaniti; Schechter; Emde; Leuzinger-Bohleber).

These findings and considerations have led to develop a prevention programme that seeks to go beyond other existing prevention programmes in promoting integration and not solely focusing on language acquisition of children and their parents as most of the existing studies in the field do, as recently reported by the federal office for migration and refugees (Friedrich & Siegert, 2009; Lösel, Schmucker, Plankensteiner & Weis, 2006). Moreover First Steps seeks to improve early developmental environments of children at risk of growing up disadvantaged due to their parents’ acute migration (stress) and strengthening their resilience (cf. Leuzinger-Bohleber, 2009; Leuzinger-Bohleber, Fischmann & Lebiger-Vogel, 2009). In promoting infant–mother (father) relationships from their earliest point on—pregnancy—we hope that First Steps will facilitate successful mother–child interaction from the time...
the natural window for its development opens. In doing so, we hope to promote attachment security and therefore healthy child development. Empirical attachment, neurobiological as well as epigenetic research show that attachment security is strongly associated with cognitive, socio-emotional and language development, stress reactivity as well as academic success (Berlin, Zeanah & Liebermann, 2008; Dozier, Zeanah, Wallin & Schauffer, 2012; West, Mathews & Kerns, in press).

There is a consensus in the scientific literature that secure attachments can be seen as a protective factor for the development of behaviour disturbances and social competence (Moss, Bureau, Béliveau, Zdebik & Lépine, 2009; Weinfield, Stroufe, Egeland & Carlson, 2008; DeKlyen & Greenberg, 2008). Children who grow up in a positive and emotionally secure environment are more creative, show less aggressiveness and learn languages more easily (see summary of literature in Leuzinger-Bohleber, in press). Furthermore we hope that by promoting parents’ reflective functioning (Fonagy, Gergely, Jurist & Target, 2002), adequate emotion regulation, parenting behaviour (e.g., responding to their infant’s cues consistently) as well as cultural competencies, parents’ psychosocial integration will be facilitated. Hopefully, negative primary (e.g., poorly educated parents) and secondary family background related effects (Boudon, 1974; e.g., parental educational decisions when poorly informed about or afraid of the education system) on the child will be weakened by an enhancement of the parent–child relationship and interaction. The intervention conceptualisation and theory of change of First Steps is summarised in figure 1 below.

First Steps’ target group are women, who, due to their situation of having lived in Germany only for a short time, mostly have not had the chance to become integrated into German society. Often they have not planned their migration ahead but had to flee from their home country due to war, persecution or other existential dangers. Another reason of migration we observe is either agreed-upon but arranged or sometimes even forced marriages, where women marry an often unknown person and move abroad. Most of them hardly know German at all, and are more or less integrated outside of their family—a process in need of emotional and cognitive support. Participants should either be pregnant or have a child younger than eighteen months. In summary the intervention programme seeks to support integration processes (e.g., allowing for successful language course participation and employment) and prevent social isolation and associated depression.
among mothers. Thereby we seek to pave the way for immigrants’ children’s integration in the sense of improving their chances of social participation in Germany (through their mothers feeling secure in the new society and being able to provide good socio-emotional support to their children, hopefully resulting in good socio-emotional and language development and education) and reduce or even prevent possible negative effects on the children’s development induced by the migration experience of their parents often associated with risk factors (such as social isolation or unemployment).

**Goals of First Steps on project level**

In order to open the doors for future implementations of First Steps in other German cities, First Steps will serve as a scientifically evaluated model project in the sense that when it proves to be successful it can also be realised in other communities and cities in Germany, independently of regional specialities such as immigration population (ethnicities), project staff and context of recruitment. Among other things, project implementation as well as short—and long-term effects of the psychoanalytically oriented early prevention programme will be evaluated thoroughly. Implementing First Steps in Berlin from 2012 on will test possibilities and practicality of its dissemination and transference.
In contrast to Frankfurt, where participants are recruited via the above mentioned integration courses at regional non-profit social service providers such as Arbeiterwohlfahrt (AWO), teachers’ cooperation and Infrau e.V. (for further details see below), in Berlin First Steps will be integrated into the offerings of the mother–child-centre (children’s house of health) at the Vivantes Clinic Neukölln, where seventy per cent of mothers have an immigrant background and participants will be recruited directly at maternity units.

Implementation and evaluation of First Steps in Frankfurt/Main

The development of the precise implementation and study design as it is being carried out in Frankfurt at the moment took place from 2008 until first intervention groups were launched in 2010.

The following research questions guided the development of the randomised comparison group design as depicted in figure 2 (see below):

a) How do babies, infants and their parents benefit from our professional intervention? What is the long-term impact? b) Does the project result in mothers more successfully completing integration courses and obtaining work after maternity leave in contrast to a comparison group? c) Does the project have a positive impact on the cognitive, emotional, language, and social development of the children?

For recruitment of participants (in Frankfurt) we make use of the above-mentioned compulsory integration courses for new immigrants, offering pregnant women and young families support in the institutions where the integration courses are held. Project staff regularly presents the project in the integration courses and is informed by the integration course teachers when a woman is pregnant in order to contact her as soon as possible. As the short and long-term effects of First Steps are investigated empirically in a prospective randomised comparison group design, the integration courses—which the women are attending—are randomly assigned to two different interventions; either to the First Steps intervention groups (Group A) or to the comparison groups (Group B), self-organised open mother–child groups led by laypeople with an immigrant background (see figure 2 below). As the recruitment of participants proved to be more complicated and time consuming than anticipated according to the results of our pilot study, the recruitment strategies were broadened.
**Intervention group: First Steps intervention (Group A)**

First Steps accompanies and supports mothers and children in groups and individual contacts until children enter kindergarten (preschool) at the age of three. As suggested by meta-analyses of early prevention evaluation studies, the project entails both “come” as well as “call on” modes, making First Steps a combination of a centre and a home-based intervention as this combination proved to be successful in other early prevention programmes (Olds, Sadler & Kitzman, 2008; Emde & Robinson, 2000).

On the one hand our project staff offers individual contacts—especially via telephone—which also allow for contact with other family

![Diagram of study design in Frankfurt.](image-url)
members such as fathers; on the other hand mothers and their babies are invited to join weekly groups with two project staffs and other mothers. In terms of recruitment and continuity of participation (drop-outs) offering “come” as well as “call on” modes seems to be effective in terms of motivating mothers to join the group shortly after giving birth more easily than within the comparison group as preliminary analysis reveals.

Home-visits and telephone contacts also proved to be necessary because women in several cultures (e.g., Eritrean, Ethiopian, Chinese, Korean) are not allowed to leave their homes for up to eight weeks after giving birth. Close contact via home-visits or telephone calls help participants and staff to get and stay connected during this important period of the project (see below).

Training of project staff

Almost all of our four female project staffs in Frankfurt are mothers and have an immigrant background or have experienced migration themselves. They have different vocational and educational backgrounds but none had any experience with psychoanalytical training or treatment. From our experience with other prevention projects such as the Frankfurt prevention study or EVA in support of disadvantaged children (Leuzinger-Bohleber et al., 2006a; Leuzinger-Bohleber et al., 2011), we have a psychoanalytically based concept at hand that is apt for working with laypersons including positively evaluated supervision and psychoanalytical child and infant observation strategies that could readily be adapted for First Steps.

Professionalisation of project staff is one of the most important project characteristics. As Olds et al. (2008) and Holodynski (2007) have pointed out in their meta-evaluations of early prevention projects, the outcome of interventions seems to be positively influenced by the professionalism of staff. When, for example, home-visits are conducted by professional staff and not by laypersons, the effects are greater (Holodynski, Stallmann & Seeger, 2007).

Training First Steps project staff is based on three components: curriculum, practice reflection, and psychoanalytic supervision. The curriculum was designed and adapted according to the relevant (developmental) topics raised during the mother–child groups, for example questions about group dynamics, breastfeeding etc. are
based on psychoanalytic developmental psychology. The curriculum’s conceptualisation closely refers to other existing psychoanalytical oriented parenting programmes (Emde, 2000; Meurs, Jullian & Vliegen, 2006; Parens, Scattergood & Petersen, 1995). Theoretical knowledge is passed on to mothers during the mother–child groups in digestible portions according to each mother’s needs and wishes. Especially Henri Parens’ parenting school guided our vision of how knowledge could be conveyed to mothers. Training furthermore involves regular case-supervision as well as practice reflection with the practical project responsible and supervision with external child and adolescent-psychoanalysts. All parts of qualification sensitise staff for processes of transference and countertransference, allowing for a deeper understanding of the women’s situation and children’s needs. Project staff members learn to develop a psychoanalytical “mind-set” and a holding and containing function (Bion, 1963) in contact with the individual women as well as during the group sessions. Thus they can serve as role models and as a “secure base” for the mothers, supporting them in the vulnerable phase of their early motherhood.

Home-visits

When women have been assigned to the First Steps intervention group, the responsible project staff contacts the pregnant woman and visits her at home shortly after birth. We found home-visits to be of particular importance for two reasons besides the mentioned findings of the effectiveness of a combination of centre and home based interventions. As mentioned above, we have learned that in some cultures women and their newborn babies are not allowed to leave their home for quite some time after birth. If we did not offer home-visits and telephone contacts, these women would, as described, probably not connect with project staff during the vulnerable phase shortly after birth, reducing the chance of participation in the mother–child group. If mothers cannot take part in the groups, for example, due to illness, we offer to extend home-visits and telephone contacts until they are able to join the groups. Secondly, individual home-visits allow for a very personal contact between project staff and the young mother. Project staff learns about the current social and living situation as well as the mother’s and infant’s health at this vulnerable stage. Staff seeks to understand the personal experience of birth and possible complications, but it
often takes time to build up trust before mothers are able to share such intimate experiences. In case of signs of postpartum depression or other psychological problems, staff have the possibility to refer to a psychoanalytical consultation.

Although project staff is often confronted with unfamiliar cultural gestures and first encounters are dominated by the unknown or foreignness, home-visits and telephone contacts are often the building stone of the relationship between the project staff and the (extended) family—especially the fathers—whose agreement and cooperation is often inevitable for the mother’s successful participation in the project.

Illustration—excerpt from a project staff’s documentation of a home-visit and practice reflection

One of our project staff members writes about a first contact with a participant (during the first year of project development all contacts were documented):

On my way to the African woman I contemplate how to approach her. My entire knowledge of Africa—if I may generalise this—is based on what we have discussed in practice reflection sessions … that is, how to slightly touch the other person’s fingertips when shaking hands and to hold this position very long but refrain from eye contact. I myself had once been greeted that way when visiting an African woman at home and simply found her to be peculiar. So while on my way I imaginatively greet the family. Yet after repeatedly practicing this greeting in my imagination it still seemed extremely unfamiliar to me.

We are able to recognise what kind of coping mechanisms our staff member is applying in order to deal with the unknown. These reflective and anticipative methods are not at the immigrant mothers’ disposal, because they lack the knowledge concerning the cultural context.

I ring the doorbell. The door is opened. There is a long hallway leading to the apartment door. A big dark-skinned woman shortly looks at me and standing in her doorframe, softly says “hello”, … she does not stay at the door in order to welcome me, she disappears right away, without waiting for me or looking at me, she
The unknown has many appearances—it can seem incredible and can be incredibly aggravating. Within expected regularity, our staff members develop the feeling that their offers are being discarded. The quoted protocol relays the feeling of rejection: the disregarded greeting, the attention which seems to be devoted to the television and not to the visitor.

Another situation, which was hard to bear, was when the women would promise to come to the group session and then did not keep this promise. On the reflective side, the many thoughts on behalf of the mother–child relationships and on the actual side the lovingly prepared snacks and drinks seemed to be in vain. The time settings were ignored repeatedly and instead staff members felt that they were expected to adapt to the mothers’ personal needs, hence implying the expectation of endlessly resourceful and available staff members. On the one hand staff members felt exploited. On the other hand they felt they were demanding the impossible from the mothers. This produced feelings of guilt among project staff. This emotional dilemma was regularly projected onto the research aspect. In all actuality, it seems to be an ideal canvas: Not only were items of questionnaires often unclear due to language barriers but they also seemed to make no sense to the mothers. It seems as though uncertainty must be borne to an unendurable extent. Uncertainty is a main theme in these mothers’ lives and scientific questions solidify this. Here we find solidarity between staff members and our clients. The psychoanalytic approach not only enables us to endure uncertainty but furthermore to use it productively. We understand what it feels like to be speechless, without knowledge of the cultural background, without preparation for the new, bereaved of mentalising capabilities, and because one is incapable of grasping one’s opponent, the other is generally perceived as dangerous and devaluationing.

**Moderated mother–child groups**

In weekly group meetings—lasting one and a half hours—project staff invite mothers and their children to meet other mothers who are experiencing migration and early motherhood just like they do. As
already at this point—as of June 2012—102 participants—assigned to either the First Steps intervention or the comparison group—represent twenty-eight different nations. In most of the groups of a maximum of eight women, women have emigrated from five different countries. This automatically led to German being the common language—a necessity rather than a choice—giving women a forum to apply and practice their German skills in a safe space.

Figure 3. Countries of origin of participants (number of participants $N = 102$; number of countries $N = 28$).
As already described, groups are moderated and organised by two project staff members who are being trained in the above-mentioned manner. First Steps seeks to open up a potential space in the sense of Winnicott (1971). The group-setting will allow women to exchange individual experiences of migration and discuss and observe the development of their children with project staff who, with a psychoanalytical mind-set, sensitively ask reflective questions in order to improve mother–child relationships individually. The setting should provide women with the opportunity to make new experiences at the cutting point of public and private space (Leuzinger-Bohleber, 2009). The spirit of the group setting therefore resembles other examples of psychoanalytically oriented parenting schools (Parens, Scattergood & Petersen, 1995; Meurs, Jullian & Vliegen, 2006; Meurs in this volume). Rituals such as providing food (prepared by project staff) and singing songs play a major role for creating a safe space where women feel nourished and taken care of.

Furthermore it should be pointed out that group meetings take place in the same institution that the mother went to for participating in the integration course. Besides the advantage of the women already knowing the venue and thereby finding their way into our project more easily, we hope that the closeness to the integration course setting as well as German as the group language motivates women to return to and to complete integration and language courses when interrupted due to pregnancy.

Excursus: assessing emotional availability—interweaving of intervention and research

Besides instruments assessing, among other things, mothers’ postpartum depression, social stressors and support as well as child attachment security, cognitive, motor, and language development, First Steps uses the Emotional Availability Scales (EAS; Biringen & Easterbrooks, 2008) as a measure of project outcome. EAS, developed from attachment research, incorporates elements of the concept of emotional availability originally developed by Emde (1980; Emde & Easterbrooks, 1985) for the psychotherapeutic setting, and of system theory. It allows for a detailed look at caregiver-child relationships and interaction by rating the dyad on six dimensions, four focusing on the parent’s behaviour (sensitivity, structuring, non-intrusiveness, non-hostility).
and two focusing on the child’s behaviour (child responsiveness, child involvement of the caregiver). Of particular relevance is that these dimensions can be rated independently of the caregivers’ cultural background (Biringen, 2009).

Dimensions are rated after videotaping mother–child interaction during natural feeding and caretaking situations for thirty minutes at different points of the intervention. However, these video recordings are not solely used for research but rather take into account findings of other intervention programmes, where video feedback was found to be a promising tool to improve mother–child interaction and attachment (Ramsauer, 2010). Video recordings are regularly used during group supervision and discussed with the clinical project leader allowing project staff to develop a thorough understanding of the individual mother–child relationship and developmental characteristics in order to develop ideas of how to support this particular dyad in group and individual meetings. It proved to be useful and well applicable to use the clinical findings based on video observations of a single case of a mother–child–dyad for discussing the topic in a generalised manner as a group rather than making one to one interpretations.

**Comparison group—self organised open mother–child groups (Group B)**

As the study design called for a comparison intervention group we picked up the recent trend to employ well-integrated immigrants as so-called “integration guides”, a model of support for immigrants being promoted by the state of Hessen. The concept of training former participants of language and integration courses or other persons from the immigrant community to become integration guides on a voluntary basis and the effectiveness of programmes conducted by lay helpers with an immigrant background is not well explored and being discussed controversially (Friedrich & Siegert, 2009). Within this study, integration guides are only instructed and informed about First Steps very basically, including the aimed duration of three years until children enter kindergarten (preschool) and research instruments, and are free to conduct and organise their groups according to their view and their experiences as immigrants and mothers themselves. They do not receive any support with regard to contents and have no contact with the project organisation and implementation other than with staff collecting data
about mothers and children including the above-mentioned videos for research. The integration guides are working on a voluntary basis, whereby it needs to be mentioned that the kind of employment as well as the connection to the Sigmund-Freud-Institut has a different quality than that of the intervention group.

Challenges

One of the major challenges remains recruiting participants and supporting women individually until they start to join and continue to visit the groups. Experiences during the early stage of project implementation showed that often times not only the mothers are very little structured—for example, not knowing what day of the week it is—but their husbands, too. Therefore project staff began to remind participants of group meetings one day ahead—a method used in other projects, too (Ludwig-Körner & Schöberl, 2010). The more often women visited the group the less reminders (in form of telephone calls or short text messages) they needed. Implementing clear (group) rituals at the beginning and at the end of the group sessions (special songs, dances etc.) also promoted continuous and more punctual attendance.

Still it has to be mentioned that there is a rather high fluctuation among participants of First Steps as well as of the comparison group due to frequent moves, little routine and structuring of the day of women and their families, particularly when husbands are unemployed—factors often associated with the early phase of migration (Sluzki, 2001). Preliminary analysis however indicates that women of First Steps take part in the groups more often than in the open comparison groups. This might possibly be understood as a phenomenon of transference: As the project team experiences the importance of support and psychological containment by its trainer and supervisors, it might be more eager and able to provide containment and bear insecurities and instability than the integration guides of the self-organised groups.

Summary and outlook

First Steps as an early prevention programme for immigrant children—who are currently still disadvantaged in educational institutions—focuses on optimising the earliest parent–child relationship by supporting parenting competencies as well as the integration of mothers
(and fathers) in order to have a positive impact on attachment as well as on socio-emotional and cognitive development of the children. On the basis of empirical findings, it is expected that professionally supported good early relationship experiences improve long-term integration of immigrant families and language development of the children. In case First Steps proves to be effective, a roll-out across Germany is planned.

Preliminary analysis of the background of participants, for example nationality (see above) and reasons for migration reveal a great amount of heterogeneity among the target group. The effects of this heterogeneity on project implementation and outcome need to be further understood. Until now we do not know in detail what factors facilitate (continuous) participation, recruitment being one of the essential but also time-consuming factors of First Steps. For example: do nationality, ethnicity, socioeconomical background or motives and reasons for migration affect successful participation and individual outcome selectively or does First Steps work “globally”? Of course the number of the families will not allow us to “test” some very specific hypotheses in this context. We have to limit ourselves to collecting first observational data and to generating some hypotheses. Furthermore it needs to be understood whether psychoanalytical developmental theory and psychoanalytical mind-set are apt in the given context; how do women and their families used to other traditions of communication and support, being confronted with enormous challenges due to young motherhood and migration—in most of the cases associated with very difficult economic situations and loss of social structures—react to the psychoanalytical, reflective, non-directive approach of support? Is psychoanalytical developmental theory ample, flexible, and rich enough to understand particular traditions and does it differentiate to the good of the mother–child relationship without unconsciously promoting assimilation rather than integration when for example, other cultures do not promote mother-child interaction in the exclusive, individualised way as in Western cultures? This process of learning in the field of our research team is, of course, connected to a process of self-reflection of the immigrant women themselves who often never thought in depth about possible differences between their expectations of childcare and child development in Germany compared to their home country.

Preliminary insights and evaluation of mothers’ social stressors show that particularly their socioeconomic situation and problems of
residency and citizenship of the newborn often occupy their minds. Therefore it seems necessary that project staff need at least some understanding of social work, the “immigration scene” and law of residency in order to support and to some extent also to advise participants authentically where possible in the given frame, a thought that has already led to an implementation of these topics into our curriculum. In this sense recognising and working with participants’ complex reality seems inevitable at this point. The precise interweavement of working with the inner world as well as the outer reality of participants will have to be explored.

Notes

1. Integration courses encompass approx. 645–900 hours over the course of approx. one year depending on the intensity of the course.
2. Self-organised open mother–child groups have become a common form of similar early prevention projects in Germany (Friedrich et al., 2009).

References


Cognitive stimulation and parental sensitivity in toddlers’ homes: how do children and parents interact and how effective are trainings for parents?

Silke Hertel, Andreas Eickhorst, Miriam Kachler, Nadine Zeidler, Katharina Wolf, Marlis Abrie-Kuhn, and Manfred Cierpka

Introduction

Fostering children’s development and preventing unfavourable pathways is of major social and political interest. It is an important aim of research to contribute to the ongoing discussion on support for children aged three or younger. At this very early stage, support is closely connected to parents’ skills. Cognitive stimulation and sensitive interaction at home are of particular importance (Bradley & Caldwell, 1984; Chazan-Cohen, Raikes, Brooks-Gunn, Ayoub, Pan, Kisjer et al., 2009; Collins, Maccoby, Steinberg, Hetherington & Bornstein, 2000; Connor, Son, Hindman & Morrison, 2005; Foster, Lambert, Abbott-Shim, McCarty & Franze, 2005; Grossmann & Grossmann, 2012; Morrison & Cooney, 2002; Son & Morrison, 2010; Storch & Whitehurst, 2001; Votruba-Drzal, 2003). Although there is plenty of research on sensitive interaction and cognitive stimulation, the interplay of these two major aspects of parental behaviour in creating fruitful home learning environments has rarely been investigated.

The project FILU (Feinfühlige Interaktionsgestaltung und Gestaltung von Lernumgebungen)

1, 2 aims at providing support and training for parents in establishing cognitive stimulation and sensitive interaction with
the child, and by these means providing high quality home learning environments (see also similar early prevention projects in the IDeA Center reported by Neubert and colleagues in this volume and Lebiger-Vogel et al. in this volume). Within the scope of the project FILU, the effects of parent trainings were investigated considering first parent’s sensitive reaction towards child’s attachment behaviour, second, the establishment of cognitive stimulation and third, the interplay of sensitive reaction towards child’s attachment behaviour and cognitive stimulation.

In the following, the theoretical background on home learning environments, parental sensitivity and cognitive stimulation as well as the design of the project FILU will be described. The chapter ends with first results and implications for further research.

Theoretical framework

Home learning environment

The home learning environment is the result of the interaction between children and their parents (Votruba-Drzal, 2003). In describing home learning environments, three levels can be distinguished (Papastefanou, 2010): First, conditions of activation at the parental home (environmental level), second, parental attitudes and educational goals (global level) and third, parents’ cognitive activation strategies (behavioural level).

Research shows that early cognitive, language and social-emotional development are influenced by the quality of the home learning environment, maternal supportiveness and early parenting (e.g., Chazan-Cohen et al., 2009; Foster, Lambert, Abbott-Shim, McCarty & Franze, 2005; Son & Morrison, 2010; Sylva, Melhuish, Sammons, Siraj-Blatchford & Taggart, 2012). There is evidence that the socioeconomic status of the family has an impact on the quality of the home learning environment (e.g., Bradley, Caldwell & Rock, 1988; NICHD Early Child Care Research Network, 2005). A large survey study in the UK focussing on preschool education reports moderate effect sizes for the socioeconomic background and occupational status on the quality of the home learning environment (see Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart 2004, 2012). Sylva and colleagues (2004) conclude: “For all children, the quality of the home
learning environment is more important for intellectual and social development than parental occupation, education or income. What parents do is more important than who parents are.” (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2004, p. 1).

The arrangement of home learning environments as well as parental attitudes and behaviour are important for the educational careers of children (e.g., Hoover-Dempsey, Battiato, Walker, Reed, DeJong & Jones 2001; Taylor, Clayton & Rowley, 2004). School performance appears to be linked to the quality of stimulation in the early environment as well as in the current environment (Bradley & Caldwell, 1987; Hertel, Jude & Naumann, 2010; Sylva et al., 2012). Moreover, “… the quality of home environment during early and middle childhood explained a portion of the effects of income on academic skills and behaviour problems” (Votruba-Drzal, 2006, p. 1154). These findings point to the importance of the quality of home learning environments as resilience factor for later academic achievement problems. They further highlight the resources in supporting toddlers’ development within parental homes independently from socio-economic status and underscore the potential of training programmes for parents.

**Parental sensitivity**

Many studies support the impact of attachment security in early childhood on later development (Egeland, 2002; Grossmann, Grossmann & Zimmermann, 1999; Grossmann & Grossmann, 2012; Main, Kaplan & Cassidy, 1985; Sroufe, 2000). The keys to attachment are internal working models of the child being composed out of interaction experiences in early childhood (Hédervári-Heller, 2011).

These are typically formed in the interaction of children and parents. Additionally, children collect attachment experiences in interactions with other caregivers, for example, relatives or nursery school teachers (Grossmann & Grossmann, 2012). From birth on, babies are capable to communicate and to actively shape their relationships (Dornes, 2001, 2007, 2009). How parents interact with their child is critically influenced by parents’ intuitive competencies (Papoušek & Papoušek, 1981). Both, mothers and fathers, possess these intuitive skills. They can form a sensitive and securely attached relationship with their child independently from the other parent. The degree to which parents can access these competencies depends on various factors like psychosocial strain.
EARLY PARENTING AND PREVENTION OF DISORDER

(Abarca, Lengning & Katz-Bernstein, 2010; Eickhorst, Schweyer, Köhler, Jelen-Mauboussin, Kunz, Sidor et al., 2010) or the parents’ own previous experiences in relationships (Stern, 1995).

The project FILU focusses on parental sensitivity, which is one important intuitive competence parents do possess (Ainsworth, Bell & Stayton, 1974). Sensitivity is characterised by a positive and appropriate emotional communication in which the parent shows genuine interest and pleasure. Corresponding behaviours are, for example, comforting and playful physical contact, warm smiles and eye contact, effective handling of conflicts, accepting and affirmative statements regarding the child or quick responses to the child’s distress signals. Throughout the interaction there is an authentic delight and pleasure visible in both, the parent and the child (Biringen, Robinson & Emde, 2000). Therefore, authentic emotional communication is a core feature of sensitive interaction and an important indicator for the measurement of parental sensitivity (Biringen, Robinson & Emde, 1994).

Parental sensitivity influences the relationship between parent and child in general as well as the quality of the child’s attachment (Suess, Grossmann & Sroufe, 1992). Non-sensitive behaviour correlates with insecure attachment (Jacobsen, Hibbs & Ziegenhain, 2000) and can be viewed as a risk factor for the child’s development (e.g., Egle & Cierpka, 2005). In a meta-analysis, the positive link between secure attachment and sensitive maternal behaviour was confirmed (de Wolff & Van IJzendoorn, 1997).

In the first year of a child’s life, sensitivity is considered the capability and willingness of parents to perceive, interpret correctly, and respond quickly and adequately to the infant’s signals and behaviour (Ainsworth, Bell & Stayton, 1974). In their second year of life, children develop an abundance of new motor and cognitive skills (Largo, 2010). As children start to recognise other person’s intentions (Fonagy, Gergely, Jurist & Target, 2004), it is important for parents to also understand their child’s intentions and to respond sensitively (Grossmann & Grossmann, 2012). When approaching the age of two years, children acquire self-control and accomplish the ability to regulate their behaviour (Kochanska, Coy & Murray, 2001). It is an important task for parents to enable children to obtain such self-regulatory skills (Crohnick, Kurowski & McMenamy, 1998). It is also important for parents to provide children with a safe background, in which they learn to interact and regulate their emotions (Levenstein & O’Hara, 1993; MacDonald, 1993).

Cognitive stimulation in the home learning environment

Cognitive stimulation is defined as process-oriented support of individual knowledge acquisition, which aims at specific cognitive operations and the construction of knowledge (Einsiedler & Hardy, 2010, p. 201). Cognitive stimulation is based on a constructivist understanding of learning and accounts for individual learning preconditions and needs of children (Hardy, 2012). To specify how cognitive stimulation can be described at the behavioural level, the concept of scaffolding is useful.

Scaffolding is mainly referred to in formal educational settings and school instruction. Scaffolding aims at supporting and establishing metacognitive strategies, cognitive structuring, reduction of complexity or providing affective-motivational support (Krammer, 2010; Van de Pol, Volmann & Beishuizen, 2010). Four aspects of scaffolding can be distinguished (see Puntambekar & Huebscher, 2005): first, establishing of a shared understanding of the task, second, continuous diagnosis of child’s understanding, third, providing adaptive support based on the diagnoses and fourth, fading out the support, if it is not further needed.

According to Pea (2004), scaffolding can focus on supporting the construction of content knowledge or on the development of (cognitive) strategies to construct knowledge (see also Rogoff, 1990; Lave & Wenger, 1991). Scaffolding includes the strategies modeling and focusing at an emotional, procedural and contentual level (Hardy, 2012). The following scaffolding tools are distinguished in literature: Questioning and hints, instructing, feeding back, explaining, and modeling (see Van de Pol, Volmann & Beishuizen, 2010).

Within the project FILU, the concept of scaffolding is transferred to cognitive stimulation in home learning environments, more specifically in parent–child interactions. The focus is on scaffolding the child’s problem solving in play situations. In this context, the scaffolding tools questioning and hints help the child to put attention to certain aspects of the task, to understand the task and to recognize the purpose of the
task (Van de Pol et al., 2010). Instructing enables the child to develop and carry out different solutions and problem solving strategies. Feeding back supports the child in recognising what it is doing, to adapt solutions and to stay interested and motivated on the task. Explaining leads the child to assess the results, to check again whether the task is completed and to develop an explanation. Modeling provides the child with an example of a solution strategy and guides the child in transferring the strategies to different situations.

Methods

Design

Within the scope of the project FILU, an intervention study based on an experimental, univariate, pre-post design was carried out. Three different treatment conditions were distinguished (see table 1). The basic training group received a training in cognitive stimulation (TG1) whereas the combined training group received a combined training of both, cognitive stimulation and sensitive interaction (TG2). The control group (CG) was trained at a later date (waiting-control group). Parent–child–dyads were randomly assigned to one of the three treatment groups.

Treatment effects will be investigated by accomplishing statistical analyses on parent and child level.

Sample

A total number of fifty-eight parent–child–dyads participated in the study. The children were aged between eighteen and thirty-six months.

Table 1. Design of parent training.

<table>
<thead>
<tr>
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<th>T0</th>
<th>T1</th>
<th>Basic training</th>
<th>Combined training</th>
<th>T2</th>
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<td></td>
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<td>Cognitive stimulation</td>
<td>Cognitive stimulation and parental sensitivity</td>
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Note: T0 = initial diagnostic; T1 = pretest; T2 = posttest; T3 = semi-standardised interview after six months.
at the initial diagnostic. Participants were recruited in urban district cities. In most cases only the primary caregiver participated in the study. The diagnostic and training sessions took place at the day-care centres and at the research institutes.

In order to control anticipated differences between children regarding their socio-emotional and cognitive competencies, established standardised tests were administered in the initial diagnostic (developmental tests: Entwicklungstest sechs Monate bis sechs Jahre (ET 6–6), Petermann, Stein & Macha, 2006; Bayley Scales II, Bayley, 1993). Furthermore, information on migration background and socioeconomic background of the families were collected by questionnaires.

**Instruments**

The following instruments were applied to assess intervention effects and important covariates on parent- and child-level:

1. **Self-ratings and questionnaires**
   - Perceived self-efficacy in cognitive stimulation (Bradley & Caldwell, 1984; Department of Health, 2000).
   - IDeA Social Background Inventory (ISBI; Körner & Betz, 2012).
   - Overall quality of the training.

2. **Knowledge and competence assessment**
   - Multiple choice items on cognitive stimulation and parental sensitivity.
   - Case scenarios and items of standardised „PS-SRQ“ (Situations-Reactions-Questionnaire of measure of parental sensitivity, Hänggi et al., 2010).

3. **Developmental tests**
   - “IMMA 1–6” (Impuls-management from toddler to preschooler, Pauen et al., 2013).
   - Parents questionnaire „ET 6–6“ (Developmental Test, Petermann, Stein & Macha, 2006).
   - Bayley Scales of Infant Development (BSID II) (Bayley, 1993; german editing by Reuner, Rosenkranz, Pietz & Horn, 2007).
4. Video observation

- Investigation of parent–child–interaction and parental scaffolding in three standardised play and learning situations (free play, problem solving task and self-regulation task) on the basis of the “Emotional Availability Scales” (Biringen, Robinson & Emde, 1998) and a self developed rating-system for scaffolding strategies and tools.

5. Interviews

- Semi-standardised interviews (about 30 min) with a variety of the participants will be conducted over the telephone.

**Parent training**

The parent training consisted of four training sessions of 180 minutes each on a weekly basis. Contents of the training varied according to the treatment condition (basic vs. combined training). Table 2 gives an overview of the specific training contents.

**First results and outlook**

With our project FILU we aim at disentangling the interplay of two important fields of research on home learning environments: cognitive stimulation and parental sensitivity.

First, we aim at contributing to the identification of promising interplays of those two in the interaction of parents and children. We have almost finished the data collection. Current analyses of the available data show that parents in the training groups (basic and combined training) rate the overall quality of the training as high or rather high and perceive an increase of knowledge in creating learning environments at home. They report that they were familiar with some strategies addressed in the training whereas other strategies were rather new to them. Most of the parents are planning to apply the strategies in the future. Further analyses will be conducted to investigate the effects of the training on parents’ skills in cognitive stimulation and sensitive interaction.

For the next step, we are planning to develop and evaluate a professional training programme for nursery school teachers. It will be based on the results of our study and include concepts on cognitive stimulation and parental sensitivity. Additionally, the nursery school teachers
Table 2. Contents of basic and combined training for parents.

<table>
<thead>
<tr>
<th>Sessions (a 180 min)</th>
<th>Basic training: Cognitive stimulation</th>
<th>Combined training: Cognitive stimulation and parental sensitivity</th>
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<tbody>
<tr>
<td>Session 1</td>
<td>• Scaffolding strategies: Modeling &amp; focusing</td>
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<td></td>
<td>• Scaffolding tools: Questioning &amp; hints</td>
<td></td>
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<td></td>
<td>• Definition of parental sensitivity</td>
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<td>• Reading signals of the child</td>
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<td>Session 2</td>
<td>• Cognitive development (Piaget)</td>
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<td></td>
<td>• Scaffolding tools: Instructing &amp; feeding back</td>
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<td>• Mirroring and containment</td>
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<td>• Scaffolding-strategies: Modeling &amp; focusing</td>
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<td>• Scaffolding tools: Questioning &amp; hints</td>
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<td>Session 3</td>
<td>• Scaffolding tools: Explaining &amp; modeling</td>
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<td>• Sensitive boundary setting</td>
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<td>• Scaffolding tools: Instructing &amp; feeding back</td>
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<td>Session 4</td>
<td>• Role-plays to support the transfer</td>
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<td>• Cognitive development (Piaget),</td>
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<td>• Scaffolding tools: Explaining &amp; modeling</td>
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will be trained in counselling skills to establish a cooperation with parents on equal terms.

Notes

1. Sensitive interactional behaviour and arrangement of learning environments (translated by the authors).
2. This research was funded by the Hessian initiative for the development of scientific and economic excellence (LOEWE).
3. Developmental test six months to six years (translated by the authors).

References


CHAPTER SIXTEEN

Just wait and don’t upset yourself: when children are exposed to poverty in their daily lives

Sabine Andresen

Attention

Child poverty is something that generates and demands attention. The specific form of attention to children’s experience of poverty addressed in this chapter links up with Bernhard Waldenfels’s phenomenology. This refers to everyday experiences that are always embedded in a spatial context, constantly bound to the body, subject to a temporal dynamic, and dependent on a perceiving but not necessarily autonomous ego: “One who hears and sees everything, sees and hears nothing; and if someone is judged according to the experiences he has had, then somebody to whom nothing happens is a nobody. To be able to talk about experiences, it evidently does not suffice for clouds to move across the sky, for traffic noise to spread, for the sun to radiate its warmth, for an instrument to heat up, or for the ground to shake. What is lacking here is my self or somebody else who notices all this and takes note of it” (Waldenfels, 2004, p. 13 [translated for this edition]). This “takes note of it” also leads to the transfer of experiences into words, to saying something about them. However, Waldenfels’s “phenomenology of attention” also points to the limitations on putting experience with all its ambiguity into words, because that which shows itself to us is never
exactly the same as that which can be said about it. It is important to not lose sight of this limitation when asking about the exposure to and perception of poverty and all the experiences that accompany it. Knowing about the limitations to putting that which we are exposed to, experience, or observe into words does not free research from nonetheless having to try to do this as well as it can in a methodologically controlled and theoretically justified manner.

It is precisely a phenomenological outlook, which can take the form of ethnographic research, which is productive for the analysis of experiences. It delivers ways of finding answers to the following questions associated with child poverty and research on it: How do deficits express themselves in the world of experience? Which practices and feelings accompany these experiences? In which concrete contexts are they located? In the following, I shall refer particularly to our study Prekäre Kindheit. Wie Kinder Armut erleben (Precarious childhood: How children experience poverty) funded by the German Research Foundation (DFG), but also our study Urbane Lernräume (Urban learning spaces). Both research projects focus on the experiences of primary school aged children whose everyday life is shaped strongly by poverty, its contexts, its interpretations, and its orientations.

This chapter has three sections: it starts off by examining the theoretical foundations for research on childhood poverty. It then goes on to look at the role of adaptive preferences, a term, which is important for the Capability Approach (CA) in a daily life of improvisation and routine, before finally looking at imitation as a social practice and the way that children imagine a good life.

Research on childhood poverty and its theoretical foundations

Any research on childhood poverty needs to be based on a theory of childhood (Andresen & Fegter, 2011; Andresen, Hurrelmann & Schneekloth, 2012). When analysing poverty during the course of growing up, we have to reflect on the status of the child in the relationship between the generations, how this phase of life is subject to being shaped by society, and even what status is assigned to the child in contemporary theories (World Vision 2007; 2010). In my opinion, this includes understanding childhood as an element in the generational order of societies, and this requires a two-sided outlook on the child, because, on the one side, children are equipped with an enormous potentiality
that enables them to be autonomous; whereas, on the other side, they are vulnerable and dependent on care. A concept of childhood oriented towards children’s rights, for example, tries to do justice to both: the granting of autonomy and the right to protection. Although this is not the place to consider the ambivalences that this always involves, I do believe it is something one has to take a stance on.

Behind this paper stands the question, whether the Capability CA has possibilities and limitations for research on child poverty, then we have to consider questions based on a theory of childhood (see for CA, Sen, 1985; Nussbaum, 1999; 2000). A phenomenological approach, such as that introduced with Waldenfels above, may offer a potential way to substantiate the “grand” and abstract concepts such as autonomy and care, such as agency or bonding, that underlie both a theory of childhood and the CA. It could do this through an attentive observation and description of everyday experiences, the accompanying routines, and the always also possible creatively new. In my opinion, there is a need for a methodologically and theoretically based awareness of the relationship between the “Bruchstellen der Erfahrung”, which I shall translate as fragments of experience and the various “Antwortregistern”, which I shall translate as response registers.

Scientific attention to the experiences of children whose daily lives are shaped strongly by poverty takes the form of observing and describing what happens to them, how they handle it, and what responses are made to it. It can also observe and describe these responses to it in the form of socio-political or labour market policy measures, social work interventions, or scientifically based systems of indicators.

I wish to direct attention to the description of this relation, Waldenfels used the term “Spannungsbogen”, namely, the experiences of children in the everyday contexts and society’s response registers.

The two following sections reconstruct the experiences of children and how they become fixed in writing through the research process. Such a reconstruction requires a systematic reduction, so I shall report exclusively on observation protocols. Although our research projects combine different qualitative methods as well as quantitative and qualitative methods, this is not the place for a methodological discussion over best solutions. Therefore, I shall focus on one methodologically justified reduction of complexity. Ethnographic observation protocols mould our methodologically controlled attention to social practices and to artefacts into a verbal description. The analysis will then (ideally)
result in a dense description that approaches actual experience. I shall report only this here and not on the methodological approach or the results of the projects.

*Adaptive preferences have their place: a daily life of improvisation and routine*

This section addresses a specific context of growing up in which preferences are also formed. Alongside the world that children experience in their families and at school, there are also significant non-school, youth work contexts. However, there are still hardly any studies on the interplay of such contexts. I am examining the Löwenhaus (ASB) in the Harburg district of the city of Hamburg, in which we carried out our study on “precarious childhood”. Officially, the Löwenhaus targets six- to twelve-year-old children residing in the district. We got to know roughly thirty children of whom about twenty attended the centre every day. The following description of the context is based on a close interpretation of numerous protocols, memos, and research diaries recorded during three lengthy observation phases. This analysis can be used to describe the “Spannungsbogen”, namely, the experiences and fragments of experiences of children living in poverty in the Phönix quarter of the Harburg district and the concrete response register of this institution that also, in turn, becomes experiences.

The first protocols focus on the educationally and socio-politically motivated plan to offer children in poverty a secure, caring, and trustworthy place to be. Whether this security, care, and trustworthiness are achieved has to be confirmed in the fragments of experience and the extended response registers. The protocols show exactly how difficult this is. At the time of the study, the centre was funded entirely by donations; there were hardly any full-time staff, only some of the adults working there had professional training, and they were working as unpaid volunteers. Nonetheless, the everyday activities functioned very well, so we concentrated on how this everyday activity was implemented.

The context of the children is given by fixed routines: the first directed towards meeting basic needs, namely, a midday meal, an evening meal, and a roof over the children’s heads; and the second towards elementary assistance with learning and regular adult homework supervision. The Löwenhaus has no televisions and no computers; the only
technical equipment outside the kitchen is a radio. The kitchen is very well-equipped, but serves as a staffroom and retreat for the adults; it is a child-free zone. The routines structured by the satisfaction of basic needs and elementary learning requirements are strengthened by the architectural layout. The centre is located in a corner house that used to be a shop. The front room, entered through the shop door, is the largest room in which the children can stay as long as they choose. There are old sofas and armchairs, a few small tables, shelves with lots of parlour games, and table football. Two further smaller rooms at the back of the house are for eating meals, for homework supervision, and for handicrafts or relaxing. Because most of the children attend every day, including weekends, they know more or less exactly what to expect at the Löwenhaus. This knowledge also includes what uncertainties they may have to anticipate, such as whether the designated volunteer will come or not, and whether a proposed activity will be available or not. This not only contributes to but even forces the children to develop their own routines. As a result, they develop a high degree of trustworthiness by themselves.

The main social practice in the Löwenhaus context is board games or card games that are surrounded by numerous smaller practices. Parlour games such as Yahtzee belong to the artefacts, and the observed children spent most of their leisure time huddled closely together playing these games. Otherwise, hardly any artefacts emerge; only occasionally do a few children bring their own toys or roller skates and the like. This social practice of parlour games gains its significance for the experiences of children in poverty through, for example, the constraints of the institution: there is little room for other more expressive types of play due to the frequently observed striving by the children themselves to get as many children as possible to join in and to integrate every adult possible by asking them to play and thereby ensuring their attention. The social practice also gains significance through the observation that the children do not use the pavement in front of the centre or the free space between two streets to play outside. This “outside” is an insecure location.

In the descriptions, this small spatial world consolidates into a physical constriction that highlights an often seemingly provisional atmosphere and a transient passing through space. Correspondingly, there are hardly any expressive bodily practices. The children do not run or wave their arms about; they do not occupy the pavement
with hopping games or the like or other open spaces nearby. Their Streifraum (roaming space) as the early-twentieth-century psychologist Martha Muchow called it, is very restricted. Even in the Löwenhaus, the children are hardly ever loud and physically unruly in their activities.

For reasons of space, I shall focus particularly on the routines of the centre and the routines of the children as fragments of experience and as parts of the response register. However, equally important is the improvisation required for various reasons that can be observed every day. The context of the centre can be described in terms of an interplay between specific routines and improvisation.

The dense description also has to try to look at what is not present, and the constraints on various levels become very clear in our analyses. The quarter possesses only this one single centre offering primary school aged children the possibility of a relatively relaxed leisure time, reliable opening hours, and reliably present adults combined with satisfying basic needs (midday and evening meals) and help with learning (homework). However, certain aspects are nonetheless precarious. The children never know which of the mostly voluntary adults will be waiting for them and whether an announced activity will actually take place. When improvisation is required, the children react quickly, and they react with their routines: wait, and play Ludo. The playful group soon integrates all the children present. They seem to actively persevere: artefacts such as a cardigan pressed under the arm all the time, a little plastic bag on their wrist. Like refugees, they always carry their few possessions with them, holding on, waiting to see what happens. The children know that the centre has opened, and they cannot imagine a life without it. However, they can never be quite sure what awaits them other than the satisfaction of their basic needs.

**Imagining a good life: imitation as a social practice**

Most readers will have already read about Nussbaum’s list for a good life, and we tried to operationalise this list for children within the framework of another study about child poverty in Germany, our Bepanthen Child Poverty Study (Andresen & Fegter, 2011). We also applied it in the qualitative part of the World Vision Childhood Study by asking children to draw a picture of the five things that are indispensable for all children to have a good life. Nussbaum’s approach is becoming
increasingly popular in childhood studies (Biggeri, Ballet & Comim, 2010). In this section, I want to single just one capability out, namely, that of being able to have ideas about a good life for oneself and for others. One access to this in both the theory of childhood and learning theory is given by imitation.

Imitations, just like displays, are social practices that we observe in many protocols, and particularly the former offer access to the ideas about life of the children themselves. Imitations also point to the action options that children observe in the world that is accessible to them.

Largeness, complexity, contradpectoriness, and the action options of the world of familiar adults (which is shared only in part with the children) embedded within these, that is, those of their mothers and/or fathers, their mothers’ partners, grandmothers, uncles, and so forth, codetermine the spectrum of children’s imitations, open up perspectives, unveil normalities, and lead to limits. To give some impression of the protocols, I would like to extend the ideas on imitation as a social practice with a longer excerpt. This comes from a fifteen-minute observation in December 2011 at a Frankfurt am Main after-school care centre in the main railway station district. Several girls are sitting and eating their midday meal. One girl, Edna, asks individual children whether they want to join her afterwards in her secret passage. All say no and make faces. Finally, Edna asks the researcher, who agrees to go with her. However, the other children try to make the researcher understand that she should not go, because children sometimes “go to the lavatory” there. Edna and the researcher leave the dining room and go out into the playground located between the school, the after-school care centre, and the street. They come to a kind of hollow with bushes that runs up against a cellar window.

At one spot between two bushes, Edna pushes the branches aside. She says “That’s the door.” She goes into the empty space. I remain standing outside. She tells me to follow her (she invites me in by pulling the branches aside). A child runs past the bush and glances towards Edna. Edna stands behind the branches and looks back at the boy. She says, “Nothing, nothing, there’s nothing there,” and waves her arms about. The boy runs off again. Edna starts to explain the secret passage to me. On the right, directly next to the door is the coat rack (a pine tree branch). Edna moves on to a place where it is possible to get through to the path because there are only a few
branches there. She says that that is the second entry. Edna uses her finger to point to a place between the doors and says that is where the couch is. Next to the second door, Edna points to the branches and says, ‘You can put things in there.’ While she describes her home to me, I gain the feeling that Edna is not talking explicitly to me; it is more as if she is explaining to herself. On the wall, there is a length of tree root. Edna takes this and talks in the direction of the wall, ‘And that’s for hitting someone with.’ She hits the wall with the tree root. She lets the tree root drop. At the corner of the house, there is another bush. Edna goes some way into the undergrowth. She pulls out a bucket. ‘I shall have to clean that. Then I’ll have a lavatory.’ She empties the bucket. ‘Now all I still need is lavatory paper.’ She leaves her secret passage. After two to three minutes, she returns with a roll of lavatory paper. She enters her secret passage by pushing aside the branches where the first door is. Edna places the roll on a branch by the first door. She asks me ‘Will you make it prettier with me?’ (Protocol Ule, 1.12.2011)

Children learn by being explorative and thereby discovering what is new, but they also learn by imitating what they see around them, transferring it into another context, and thereby creating something new as well. For Edna, the little shrubbery is a home for which she is responsible in the way an adult is, particularly in that she defends this place from misuse (urinating in the bushes) and furnishes it. The second door probably also has a function in this defence as an escape route or a secret entrance. When furnishing her home, she ensures that things are orderly: this is shown by the coat rack, the something you can put things in, a certain standard of furnishing (the couch), and hygiene (bucket and lavatory paper). She addresses the latter with great care—as can be deduced from the content of discussions among the other children: somebody had urinated there.

Alongside order and cleanliness as descriptive categories, a further artefact to which Edna assigns a meaning reveals an imitation of behaviour and ideas about life: the tree root as an artefact of violence. Her almost sober and neutral formulation in the scenario reveals the precariousness of the world she is imitating and relocating. A home requires a cudgel—be it to discipline those living in it, or be it to defend it. What is interesting is how Edna imitates and organises her world domestically. A hollow formed by bushes is transformed into an imitated life that
gains particular meaning through the two doors marking the border between a protected or, however, also isolated and violent (tree root) interior. The border between the interior and the exterior is not only transgressed by unauthorised persons but also soiled by them. Edna tries to channel these transgressions by imposing order. This also reveals her active perseverance, and active self-adaptation to precarious circumstances.

In other protocols as well, children imitate family life and particularly demonstrate how adults treat children. It can be seen that children whose daily lives are strongly shaped by poverty generally imitate a very narrow spectrum of actions and accompanying lifestyles. This permits the cautious conclusion that the action options in the world they share with adults are very few and also follow gender-specific role patterns. Imitations from the world of adults illustrate what children perceive as options, but one can also see how new contextualisations emerge through imitation. As a result, it can be seen that imitations are informative not only in terms of learning theory but also and particularly with regard to the fact that the experience of child poverty relates to the experiences of adults living in poverty and the way in which it relates. This brings me back to my ideas at the beginning of this chapter, namely those on embedding research on child poverty in a theory of childhood.

**Conclusion**

The phenomenological outlook, methodologically controlled attention, and a framework within the theory of childhood provide an approach to a dense description of the experiences of children in poverty. This then leads to analytical conclusions.

I wish to finish with just one conclusion: the description of everyday life as an interplay of routine and improvisation and of imitation as a social practice reveals not only the fact that children wait and play Ludo and the ways in which they do it, but also the fact that they persevere actively and routinely and the ways in which they order their daily lives.

One of the fundamental components of Waldenfels’s phenomenology of attention is its ethical sensitivity. This, in turn, leads into a domain in which research on child poverty must also take a stance against the currently dominant trend towards its intellectualisation if not aestheticisation.
References


PART IV

CLINICAL APPLICATIONS
Once upon a time there was a doctor

Around the end of 1800, a young doctor is on holiday on the Alps. One day he makes an excursion to a refuge hut at a height of 6,000 feet and, being somewhat exhausted, decides to stay for dinner and for the night.

After dinner, there is still some sunlight, he sits deep in contemplation of the charm of the distant prospect; from what we know of him we may imagine him lighting one of his terrible cigars (there was no law against this at the time). He is so lost in this bliss that at first he does not connect it with himself when he hears the question: “Are you a doctor, sir?”

The question comes from a “rather sulky-looking girl of perhaps eighteen” who had served his meal, the story says. She learned the man is a doctor from the Visitors’ Book. “The truth is, sir, my nerves are bad. I went to see a doctor about them and he gave me something for them; but I’m not well yet.”

Upon further questioning the girl answers with very concrete images: “My head gets so heavy, there’s a dreadful buzzing, and I feel so giddy that I almost fall over. Then there’s something crushing my chest so
that I can’t get my breath … my throat’s squeezed together as though I were going to choke … there’s a hammering in my head, enough to burst it.”

The girl, who is named Katharina in the story, goes on in her detailed description. The doctor, who is just studying this kind of problems in that period, asks her to tell him something about the circumstances in which these symptoms first occurred. Rapidly and relatively easily (only two years have passed since) Katherina recalls discovering her father having sex with her cousin; immediately after she also associates having being molested by him herself some time earlier. Following the more recent episode, which she eventually reported to her mother, the parents separated, among terrible rows and threats from her father for “chattering”.

There is enough to allow young Sigmund Freud to define Katharina’s symptoms as understandable reactions to traumatic events. Symptoms which, when isolated from their context, could be classified as “disease”, so that the fate of the girl could become that of an “incurable” “nerve patient”.

We know nothing of the long-term history of the girl. We know something, however, of her immediate reaction to the doctor’s clarifying intervention, establishing links between her symptoms and important, painful, events of her life: “At the end of these two sets of memories she came to a stop. She was like someone transformed. The sulky, unhappy face had grown lively, her eyes were bright, she was lightened and exalted” (Freud, 1893, p. 131).

It is difficult to state whether Katharina was “cured”. What we may say is that, the next time she will experience her symptoms, they will appear less mysterious, less horrifying, maybe she will think that given all she has gone through she is not so badly off. She will feel less “ill”, mentally and/or physically.

All this was made possible since, due to a rare coincidence, Katharina, a short time after the beginning of her problems, met possibly the only person who at the moment was capable of understanding her. It would have been difficult for a girl of her cultural condition (she only spoke a dialect, Freud tells us), living in a refuge hut at 6,000 feet, to consult a psychoanalyst, even if there had been at the time more than one in the world.

On the other hand, Katharina is very prompt in grasping the opportunity fate offers her; Freud, on his part, is also perfectly willing to accept
a dialogue in a rather unusual setting possibly because he realises what unrepeatable opportunity that person has found.

Similarly, in the experience I am going to report, distressed people find a psychologist in front of them without having to look for one, or rather without even needing to acknowledge they need one. Many of them, like Katharina, make good use of this opportunity.

The reasons for a proposal

When the physician feels inadequate

Mrs C., aged thirty-two years; married, childless. This patient had been on my partner’s list since early 1946. She complained then of epigastric and chest pains. My partner sent her for investigation to an eminent physician in April 1946, who reported, “You will be glad to hear that this patient’s chest X-ray is quite normal. She seems very pleased at this and I think most of her symptoms are functional, and hope that the reassurance I have given her may be of some help.”

A short while after, the patient was unhappy about the condition of the chest as the pain returned, and she was sent for chest X-ray to a chest clinic. The physician to the chest clinic reported in May 1946, “You will be pleased to learn that there is no evidence of pulmonary or pleural tuberculosis. I think the epigastric pain originates in the abdominal wall, that is, it is probably muscular or fibrous in origin. Massage might now be tried”. Massage was accordingly tried, but with little success.

She was a frequent visitor to the surgery and was seen by me first in October 1946. I thought then that her symptoms might be due to “chronic appendicitis.” I referred her to a gynaecologist first, who wrote in 1947, “This lady is rather puzzling. She has been under Dr L., who had her completely investigated and found nothing, and I must admit I can find nothing abnormal, and from the gynaecological point of view I have drawn a blank. Whether in view of her constant pain in the right side and her chronic constipation there is the possibility of an appendicitis is difficult to say, but if you wish I will ask one of our surgeons …”

A surgeon was accordingly asked and he said in October 1947, “… I have advised her to come into hospital for the removal of her appendix.” Appendicectomy was carried out in December 1947.
She came to see me then practically every week with a variety of pains, sometimes in the right iliac fossa, sometimes in the back, and drove me frantic with seemingly irrelevant chatter and unwillingness to leave me during a busy surgery.

Several investigations, beginning from Balint’s (1957), have shown that at least fifty per cent of motives for consulting the family physician, whatever their route of expression, derive from problems that are relational/existential rather than somatic in origin (Balint, 1957; Katon, 1985; Magill & Garrett, 1988).

This fifty per cent may reach one hundred percent if we endorse a theoretical framework entailing body-mind unity (De Toffoli, 1991, 2011; Matthys, 2000), which finds support in an extensive series of investigations (see e.g., Solano, 2013) showing that even when distress takes organic forms it derives in most cases also (or mainly) from psychosocial factors (relational, intrapsychic, historical/traumatic, life cycle). Consequently, any distress may be more effectively addressed if it is taken into consideration not only from a biological point of view, but also in the global existential context of the patient.

The physician is rarely in a position to offer psychosocial listening and response, due to several reasons: first, progressive differentiation has taken place between psychology and medicine, that is between an approach to the body and an approach to the mind (to the relational context) of the individual. Second, Western medicine (save for individual exceptions) has departed from a holistic consideration of the human being, which was one of its prominent features before the second half of the nineteenth century, and has become all the more concentrated on biological and genetic factors affecting health and disease. This focused approach has brought enormous, previously unthinkable benefits in the prevention, diagnosis, and treatment of disease in the course of the nineteenth and twentieth centuries, but has entailed disregard of emotional and relational factors in health and disease, and more generally of the specificity of the individual. This latter attitude is far from subsiding, reinforced by such constructs as evidence-based medicine and universal diagnosis and treatment protocols.

The physician therefore is seldom capable of meeting the complex request of patients, and often tries to supply responses on a purely biological level, often through the prescription of clinical investigations and drug treatments the usefulness of which the physician herself finds strongly doubtful.
Possible solutions to this problem are psychological training of family physicians, as originally proposed by Balint, or cooperation with psychologists.

Psychological training of family physicians appears much more difficult today due to a greater differentiation between psychology and medicine and a greater quantity of both medical and psychological notions that should be learned by a single professional.

No one would think of the medical training of a psychologist in order to enable her to care for her patients physically; certainly the problem cannot be solved with a three-day course in communication.

Cooperation with psychologists

Psychology, specifically psychoanalytically inspired psychology, certainly has the instruments needed to consider distress—whether expressed somatically or otherwise—in connection to the subject’s relational context, to the moment in his lifecycle, to his resources for dealing with difficult situations.

Psychoanalytically inspired psychology also has the capacity to view somatic symptoms not only as indicators of distress, but also as:

- a first level of expression of nuclei of dissociated experience which until that point were present in memory only in an implicit, subconscious, unconscious form (Bucci, 1997; Solano, 2010);
- a first attempt at reconnection between verbal and non verbal systems of the organism (ibidem), remindful of what Winnicott called an attempt “to draw the psyche from the mind back to its original intimate association with the soma” (Winnicott, 1949);
- an important communication towards the subject himself and towards the outside world: a communication that strongly needs to be understood before it becomes a disease.

Referral to a psychologist on part of the physician, however, unfortunately appears problematic, due to the progressive differentiation and difficulties in communication between medicine and psychology, entailing different models on the origin of health and disease, different views on the indications of psychological intervention, different models of referral and the social position of psychology, which I will now address.
When the psychologist comes in late

Anna, a forty-five-year-old woman, is admitted to a well-known Rome hospital for very severe hypertension (200/120), which appears refractory to common drug treatments. Her general physical condition is good; she has a clerical job in a company. Since there is a psychology service in the hospital (not so common in Italy), a well-informed physician, who has learnt somewhere that hypertension may have “psychosomatic” components, requests a consultation with a psychologist for the patient.

At the first interview, with no difficulty, the psychologist obtains the following story, which Anna never told anyone before, in twenty-five years.

At twenty, Anna accidentally became pregnant with her boyfriend, of the same age. As often happens in these cases, feeling both unprepared for parenthood, she had an abortion; and she felt very guilty. Often, in these cases, the girl places the guilt (and loss) on the boy and leaves him; not so in this case. On the contrary, Anna decides that the best way to punish herself for her “crime” is to marry this boy she loves no more. Along the years, two children are born.

A few months ago, the children have quite grown, Anna decides she has atoned enough for her “sin”. She meets “the man of her life” and decides to separate from her husband and go to live with him. At this point, she starts feeling strong headaches: the family physician finds a very elevated blood pressure, which does not respond to common drug treatments.

At this point, after Anna has spent twenty-five years of her life disconnected from her needs and emotions, someone calls a psychologist. The latter is faced with a problem which has been building up and becoming every day more complicated (for twenty-five years), with a series of concrete implications (marriage, children, loss of other possibilities) until serious somatic damage, resistant to drugs, ensued. At this point the probable indication, if something is to be done through psychology to help this woman, is a long, frequent, costly treatment, in order to unravel such a complicated tangle of problems, with a life potential which is certainly lower than twenty-five years before. Someone will say that long treatments are advocated by psychologists, or psychoanalysts, in order to earn more money; someone else will say there is evidence that a six-month,
once-a-week treatment will work just the same or better. We well know that this is not true.

Could a psychologist have come in earlier? How often Anna, along these years, possibly after watching a serial on TV, may have had the impulse to consult a psychologist, a psychoanalyst, a psychosomone? How often she may have consulted her family physician, her gynecologist, her paediatrician for a headache, a menstrual cycle problem, an allergy in her child? What if one of these, in one of these occasions, noticing something in her behaviour, had said “your liver (for instance) is in a good shape, but how are you, madam?” (Balint, 1957, p. 32).

A psychologist is called, instead, when distress, after twenty-five years of difficulties and struggles, has produced modifications which in this case are also somatic, severe, resistant to drugs. The patient’s real life relational situation and internal world (defences, internal working models) have also been structuring in these twenty-five years, and can be modified only through further suffering and time and money-consuming interventions, which in my country and in others receive little public support.

Why is it difficult to consult a mental health operator

Physical disease is seen as inevitable for everyone, sooner or later, to the point that, in European countries, every citizen from birth is assigned a physician. It is also seen as something objective, the existence of which is not dependent on consulting a physician or not.

Psychic distress, on the contrary, is seen as pertaining only to a certain subset of people, who are to be treated (more or less benevolently, according to the historical period) in specific services, following a specific request on the part of the patient or of someone else. Moreover, due to the difficulty of objectively defining psychic distress (except in cases causing security problems) an individual is socially defined as mentally distressed essentially when a consultation with a mental health operator has taken place.

Given all the above, in spite of any official or individual statement to the contrary, a heavy stigma is attached to people requesting this kind of consultation. In my country at least, “go see a psychologist! (or a psychiatrist)” is often used as an insult. Even when social judgement is benevolent and tolerant, the individual is generally seen as entering a different category. When someone is suggested to consult a mental health
operator her feeling is probably close to what most European citizens
would feel should they receive the suggestion to consult a Bhuddist
monk. “I have nothing against Bhuddhism” our hypothetical subject
would answer (in the best of hypotheses) “but I am no Buddhist!”

The effect is that a psychologist (let alone a psychiatrist) is often
consulted as a last resort, only after everything else has failed. A recent
study by the Italian Institute of Health (4,700 Ss.), part of a larger
European Study of Epidemiology of Mental Disorders, found that:

• Only sixteen per cent of people reporting some form of mental
distress ever consulted a mental health operator in their life;
• The age of less contact with the mental health services is between
eighteen and twenty-four, when it would be most necessary;
• The average treatment delay is twenty-eight years for anxiety disor-
ders and two years for major depression.

No comment appears needed. I would only add that this study leaves out
all those individuals who are not aware of their distress, specifically those
who are capable of expressing their distress only through the body.

A psychologist for everybody

In order to solve the problems outlined, it appears necessary to organise
situations where:

• A specific psychological request is not needed;
• Access to a psychologist is easy and free of charge;
• The service is clearly organised not for some unfortunate individ-
uals, but for the whole population, exactly as services for physical
disease;
• The aim of the service is to solve problems—as anyone can have—
not to “cure” “pathologies”.

One such situation is a “first-level” psychologist sitting at the same
desk with the family physician. Such a location may offer the following
possibilities:

• direct access to a psychologist for the whole population, avoiding
the filter of medical referral—which, as outlined above, is not always
appropriate—and without the risk (or certainty) of the patient’s being stigmatised as “mentally ill”;

- intervention in an initial phase of distress, before severe and/or chronic somatic diseases or psychic disorders become structured;
- an approach to symptoms of any kind taking into consideration, in addition to the patient’s biological condition, his relational, intrapsychic, and life cycle situation;
- an integration of the competency areas of the physician and the psychologist;
- a reduction of costs for clinical tests, consultation of specialists, drug treatments, admission to hospitals, to the extent that these derive from an effort to find solutions that lie exclusively within a biological model.

The experience of the postgraduate School in Health Psychology of the Sapienza University of Rome

Since 2000, fourteen qualified psychologists attending the postgraduate School in Health Psychology of the University of Rome have guaranteed their presence, one day a week for three years, in the consulting room of a family physician in Rome or in an adjacent town. A poster in the waiting room informs patients of the initiative and of the possibility of consulting only with the physician if they so prefer. Clinical cases and the functioning of the initiative are monitored in group meetings, which are attended by all psychologists involved as part of their training and are open to physicians, and coordinated by a member of the school faculty (the present author).

Intervention on the psychologist’s part is implemented through the following means:

- assessment of requests and of the doctor/patient relationship for every patient coming to consultation;
- discussion with the physician of cases observed;
- further exploration/clarification with the patient in the context of ordinary medical consultation;
- in some limited and selected cases, further exploration through separate interviews with the psychologist (ordinarily one to five in number);
- in some of these latter cases, referral to mental health specialists.
I wish to stress that the main aim of the experience is not to implement “first-level psychiatry” for patients with patent mental distress, but to explore the meaning of every complaint brought by patients, be it in the physical or mental sphere, in the context of the individual’s past and/or present relational and lifecycle situation.

Results

Overview of the initiative

- the joint presence of the family physician and a psychologist appeared feasible and helpful, from all points of view;
- integration of the psychologist in a physician’s office, on the other hand, took several months, which were necessary primarily to reach a sufficient level of attunement and understanding between the two professionals;
- most patients showed and/or directly expressed appreciation for the initiative;
- only in two cases on average in each three-year experience did a patient request consultation with the physician only;
- the number of separate interviews with the psychologist was very small (four cases a year, on average, for each psychologist);
- the number of referrals to mental health specialists was negligible (about two cases per year for each office);
- the latter two points show that, at least in the theoretical/clinical framework we adopted, there is no risk of psychiatrisation of the population, nor of an increased burden for mental health services;
- on the other hand, in the course of three years of experience, each psychologist met about 700 patients, about one-half of the physician’s clients. This is a measure of the large extent to which the general patient population had access to a psychologist through this experience, in spite of the low frequency of the psychologist’s presence (once a week).
- Each psychologist implemented meaningful intervention in about 120 cases. In all the experience up to now, therefore, about 1,640 meaningful interventions were performed. Figure 1 reports the distribution of areas of intervention for the four psychologists involved in the initiative in years 2008–2010 (557 interventions).
Cost reduction

In two cases where data was available, drug prescription on part of the physician, compared to the average in the District (ASL), showed a seventeen per cent decrease (75,000 Euros in one year) for one physician (see Figure 2) and a fourteen per cent decrease (55,000 Euros in one year) for another, following the psychologist’s intervention.

Assessment of changes in drug prescription is complicated by the fact that costs are constantly rising in general, so that we cannot expect a decrease in absolute terms, but only in relationship to the average in the District. As can be seen, in December 2007, before the beginning of cooperation with the psychologist, drug prescription on part of Dr A.C. is remarkably higher than the average in the ASL (District). In the following years this difference decreases, down to an inversion of the relationship. On the column on the right is the figure representing expenditure induced by the physician had the relationship remained constant at 2007 values. The difference between this figure in December 2009 (823.83 euros) and the actual expenditure (686.83) is 137 euros per day for 1,000 clients. Since clients are in fact 1,500, the difference i 205.50 euros per day, which multiplied by 365 gives 75,000 in one year.

Unfortunately it was not possible to obtain data pertaining to expenditure for clinical and X-ray assessments, and for admissions to hospital.
Clinical notations

On several occasions, it was apparent that the simple presence of the psychologist in the office changed patients’ expectations about what they could talk about in a physician’s office. Patients told the story of their ailments in a different way, with the addition of new elements—not only due to the new figure’s different professional role, but also to the presence of a “third” in the doctor/patient relationship. The main strengths of the initiative can be summarised as follows:

- The possibility to intervene very early in respect to the beginning of symptoms;
- The possibility to intervene in developmentally meaningful moments (e.g., adolescence, beginning of university, marriage, parenthood, retirement);

Figure 2. Drug expenditure induced by prescriptions by Dr A.C. in the month of December in years 2007, 2008, 2009, compared to the average expenditure in the District. Data is expressed in euros per day per 1,000 clients. The psychologist began working in the office at the beginning of 2008.
• The possibility to intervene in real time in accidental crises (marriage or work crises, loss or disease of significant others);
• The possibility to view symptoms as signals of an unsatisfactory life situation, and not only as something to eliminate.

The following case is an illustration of several of these points.

*When the psychologist comes in on time*

Dino is a forty-one-year old man, tall, neat, and of juvenile appearance. He comes to the physician’s office complaining of episodes of intense dizziness, appearing a few months ago. Vomiting, nausea, and tachycardia are absent (making an organic lesion highly improbable). He is very disturbed by the ensuing reduction in his work capacity. Though he admits that these symptoms are associated with more stressful periods, this connection is put aside in favour of a forceful request to find an organic cause through a CT scan or some other sophisticated brain-imaging technique. At the same time, he is very frightened at the idea of discovering some dangerous health problem.

Blood parameters, recently measured, are all normal; “perfect!” says the physician. This gives little relief to Dino, who wonders in a more anxious tone “What is wrong with me, then?” Physician and psychologist enquire together more carefully about the circumstances of this dizziness. It takes place only in specific situations: at work, especially during meetings, and at the gym. The doctor performs a physical examination, finding no neurological implication; he excludes the usefulness of a CT scan; he tells the patient that dizziness is commonly associated with highly stressful situations and, in agreement with the psychologist, proposes a separate meeting with the latter to elucidate what stressful situations may be present in his life.

In this encounter, very significant details of Dino’s life quickly emerge. He is an engineer, has a high-level job, but still lives with his mother, who is eighty-four and suffering from diabetes and renal insufficiency. A caretaker is also present in the house. Father died when Dino was twenty-two. He is the youngest of four brothers; the other three are all married and living on their own, including one who was disabled following an accident and who lived with him and their mother until two years ago. When this brother left home the mother’s diabetes worsened greatly.
Dino is single, a few months ago he broke up with his girlfriend of twelve years. His days consist mainly of work, gym, and mother. He rarely goes out. He does not particularly like the gym, but says he attends it three times a week, in addition to following a diet, in order to avoid the possible onset of diabetes that he could inherit from his mother.

The psychologist suggests that physical symptoms are often signals our body gives us, in relation to life situations; that rather than following the urge to suppress symptoms as disturbing, the two of them could work together in trying to figure out what these signals might be about. Dino appears surprised but interested and says he will consider the idea.

Dino will never meet the psychologist again.

A few days later, on a day when the psychologist is absent, Dino shows up at the office, officially only to ask for some prescriptions for his mother. “Marginally”, though, he tells the physician he found meeting the psychologist quite helpful and asks how he can meet with her again. The doctor tells him to phone on the day she is present.

One month later
For some weeks there is no further word from Dino. One day the doctor goes to Dino’s house (while Dino is at work) for a home-visit to the mother, who is also his patient. “What have you two done to my son?” cries the mother. “Since he broke up with his girlfriend he was always at home, but now he is going out every night!”

Three months later
Dino shows up in the doctor’s office, again on a day when the psychologist is not present:

DOCTOR: “how are your things going, Dino?”
DINO: “Doc, I am having sex like a rabbit!”

One year later
Dino shows up in the office, again in the absence of the psychologist.

Dino: “Doc, that dizziness never came up again. How can it be that an illness disappears like that?”
How things could have gone

The doctor, not knowing what else to do, prescribes a CT scan:

a. Nothing is found: the patient becomes progressively more resentful and embittered at the powerlessness of medicine in failing to find what is wrong with him; in his peregrinations, he may start to get the feeling of being considered a malingerer, someone who is looking for excuses to avoid work, or a “psychiatric case”.

b. Something is found, something that will eventually appear a casual, meaningless finding, unrelated to his symptoms, but in the immediate time leads to further, more invasive investigations, leaving the patient with the impression of “having something wrong in his brain”.

In both cases, after a period of time, new symptoms may develop. Very unlikely, at this point, will the patient accept referral to a psychologist.

How things went

The physician, supported by the presence of the psychologist, was very firm in avoiding the pathways and developments just described.

The psychologist elaborated Dino’s symptom in her mind as a reaction to a difficult life situation, in particular to breaking up with his girlfriend. She did not communicate this in detail to Dino, in order to avoid immediate resistance; she only gave the message that physical symptoms were a signal his body was sending him, that deserved to be taken into consideration. Dino understood, at some level, and made substantial changes in his life.

We did not solve any of Dino’s deep intrapsychic problems, nor addressed the roots of his relational problems with his mother, but giving sense to his dizziness:

- avoided his entering a pathway of physical examinations that would have brought nothing helpful to him, and would have caused a useless drain on the health services;
- opened the possibility of a totally different way of thinking about himself, his health, and his symptoms;
• showed him the reality of a relationship with a psychologist—without requiring of him any prerequisite confidence or commitment—so demolishing who knows what forms of prejudice;
• so facilitating the possibility—in a more or less near future—of a more prolonged and deeper contact with this kind of helping figure.

**Implications for psychoanalytic theory and practice**

**The value of symptoms**

This experience may be taken as a contribution to the debate on the developmental versus regressive/defensive value of physical symptoms, in that it gives an example of conditions in which a physical symptom, as advocated by Winnicott, Bucci and many others, may become a useful and meaningful signal for the individual: when an adequate container is present in the early phases of its appearance and of the corresponding life crisis.

**Applications of psychoanalysis**

This notation brings to the following point: psychoanalytic research has very often taken the route of extending its possibilities of application in the direction of the more severely disturbed patients (the “widening scope”). Though this effort should of course be recognised and maintained, the present work—as many others contained in this volume—shows that comparable effort deserves to be employed in the somehow opposite direction, that is in finding ways to make psychoanalytic intervention available to individuals who are not yet so disturbed; situations where significant changes in a person’s life course may be obtained with comparably very limited work, that may considered halfway between intervention and prevention. This new effort may also respond to frequent accusations to psychoanalysis of being too long and expensive, while other treatments are shorter: in my view, psychoanalytic treatments are long and intensive because they are generally applied to very severe cases, where nothing less would work (as discussed above in Anna’s case). If psychoanalysts find a way to apply their skills to less deteriorated situations, they may appear as good or better in brief interventions as clinicians coming from orientations who exhibit brevity as as distinctive feature.
The origin of pathology

In this experience we had the privilege, which is generally denied to our profession, of witnessing the initial emergence of all kinds of pathology, somatic, or psychic. We also had the privilege of meeting directly with the relational environment of our patients, not only with their reports, often remote from facts. We listened with our ears to a mother talking with extreme nonchalance of her sleeping in the same bed with her fourteen-year-old son; to a father saying in front of his fifteen-year-old daughter how she was so much nicer with her milk-teeth; to parents who in full agreement stated they were very proud of their twenty-year-old son because he never went out and sat all day in front of his computer; to a wife reproaching her seventy-year-old husband, in the acuteness of his retirement crisis, because he went out too often and soiled the floor with his shoes when he came back.

When symptoms were seen at their onset the link with severe existential problems was readily and easily apparent. Systematic inattention of medicine towards these aspects, joined with equally systematic unwillingness of distressed subjects to consult a mental health operator, makes it highly frequent that the psychosocial condition of patients is examined only many years from the initial circumstances which were responsible for pathology: these will be very difficult to reconstruct, narratives will be unreliable etc. At this point someone will talk of genetics, constitution, family predisposition etc.

Insufficiency of psychiatric diagnosis

Similarly, being present at the onset of symptoms allowed us to see clearly how pathology was not in the symptom, but in the preexisting situation. Rather, in many cases the emergence of a symptom represented an initial awareness of an unsatisfactory situation. A classification essentially based on the presence/absence of symptoms, without any consideration of a person’s level of self-realisation and quality of relationships appears at least partial.

Notes

1. From Balint, 1957, pp. 11–12. The case is reported in first person by a family physician.
2. The case was reported some years ago in a seminar by Ausilia Sparano, specialist in Health Psychology.
3. It is almost amazing how people, who are generally so reluctant to accept the responsibility to request a consultation with a psychologist, are perfectly willing to tell their problems extensively and truthfully to a psychologist when they meet one casually or when the encounter is requested by someone else, as in this case.

4. The experience is reported extensively in a volume in Italian (Solano, 2011) and in several publications (in English: Solano, Pirrotta, Ingravalle & Fayella, 2009; Solano, Fayella & Di Trani, 2011).

5. Psychologists were (in time order): Monica Tomassoni, Salvatore Mundanu, Antonia Palmisano, Paolo Fayella, Simona Balistreri, Lucia Chiancone, Veronica Ingravalle, Alessandra Marchina, Barbara Sofia Coci, Daniela Onofrio, Pamela Strafella, Antonietta Dattola and Sonia Russo. Physicians were: Giovanni Iacarella, Quintilia Rosati (two periods), Sandro Scattoni (two periods), Adriano Cappelloni, Enzo Pirrotta, Andreina Boschi, Maria Luisa Pandolfi, Donatella D’Angelo, Adriano Cuffari, Teresa Giannasio and Federica Menichelli.

6. The case was reported by physician Dr Enzo Pirrotta and by psychologist Dr Veronica Ingravalle.

7. Very similar situations, including possible developments, are accurately described in Balint, 1957, pp. 11–44.

8. It could be argued that the shorter duration of analysis at its beginnings could be due to the fact that patients came for treatment at the onset of their symptoms, less structured in their pathology; this in turn could be due to their having the possibility of consulting a doctor (i.e., Herr Dr Freud) for a physical symptom—a behaviour which was perfectly acceptable socially at the time, as today—and being proposed psychological treatment in the same office. Which is exactly what we tried to accomplish in this experience.

References


From nameless dread to bearable fear: the psychoanalytic treatment of a twenty-two-month-old child

Agneta Sandell

This is about a little girl and how I understood her difficulties. The little girl was twenty-two months old when she came to see me and started treatment in what we call baby analysis (Norman, 2001). In other words, she was not actually an infant but a very young child. She was a child who had just started to talk in one- and two-word sentences. The girl was in treatment with me together with her mother and the analysis went on till she was a little more than two and a half years old, thirty-two months.

The title of my chapter is “From nameless dread to bearable fear”. I will later explain what is meant by nameless dread and how I worked together with the little girl and her mother according to a model developed by a Swedish colleague, Johan Norman. It is psychoanalytic work with infants and little children up to about two and a half years old (Norman, 2001).

First I will tell you about the little girl whom I will call Hilda in this chapter.

Hilda

Hilda was twenty-two months old when I met her for the first time. Hilda’s mother had called me on the telephone and briefly told me
about their concerns. So I knew a little about their problems when we first met, Hilda, the mother, and I.

Hilda has a brother who is eleven months her senior. The mother described him as being more robust—more resilient and patient. There had never been any particular problems with him, she said. Mother told me that Hilda had never seemed to be calm and secure, never peaceful, not even in the presence of her mother. She never seemed to surrender herself to a relaxed calmness, and much less to secure, trustful sleep. During Hilda’s first six months the mum always had to carry her around but still she was never calm. But when she was six to seven months it was possible to put her down without her screaming but she just lay there, staring into nothingness as it seemed. Whenever the parents checked on her, day and night this was how it appeared. Her brother was also only a baby needing as much care as Hilda and the parents were exhausted.

It did not help that Hilda usually slept with her parents. She lay still just staring anyway. The unhappy parents found it so lonely, so incomprehensible and uncanny. Hilda also had a tendency to withdraw into herself, shut everything out, in a disturbing way. She was difficult to reach and to be in contact with. She was often caught up in monotonous and aimless picking and sorting of things. At home she for example sorted the cutlery or the food on her plate instead of eating. In kindergarten (preschool) she sorted Lego pieces or something similar. Instead of trying to build she put the pieces in piles. She was then very difficult to contact and just went on sorting endlessly. This can be quite normal for such a young child but Hilda did it in a way that also made the personnel at the day-care worried.

There had been a traumatic start in Hilda’s life. The mother had almost died when Hilda was born, and it took some weeks before she recovered. The poor father had been shocked and utterly distressed. He had felt completely powerless and terrified as he found himself with the newborn baby Hilda and another baby at home, the brother.

Some words about the psychoanalytic technique and the setting

I worked with Hilda and her mother in the room in a way that Johan Norman developed and has described (Norman, 2001). Björn Salomonsson, another Swedish colleague, has described and also
made extensive research on this kind of work (Salomonsson, 2007; Salomonsson & Sandell, 2011a, 2011b, 2011c).

I saw Hilda and her mother two to four times a week but it varied. Usually I saw them two to three times a week and during the last two months of the treatment twice a week. I spoke directly to Hilda by describing what I saw and the thoughts I had, what it aroused in me. That is how Johan Norman described it—as verbal comments directly to the baby on what you see, hear, and experience in the present situation in the analytic room. When I talked with the mother I explained why to Hilda. The sessions were tape recorded for reasons of supervision in a peer group.

As a psychoanalyst you try to find words for the impressions and emotional experiences you have. Guided by them you describe what you perceive is going on during the session. In psychoanalytic work it is, of course, always necessary to try to be in touch with what is going on in your own inner world, in your mind. But that becomes even more important with a very young child. It is the most important source for understanding that you have available. It is this information, the countertransference in a broad sense, that must be the guidance when working with very young children. It means that there is something strongly subjective with pronounced intuitive elements in your understanding. Your attitudes towards it must be that it is something you try, test, something tentative. There are thoughts you have, feelings, images—thoughts that you want to and need to check and reconcile with your patient, even when it is a very small child.

Johan Norman (2001) underlines the importance of the analyst’s subjectivity—the analyst’s beliefs—and that the understanding is tentative and experimental. He refers to the British psychoanalyst Wilfred Bion (1987) and his concept of imaginative conjecture. Of course, you also have all your experience and theoretical knowledge to help but at the moment in the session that is in the background.

I would like to add the importance of relying on and trusting the countertransference. It means that the analyst must be able to trustfully stand her countertransference and also stand the contradictions and the uncertainty of the impressions you might have.

On the one side there is a risk of too great a subjective irrationality but on the other side is a risk of too great rationality and technicality where dreaming and playing are not given space. There is nothing
mystic in it but neither no exact technique you can learn or teach (Sandell, 1999).

Hilda could speak a little at the time we started analysis. She understood spoken language quite well though she did not use many words in an active way. The work with Hilda differs from the work with an infant who cannot talk and does not have the mobility of a somewhat older child. But even much younger babies evidently grasp the meaning, the intention, in what you say though they still have no language in a verbal linguistic sense. Basically the psychoanalytic approach with a toddler is the same kind as with infants.

The play things I had for Hilda were a few balls, some wooden trains, some cars, some large, soft animals—a big kangaroo with a baby in its pouch, a big soft lion and two small baby ragdolls. There was also a set of small plastic animals including some that were a little larger, a female lion and two lion cubs.

The first session with Hilda and her mother

Hilda turned out to be a wide-eyed serious little girl with an eager and anxious expression. She was very tiny and very pale. She had a large pacifier in her mouth and dragged a giant stuffed animal behind her, a sort of bunny rabbit, a bit like a big, shapeless bag.

There was something extremely restless about her. I was quite taken. She stumbled through the front door into the hall and repeated in a shrill voice to her mother “not ´gerous, not ´gerous” (not dangerous).

Hilda and her mother were two people in great distress. That was my impression. In my room I turned to Hilda and told her why they had come to see me. Hilda sat on her mother’s lap and held her big bunny rabbit tightly. She looked at me serious and searchingly.

Already during this first session the mother told her story. I had asked her to tell me and I had turned to Hilda and explained. I said “and then I want to hear your story. A child tells in a different way, expresses in other ways, by other means.” I pointed at the toys. I continued “It is important that I learn from you how things are with you. We have lots of time. We can take it at your own pace so that your story comes out naturally”.

I said I wanted to understand so that I could help them better.

The mother told me that she and the father were very worried about Hilda. It was so difficult for them to understand how Hilda felt. It was
so difficult to reach her. They really wanted to help her but they did not understand how they could make her feel calm and secure.

The mother told me about the pregnancy with Hilda and the childbirth, that she had almost died and that she had been in a bad shape for a long time after.

I turned to Hilda and talked to her about what the mother said. Hilda listened intensely and attentively with an unhappy expression. Soon she slid down from her mother’s lap while the mother sat talking. Hilda started to show her predicament, as I understood it.

With great effort she began gathering all animals, big and small. “All mals”, she said. With a small, shrill voice she repeated anxiously, “Liddle (her word for herself) all (ani)mals”… “Liddle evely”… “and watch (ani)mals”. She seemed very tense and unhappy. There were always some animals that couldn’t be kept but fell to the floor.

I commented: “they seem to be so badly held, all of them, so badly held. They seem so restless and uncertain. They really need help”.

This was repeated again and again with some variation over many sessions. She lugged and carried the animals, dropped and picked them up again. After a while she had carried all the animals over to me and put them on my lap.

A common scene under several sessions during the first weeks was this: At first Hilda placed the large soft kangaroo mother on my lap and I held it. Then kangaroo mother in her turn was to hold all the small animals. Then Hilda wanted me to help her to move everything over to her mother. All the time she anxiously made sure that everyone was included and she became upset if we dropped any animals. Meanwhile I spoke to her about her wanting me to help Mummy hold everyone, hold them all.

Hilda’s mother easily grasped and got comfortable in this kind of treatment situation. It became clear that it was easy for her to identify herself with this way of understanding and relating to things.

*Nameless fear*

When I later formulated this more clearly to myself—about Hilda and her situation—I thought in terms of nameless fear, nameless dread, (Bion, 1962) and unthinkable anxiety (Winnicott, 1962).

Basically nameless dread has to do with catastrophic failures in the containing function; when the containment totally fails for various
reasons; for example when the mother cannot tune in with her baby and is not mentally open to her baby. The containing object is a caretaker of inner states, states of mind. Unthinkable anxiety is something similar. The unthinkable anxiety is an anxiety of going to pieces and falling into nothingness. Usually the mother’s care protects against it.

The mother (usually the mother) early in the child’s life helps the child to handle the impressions, fantasies and experiences by making them digestible and bringing order and meaning to them. An important part of this psychological “take-care-of-function” is what Bion (1962) calls reverie, an inner, more intuitive caretaking and dream thinking.

Evidently Hilda had great difficulty in establishing a reliable relationship to such a good containing object, to her mother, to a containing mother figure. When such a relationship is not established everything easily revolves around dependency and the dreadful fear that the object one needs for survival will disappear. If the mother is not accessible to her child, if she is not able to receive and take in the child’s impressions and experiences and help to take care of them, then the child will be left with the feeling that they were not possible to understand and find meaning in. But not only that, what the child experienced was not tolerable at all. It was unthinkable and thrown back at the child as a destructive attack, as something terrible. The child is left in a state of nameless dread/fear. (Bion, 1962).

Unthinkable anxiety and nameless fear can be described as an expression of a formless fear, a fear that has to do with the horror of being dissolved and lost in in an empty space. R. Britton (1998) points out that this fear is not just about a fear of dying as we would describe it in adult language. It is a more undeveloped, basic anxiety; a fear of not existing, a fear that something will obliterate, annihilate the past, present, and future.

Later in the development this fear of annihilation takes on some different forms. Then it is more in the shape of an anxiety of losing your identity, not knowing who you are. It is an anxiety typical for adolescents but it has a tendency to come back during all weak periods of life, in crises.

In our clinical work we sometimes encounter people who are tempted to commit suicide in order to escape this anxiety of destruction, annihilation.
As I mentioned earlier, among the toys there was a lion mother and two lion cubs. After some time—ten sessions maybe—a procedure developed where Hilda played with those lions. She moved them around and fiddled with them in some sort of play. One or the other of the cubs always got lost. It fell behind again and again and became alone somewhere else. At first it was hard for Hilda’s mother to bear this. Instead she picked up the dropped cub and put it back to the lion mother and the other cub. Hilda pretended not to notice this but soon made sure that the cub was lost again. I commented on this and talked about how it feels to be lost all the time and that there was one kid too many. That was annoying and one could pretend that that kid did not exist at all.

After another few sessions the scene changed. Hilda stopped losing one cub. Both cubs were now with the lion mother but there was now a big problem. Hilda wanted both cubs to sit safely on their mother’s back but there was not room enough for both. One always fell off. Hilda was very frustrated that both of them could not be on lion mother’s back at the same time. Finally, she angrily shoved them away and left the three of them lying spread apart on the floor. She pretended not to see them lying there though she had a hard time not tripping over them when she repeatedly chose to pass them as she walked across the floor.

About four to five weeks later Hilda became ill and could not come. She was anxious to get to talk to me herself on the phone. She asked me eagerly “Aneta (Agneta) watch, guard animals, all animals … watch, sleep, keep … guard, sleep, stay, all animals.” I assured her that I would carefully look after all the animals while she was gone.

Hilda’s mother told me that Hilda now had started to collect all the stuffed animals at home—also her brother’s if possible—and when she slept she wanted them tightly around her. She had actually slept much better since the analysis had started. Now she almost always slept well much to the relief of her parents. It was like she and her parents now felt as though they could be calm; now all the restlessness was taken care of in the analysis with me. Now it belonged to me and my room.

Weeks passed and Hilda became more articulate in what she was doing and expressing with me. Even more accurate is to say that the diffuse fear and anxiety increasingly began to have a form. From being a shapeless, formless anxiety that was not possible to imagine or to grasp—unthinkable—it was now as if more specific sources of
anxiety, more specific fears, began to form. More concrete and thinkable forms took shape.

In general, if the containing and holding works well—is good-enough—the child will live in a kind of safe and magical illusion of being protected. This requires a trusting relationship with good objects.

The child is helped by external and internal objects to experience and accept its small size, its helplessness. The immature individual cannot differentiate between threats coming from the outside or the inside. This is by the way difficult also for mature adults in stressful situations.

An important aspect of trustful containing is to recognise and tolerate the child’s destructive feelings and impulses. The child’s aggressive, sadistic, and jealous parts need to be recognised and understood and made less harmful by the containing object. For example, by the mother being able to think them and not being damaged by them.

Another aspect is that the little child cannot make a distinction between a mother who is damaged by disease or other external things and a mother who is injured by the child’s destructive impulses. The child easily experiences an inadequate mother as a mother who is harmed by the child. In the child’s fantasy she then becomes a mother who cannot protect the child or not even wishes it well but a mother who is damaged and also wants revenge. These are thoughts we well recognise from Kleinian and Post-Kleinian thinking.

Of course, this lack of what we call basic trust makes the individual vulnerable and easily exposed to experiences that become indigestible. Hilda obviously lacked the feeling—the illusion—of fundamental and omnipresent protection. She lacked basic trust. It was as if Hilda was under constant threat, from the outside and from within herself.

I saw Hilda as a more or less terrified child. She seemed to be relatively secure when she was close to her mother but seemed to be very busy holding on to the mother, clinging to her.

Another way she had of protecting herself was to withdraw from all contact. She often shut herself out and made herself unreachable. When this happened in the sessions Hilda seemed to be totally unaware of the presence of her mother and I. She gave the impression of being totally alone in the room in an uncanny way. Then she would get stuck in sorting things in a listless way, sorting the animals or other toys.

When I realised the evident connection between her defending herself by cutting all contact on the one hand and her desperate clinging to the mother on the other I commented on how lonely this made her,
so eerily lonely and so afraid. It became a vicious circle of withdrawing and clinging: fear of going under by annihilation in absence of an object, then clinging more intensely to the object and then again defending by withdrawing, shutting out more.

A session after some months of work

Sometimes I had used the term “scary” when I talked about how worrying it might feel. For example I said “It’s so scary” and “It can be so scary, so horrible, so that you just lie completely still, wide awake and keep watch almost all night.”

One session after some months of analysis Hilda all of a sudden became very afraid of a little bear, made of plastic. The bear had his paws raised as if ready for an attack. She had never cared for the bear before but it had always been among the animals. Now she suddenly looked at it in horror as if she had just discovered something about it. She held it away from her and stared horrified at it. Then she threw it down with a scream and jumped up on her mother’s lap. “Go home, go home, scary, scary!”

After a while I picked up the bear and talked to it and to Hilda. It took a while before she was calm enough to listen. She sucked her pacifier intensely and anxiously indicated that the bear must be put away, high up on a bookshelf. “Away, away!” she screamed. “There, there, away, not look, not look”. And “Go home, go home!”

I put it away, high up. Now she looked at me with horror, as if I had turned into a witch. It was as if I had become identified with a dangerous bear-part, I think. I said something like: “Now I, Agneta, became as bad as the bear, when I held it and talked to it, a bear-like Agneta”.

“Go home!” she cried. Her mum commented that the bear was red around the mouth (the tongue). “Maybe it looks like blood,” mother said. That made Hilda turn around to look at her mum with horror in her eyes and now she did not know where she would turn. Both the mother and I now seemed to be very dangerous. As if we were contaminated and destroyed as good and reliable just by talking about and touching the bear, and about blood too.

Hilda cried heartbreakingly, rigid with horror. I wondered how we would be able to endure this and be able to help her.

I tried to comment and said that it felt so very scary and difficult at the moment. “It is not easy to stand, it feels so scary. How can one stand
it, it’s so difficult.” She seemed to listen a little. After a while I said that I knew the bear. “You know, it’s good to know it … It’s scary when you don’t know, don’t know when someone gets dangerous or angry … when suddenly everything becomes very angry and scary.”

After a while I said that she, Hilda, was probably very angry at times—and mum and dad and her brother too. I added after a while that I thought that she got very scared when was she angry herself. That was maybe the most scary. Hilda had fallen silent and listened sceptically, sucking her pacifier. Eventually she slid down from the mother’s lap and came up to me. She instructed me to move the bear to a cupboard and carefully shut the door. She was now reasonably calm.

Hilda slept badly the night after this session. She was very restless, her mother said. The next session she was just as usual again and pleased to come. The bear was still in the cupboard. Hilda played with all the other animals as if nothing had happened. She did not mention the bear and did not give the cupboard a look or a glance. It was as if nothing special had happened the day before.

I think Hilda used the bear to stage, to externalise a very intimidating and evil object relationship. She did it in front of her mother and with me reassuringly near.

After another few sessions I started to talk about the bear. He had not been mentioned at all since he was put away into the cupboard. Hilda cried out loud again, “scary”, just by my mentioning the bear. But this time she let herself be calmed down by the mother.

The night after this session Hilda cried out for mum and dad and said that Scary was there. She had pointed at the ceiling in the children’s room bedroom.

Hilda made sure that all the stuffed animals, all the teddy bears and soft bunnies, were brought into the mum’s and dad’s bed that night together with her. Mother told that Hilda had said, with emphasis, that the animals did not like Scary. Scary had simply become the name of the bear.

I understood it as Hilda had become more cohesive and integrated, now being able to project aggressive, destructive, and envious impulses and thus being able to keep apart good and bad objects. To put it simply: It meant that she could finally protect the good objects from the bad, protect them from destruction by being confused. The diffuse dangers, the scariness, had got a figure. It had got a form and thus something to relate to.
The capacity to split and to project is vital for mental life. Especially early in life it is a necessary mental mechanism for a good-enough development. It protects from living in a fundamental total confusion. Before the ability to perceive and tolerate nuances and contradictory features is developed—that is before there is a capacity to cope with ambivalence—it is a vital function.

Now, things started to move pretty quickly with Hilda: One session Hilda took the kangaroo mother and did exactly what she had often done at the very beginning of the analysis: First she placed the large soft kangaroo mother in my lap and I held it. Then kangaroo mother in her turn would hold all the small animals. The kangaroo baby always stayed in the kangaroo mother’s pouch. Then Hilda wanted me to move the whole load over to her mother. One difference now was that Scary, the bear, was not allowed to be together with the other animals: “Not Scary, Scary not with them”, Hilda declared. Scary still had to spend most of the time in the cupboard. Sometimes she wanted me to take him out just for her to have a look at him.

Earlier, the bear “Scary” had just been one of the animals, no one special. That was before he became “Scary”.

A few sessions later Hilda started to include Scary. She brought him out of the cupboard and would now sometimes let him be with the other animals in simple games, for example going to the kindergarten (preschool) or going shopping. After some further more sessions Hilda held Scary and made him have fierce, biting attacks, mostly on me but eventually on her mother. Hilda then remained very close to me. She held firmly onto my leg and stretched out to let Scary attack her mother. Mostly he had to be locked up in the cupboard.

I commented as always a little now and then. It was not easy to talk about the bear Scary because it often made Hilda so upset, so frightened. Sometimes Hilda would jump up on mum’s lap staring at me with horror in her eyes. I felt how much easier it would have been not to mention the scary things, not to talk about it and just let it be; to let her be in peace and continue shutting out instead of being confronted with the difficult and scary. It was easy to think of it as an assault, an impingement on her. In the moment of the session it is not always easy to know the difference between an assault and something helpful.

When I once again one session said to Hilda that she probably did not want Scary to exist at all, or at least that he lived far, far away, she firmly protested much to my surprise. “No, not”, she said with emphasis and
added: “Scary live in cupboard, in room, here, in cupboard lives Scary, live the bear. Not away.” Note that she now had called him the Bear.

A very special session

I shall now recall a very special session. It was one that came to make a decisive difference. This session Hilda’s father came with her instead of the mother. I had been informed of this just before the session and had decided to see them though I also told the father that it probably would be a different session. And so it was!

Hilda did not greet me nor look in my direction at all to begin with. She sat stiffly on her father’s lap, stiffly upright, sucking her pacifier intensely and holding her big bunny. She stared out of the window, minute after minute after minute, without a glimpse in any other direction and not leaning back.

I said that things became so different and so wrong. Here everything was so filled with the relation to mother, and that she, Hilda, had told me in her plays of the things that were difficult with the mother-figure.

Hilda’s father felt very shaken and wondered what he had done wrong in relation to Hilda. Now, in the session, he tried to get in contact with Hilda but she continued to sit stiffly. It was shaking to experience her determination and shutting us out. One can think of it as an expression of a healthy protest as well but eventually it turned into something totally relentless. Actually, I had never seen her especially angry—frustrated but not angry. Now she looked angrily resolute more than anything else. Was she terrified, things being so wrong?

The father began to tell about him and Hilda and how different it was with her brother. I noticed that Hilda after all seemed to listen to what he told me. He told about his experiences of the whole situation at home and that he hardly seemed to exist for Hilda. After a while I said: “Hilda, I think it’s good that dad too talks about you and him, now that he is here.” And I said that even though it was so strange and so difficult that mum was not with her here as usual it might still be something good. “Now I understand better”, I said, “that this is really about the mum and baby-Hilda. That here with me it is so much about mum-things. Of course you can or will not change that suddenly. The situation here can not just be changed like that, how stupid of me.”

Eventually, long into the session (twenty-five to thirty minutes) it began to loosen up a little. The father was very empathic with her. He
was overwhelmed and said that he had got a lot to think about. I now had the feeling that Hilda was well understood and contained by the father, and restored.

All of a sudden Hilda let go of her big bunny rabbit. Angrily and violently she threw it at me. Although it was angry and violent, it was still her favourite bunny—her transitional object. I felt it as a strong approach. Gently I threw it back, and she threw it again. I said, “I think you want to show how it feels being thrown here and there. And perhaps even discarded”. The session ended with an atmosphere of great relief. After that session something had changed. It was as if something had been released for all of us. Now Hilda got very discontent with that there was no lion father. She complained loudly. (There was actually a large, soft lion that in size matched the large kangaroo well. I am not sure that Hilda even saw that it was a lion.)

**Together with father in a session again**

A month later after his first, unplanned visit, the father accompanied Hilda again This time it was planned. Hilda was happy and excited. She showed all the things and she kept on talking. But it was very interesting to see that she did completely different things than with her mother. She built with the wooden trains that she had never even touched before. The father told me that he felt like he had got another child. Hilda had begun to turn to him much more. “As if she has discovered me,” he said. I think it was very natural that Hilda did other things with her father in the room. I think that she wanted and needed to protect her work with her mummy, to protect the delicateness of the relation to her mother—a relation that had once in the very beginning of her life been so threatened, even of not existing.

**The end of the treatment**

The treatment continued for another few more months together with her mother, altogether till Hilda was thirty-two months old. The analysis went on for ten months including the breaks for Christmas, Easter, and summer. Hilda’s development of speech had exploded recently. She had become much more playful, often smiled and laughed, but was also sometimes very angry. At home and in the day care she was experienced as a much happier little child, much more curious and interested in others. She played adequately with the other children. On
some occasions it had happened at home that Hilda fled into mechanic sorting of things, such as cutlery, but it was easy to distract her and get in contact.

I had some follow up contact after one year, when Hilda was four years old and again when she was five and a half. Everything now was satisfactory normal. She was an alert and lively, friendly child with good relations. She developed well. She slept well, but/and dreamed a lot. Hilda’s mother summed it up like this “it’s like she has widened her world. It feels like she’s discovered the world!”

I think that for Hilda experiences now were something that could be taken care of in a reasonable way and be given meaning to with help of her objects. Maybe it could be described as her world, the inner and outer, became possible to learn to know, possible to learn about and to cope with and at an increasing rate an expanding universe was forming. Fear had got a form, a shape, and had become reasonably bearable under her parents’ protection. Hilda no longer lived in a formless archaic, nameless dread. Her life did not any longer circle around surviving. That made it possible for her to get into a much normal development.

Hilda was just a very young child and she had development on her side but I find it hard to believe that she would just have developed out of her serious difficulties.

On the contrary, I believe that the risk was great that Hilda without help had developed a locked, closed, inner reality, a rigid mentality that was not open to learning to know her objects and the world, a restricted world of what can be called finished formations (Sandell, 1996).

Note

1. When you live in constant fear, that one you need at any time can turn into something evil, someone who wants to hurt you, or that something of vital importance at any time, can become poisonous and deadly, then you become beaten by an unbearable uncertainty and anxiety. H. Rosenfeld has described this as psychotic confusion. (Rosenfeld, 1950, 1987).

References


CHAPTER NINETEEN

A preventive attachment intervention with adolescent mothers: elaboration of the intervention

Frances Thomson-Salo

This chapter describes a pilot intervention aimed at assisting adolescent mothers to be more emotionally available and respond more sensitively to their newborns, which I designed and carried out with a PhD student, Susan Nicolson (2013), who will report separately on the background, method and results. The intervention comes out of my work as an infant mental health clinician at the Royal Women’s Hospital in Melbourne, Australia, where about 120 pregnant adolescents attend each year for antenatal care. The intervention has the potential to be manualised and provided by health professionals as a part of routine maternity care.

Clinical experience had shown that fairly rapid change in infant–parent interaction is possible with an attachment intervention after birth but it seemed important to intervene antenatally if possible. While many studies have tried to influence the adolescent mother–infant relationship, this is to my knowledge the first brief, evidence-based programme for adolescent mothers which fits with routine maternity care and tries to influence their relationship with their infant from the beginning. The research question, briefly, was whether a brief, perinatal attachment intervention, offered to pregnant adolescents in addition to routine maternity care, would be associated with a better quality
mother–infant relationship at infant age four months, compared with the mother–infant relationship observed in a peer control group who do not receive the intervention.

This population carries disproportionate risks for, while many adolescent mothers do very well, using the pregnancy as a catalyst for positive change, it presents considerable developmental challenge for many (Berlin, Brady-Smith & Brooks-Gunn, 2002). The risks include a history of abuse, depression and substance use (Luster & Haddow, 2005; Myers, Heazell, Jones & Baker, 2006; Schmidt, Wiemann, Rickert & Smith, 2006). For the infants there is a risk of developmental delay and later of conduct disorder, depression, and suicide (Mittendorfer-Rutz, Rasmussen & Wasserman, 2004; Osofsky, Hann & Peebles, 1993; Whitman, Borkowski, Keogh & Weed, 2001). Targeting the relationship which these mothers have with their infants is a window of opportunity for intervention: the early mother–infant relationship is an important predictor of infant attachment at one year, in that infants of adolescent mothers are less likely to be securely attached at one year of age. The emerging mother–infant attachment relationship has been shown to be influenced and meaningfully supported by attachment interventions (van den Boom, 1994).

Research design

The research design is briefly outlined. The intervention was designed to be low cost, replicable and to be provided within the Young Women’s Program, a dedicated multidisciplinary clinic, so that it was carried out in a realistic, community setting to overcome some of the barriers to care for new mothers (Mallinger, Goodwin & O’Hara, 2009). The intervention was designed over a twelve month period while I worked as the hospital infant mental health clinician. The study was approved by the hospital’s Ethics Committee.

Some of the primary hypotheses were that an attachment intervention offered to pregnant adolescents would be acceptable to them, that the intervention would be associated with enhanced maternal sensitivity, as assessed by mother–infant interaction at four months of age, compared with an age-matched control group, and associated with greater maternal self esteem, and with a reduction in negative maternal perceptions of their infant, at four months of age compared with an age-matched control group.
The study tested the pilot intervention against usual care in a sample of young women recruited into two groups: intervention and control. Total sample size of seventy was required for .82 power to detect a clinically meaningful 0.7 SD difference in maternal sensitivity (α 0.05) between intervention and control groups. Recruitment of 100 young mothers was planned with an anticipated loss rate of twenty to thirty per cent to provide seventy recruits expected to complete the study. It was designed with pre-post control group design. The two groups were convenience samples recruited from the Young Women’s Program. Usual care plus a mother–infant relationship focus for the intervention group was tested against usual care in the control group; the involvement of other services as appropriate was unaffected by their participation in the study. The mothers in the control arm were recruited and followed before the intervention group to avoid contamination, because the young mothers all used the same waiting room and often developed social relationships. Rather than being able to establish cause the study aimed to find an association.

At baseline recruitment in pregnancy, information was collected on demographics, psychosocial background, birth data, parenting history, emotion self-regulation and depressive symptoms for all recruits using a self-report questionnaire and review of the medical record. National Medical Research guidelines were followed so that very young mothers or mothers with a pregnancy resulting from abuse were not included.

In the intervention group the participants received usual care plus a parent–infant mental health intervention in the third trimester of pregnancy and just after birth in the hospital. It was a preventive mental health approach with two components, antenatal and postnatal, with a focus on helping the mothers to see their baby as a person, the baby’s social capacity, their importance to their baby and the potential for mutual delight from the beginning, to support attachment and bonding. All mothers completed a questionnaire at the endpoint of the study to provide information on symptoms of depression, time spent caring for their baby, self esteem and their baby’s temperament. Also, the interaction of all recruited mothers with their babies was videotaped at home when the infant was four months old and all seventy-three of the mother–infant videos made were coded for different qualities of mother and infant behaviour using a validated coding system, the Emotional Availability Scales (Biringen, 2008). Emotional availability is predictive of infant attachment at one year. The scales offer a global
assessment of the mother–infant relationship, based in attachment theory and they aim to provide a real life assessment of the developing attachment relationship in action. There are six scales of equal weight: Maternal sensitivity, maternal structuring, maternal non-hostility and maternal non-intrusiveness, and infant involvement and infant responsiveness. The scales provide a dyadic assessment of the relationship—via expressed emotions as well as behaviours in mother and infant. The data collected was analysed by blind coders in the USA for statistically significant differences between the intervention and control groups.

*The intervention*

The antenatal component was a single, forty-five to sixty minute group session for the adolescents from thirty weeks gestation. This was informed by an account of a group for pregnant adolescents with conduct disorders in a research programme in Toronto, whose infants were significantly more securely attached following a group session discussing the Benoit & Goldberg (1998) “Simple gift of comfort” DVD (Mark Zoccolillo, pers. comm. 2003). The intervention ran weekly or fortnightly on an afternoon during the intervention phase as required. There were two to six participants in each group who attended immediately following or preceding an antenatal check-up. The session was designed for a small group of young women, but it could be provided individually and accompanying partners, friends, parents, or other support persons were welcomed and involved in the sessions, as occurs in usual maternity care in the Young Women’s Program. I set up the session not as a classroom experience but to be enjoyable and developmentally appropriate. We showed five brief video clips (of two to five minutes duration) from the following DVDs: “Your Social Baby” (Murray & Andrews, 2002), “Getting to Know You” (Blick & Warren, 2003), The Circle of Security “Shark Music” (Circle of Security, 2002), “The Simple Gift of Comfort” and “Bonding With Your Newborn Baby” (Raising Children Network, 2007). The sixth clip was an extract from an interview with a teen mother, with her permission, when her infant was age four months who shared how surprised she was at how interactive her baby was from the beginning. The other clips showed the social capacities of newborn babies and their urge to connect, the importance of comforting a crying baby, the negative feelings that may arise with a crying baby and how to handle these feelings, as well as parents’ varied
experiences of bonding. The clips were chosen for their relevance to the aim of the intervention, and their relevance and acceptability to the study population of culturally diverse, adolescent women.

After showing the clips I invited discussion in an unstructured way. This provided an opportunity to talk about surprises, fears, and dilemmas such as what to do when they felt under pressure, when their “buttons” were pressed. I aimed to convey two key messages: the amazing capacities of the baby as a person, and secondly the importance of comforting a crying baby, that crying is a communication and how important it was for the baby to feel that someone was there with them trying to understand and comfort them so that they did not feel alone. The Circle of Security clip which shows how the music accompanying a beautiful scene changes to the menacing music from the film *Jaws* conveys graphically how a mother might sometimes feel that it was too hard—it is still the same baby but the music has changed. We could use this to talk about what steps they could take when they felt this happening, and to use their language, how to “chill out”. I alerted the young women about a possible effect on the foetus on hearing the music. Mothers who were likely to be “good enough” used the DVD session as reinforcement while mothers who were anxious or negative needed the reinforcement of the neonatal intervention. It was surprising how many mothers who already had a child accepted the intervention but were often negative in the group discussion—I came to think that they wanted help so that the attachment process went better with their second or third baby. Aiming to do this intervention quite some time before their baby was due was to enable enough time for the young women to digest it.

The neonatal component was a thirty to sixty minute individual session that built on the antenatal session through exploring their own infant’s social capacities and urges to connect with them through seeing this and talking about it. The student researcher and I visited the mother at a mutually agreed time on the postnatal ward within the first three days after birth, ideally on day two or three. I said something like, “I’ve come to meet you and your baby”, rather than a stance of “Can I show you your baby’s capacities?” Generally I carried out the neonatal session along with whoever was visiting, whether it was father, grandmother, friends, or children. There might be little privacy if it was a two-bed ward, heightening the need for a secure internal setting (Parsons, 2007). If the baby was in the Neonatal Intensive Special Care unit, we did the session there when it was appropriate.
During the session I engaged mothers in a conversation about their perception of their new-born as a person (and before birth), what they saw of their baby’s personality, and likes and dislikes. I tried to engage in a discussion about “reading” their baby’s behaviour in terms of the internal states that might contribute to it, that is mind-mindedness (Meins et al., 2002). If mothers needed some prompting, I might ask questions such as, “What is your baby like?” or “How do you see her personality?”, or looking at the baby’s state, enquire whether they thought that the baby was active, calm, curious, alert, or sleepy? “What does he seem to enjoy and dislike? What was she like before she was born?” The aim was to encourage mothers to wonder about their baby’s experience from the beginning, based on experience that a baby is “knowable”.

If the baby cried, I would wonder together with the mother what her baby was experiencing and see how the baby could be consoled. I aimed to ask mothers about their recollections of the antenatal video clips and how they related to their experience so far of their own baby. I would reframe negative attributions to a baby’s behaviour (e.g., “He sleeps all the time, he’s so lazy”), as what a newborn baby needed to do as part of getting to know himself.

I interacted with the baby, usually holding them. This comes out of the approach in infant–parent psychotherapy from the Children’s Hospital in Melbourne of viewing the baby as subject. (Here the therapist relates to the infant as a person in their own right, entitled to be treated respectfully and courteously, trying to engage with the infant, to understand their experience and communicate this to the infant as well as explore it with the parent, to shape the parent’s and infant’s representations. From experience parents usually welcome this approach.) I would try to ensure that a mother could see the interaction and also point out if the baby was referencing her when the baby was with me. If a baby gave a smile of pleasure in response to interaction and this went unnoticed or if the baby held their mother’s gaze, I used it as an opportunity to wonder together about the baby’s experience, to facilitate mothers getting to know their newborn and to promote a sense of connection and mutual enjoyment. For some mothers, when they saw how their infant could follow with their eyes it was quite dramatic. If a mother did not seem not able to claim her baby and seemed initially passive in the presence of partner or grandparents, I would try gently to bring her to the centre by passing the baby to her to hold particularly if a maternal grandparent seemed
to be monopolising the baby. If there are parent–infant relationship difficulties particularly linked to parental emotional unavailability due to trauma, this approach may be a circuit breaker in which parent and infant are helped to become more attuned, in the hope of influencing the parents’ representations of the infant.

Many of the mothers seemed to envisage a full object relationship with their baby and said that they looked at their baby “all the time”, commenting, “They only want me.” One mother said that her son was “bright, determined, sensitive to my presence and wants me and to sleep with me.” When I asked her how she knew, she said that he cried loudly if she went to the toilet and he stopped when she picked him up.

Occasionally, I used one or two elements of a modified Neonatal Behavioural Observation (Nugent, Keefer, Minear, Johnson & Blanchard, 2007). This included showing parents that their newborn responded to noises and light, followed their voice, turned to follow a moving object and looked for their face in preference to other objects. The Neonatal Behavioural Observation has been shown to improve adolescent mother–infant interactions at age one month, giving parents confidence (Widmayer & Field, 1980). I used this more as a stepping stone to facilitate their feeling that they knew their baby as a person, as the neonatal intervention was not about what the baby does but who the baby is. At the end, the researcher would give the mother a photo or video showing a positive feature of the baby or interaction.

Results

I shall briefly give some selected main findings. The group was a very multicultural one and quite a high proportion had mental health issues. Acceptability of the project was very good with eighty-three per cent of those eligible agreeing to participate and there were high retention rates among recruits: seventy-four per cent in the intervention group and seventy-six per cent in the control group. In terms of demographic diversity eighty-seven per cent were having their first baby. Despite most of them having a partner they were dependent on their family and government benefits. A high proportion were homeless at some point while pregnant and there was a high rate of psychosocial vulnerability: twenty-three per cent said their main mother figure was not the birth mother. Forty-five per cent had a family mental health history.
Depression reduced dramatically post-birth. In terms of positive birth outcomes: most were not at risk. There were no significant pre-test differences in demographics or psychosocial measures. But there were significant differences in psychosocial mother–infant relationship in the intervention group.

With Post-test (endpoint) comparison of control and intervention groups, significant post-test differences were found between the intervention and control groups, measured at the study endpoint at infant age four months. The intervention group scored significantly better in two of the EA subscales (maternal non-hostility and maternal non intrusiveness) when a twenty-minute episode of play alone was observed and coded for Emotional Availability ($n = 73$). The effect sizes were medium to large (Cohen’s $d = .66$ and $1.06$ respectively) (Cohen, 1988). When a twenty-five-minute episode of play-plus-brief-separation–reunion was observed and coded ($n = 55$), the intervention group scored significantly better in three of the EA subscales (maternal sensitivity as well as maternal non-hostility and maternal non intrusiveness). Again, the effect sizes were medium to large (Cohen’s $d = .66$, .66 and .85 respectively). These findings support the main hypothesis that the intervention would be associated with a better quality mother–infant relationship.

Theory of the approach

It is important to note that the intervention was supported by medical, nursing and social work personnel involved in the mothers’ care. I tried antenatally and neonatally to increase a mother’s observation and thinking about the baby’s mind, for example, to change beliefs about babies and confidence in their capacity to “read” their baby, and particularly at birth to help them delight in their baby. I tried to convey support, understanding, and affirmation, techniques related to higher treatment alliance in findings from psychotherapy research: “a more active, engaged, motivating, yet open-ended stance by the therapist was important in a positive therapeutic relationship” (Hilsenroth, Cromer & Ackerman, 2012 p. 375). I tried, as many psychotherapists do, to enhance the mothers’ problem-solving capacities, self-representation, and regulation of affective states (Karlsson, 2011). Most of the women had a positive relationship with us (similar to Humphries & Korfmacher, 2012,
finding that black American teen mothers preferred to have a warm relationship with their doula than just being given facts about their baby).

In the context of the brief therapeutic window of a maternity hospital stay, this clinical approach supported the parent to “be with” their baby, to be attuned to the baby, to enable mutual enjoyment. It may influence the parents’ representations of their baby, particularly reflective functioning in the rapid changes of adolescence. I tried to find the person of the baby, to connect with the baby in their own right, and—for a mother who feels that she does not know her baby—to connect him or her to their mother. She could see that it could be potentially enjoyable.

It seems likely that the effectiveness of the intervention stemmed in large part from a good grandmother transference—we followed up at the momentous time of birth, affirming that the mothers either already “knew” their baby or showing them that they could know their baby in a way that could be internalised at a procedural level in implicit memories. (Presumably mirror neurons were activated as together we explored their baby). Many adolescent mothers who may have gone “off the trail” hope to reconnect with their mothers and the intervention offered a substitute or potential bridge (Schechter, 2012). The hospital functions in a how-to-manage the baby way, and the intervention was different and was welcomed in assisting mothers to be relationship-focused.

While the intervention may at times have similarities with a strengths-based approach, I reframed negative projections onto the baby, for example that an early smile was not “wind”. Carrying out the intervention was often exhausting and not only for practical reasons (maternal ambivalence seemed to transferred into the system with many appointments rearranged). Trying to move a negative projection towards a positive one in a short session in a busy hospital often within hours of birth is working with an externally imposed pressure. In countertransference processing I may partly have taken on some of their emptiness, despair, and terror of having a baby. However, being able to intervene around the first day or two of birth offers particular therapeutic advantages because it is such a momentous time, in a mother’s becoming aware that what was inside is outside and they find that they can hardly believe this (although they have been primed having seen clips of the capacities of newborns).
Impact of the approach

I have outlined above some of the results. At four months, a high proportion of mothers were still breastfeeding although this did not reach full significance. (One mother who had not breastfed her previous baby so as not to spoil the shape of her breasts breastfed the new baby as she thought that it was better for the baby.) Those mothers who already had children and had initially been negative in the group discussion became warmer in the Neonatal Intervention. The qualitative feedback was positive: most of the mothers at four months felt that the intervention helped them be more confident and above all to enjoy their baby in a way most of them had thought unimaginable. One mother said, “At a time when everything was frightening, it was helpful.” Involving the fathers nonjudgementally and empowering them was helpful: many fathers were involved with their baby. One DVD clip (Murray & Andrews, 2002) showed a newborn copying his father sticking out his tongue; most mothers were intrigued, as were their partners and most fathers had tried this successfully. One baby when I first met him spontaneously put his tongue out at me two or three times and his parents said that they had done this so much with him that it was now part of his repertoire.

To reduce maternal intrusiveness, which is usually highly stable from the first day of life, is a very positive result. The intervention may have been effective because it functioned to boost oxytocin (Feldman, 2012). This is now recognised to be important in the physiology of early attachment with respect to the experience of safety and the development of empathy and trust (Carter et al., 2005; Churchland, 2011), with this kind of contact being offered by me at a critical period.

Case vignette

In Ms A’s antenatal group session I was not able to facilitate any discussion; she seemed truculently negative and as though she had been “captured” for the intervention. The neonatal session initially seemed the hardest of all the sessions; she looked at me blankly, and was very negatively resistant. She answered my questions by saying, “I can’t help you, the baby has no personality, I haven’t noticed anything, she has vomited a lot, and is causing jealousy for the older girl”. Ms A had fed the baby and said that she would now go to sleep and there was
no way that she would wake up. I resigned myself to that. She said the baby had not smiled much. I tried exploring the usual topics such as who was there for support for her and what her partner thought of the baby and Ms A’s replies seemed robotic.

In the transference I seemed to be seen as an authority figure. She wanted to know what I wanted to know, what I was looking for? I took a risk and asked if I could hold the baby, anxious not to receive more from the baby than her mother had but thinking that it might be helpful if I could wake the baby up psychologically which I seemed able to do. I then turned her round saying that I was doing this so that her mother could see and she was quite smiling and chatty which I reinforced—the baby had already seemed rather shut down as the recipient of the projections onto her. When I gave her back, for the first time her mother smiled warmly and welcomed her daughter back. From a stance of “knowing it all” Ms A moved to a position where she seemed softer towards her daughter and to acknowledge a richer life within her daughter and in the relationship between them.

*But the intervention was associated with lower maternal esteem*

While significant differences were found between the two groups in maternal self-esteem, contrary to the study hypothesis that receiving the intervention would be associated with higher maternal self-esteem, this was lower in the intervention group (measured using the Maternal Self-Report Inventory (MSRI)—short form): MSRI total scores and C (caretaking ability) subscale scores were significantly lower in the intervention group. The effect size was medium (Cohen’s d −.57 and −.55 respectively). There was no significant difference on the preparedness for motherhood (P) subscale between the two groups.

The study hypothesis that receipt of the intervention would be associated with a less negative perception of the infant was also not supported; there were no significant differences between the two groups (measured using the Infant Characteristics Questionnaire (ICQ)), and there was no significant difference in post-test depression symptoms between the two groups. Thus, the confidence about mothering skills was reduced in the intervention group associated with improved mother–infant interaction four months later.
How do we understand this result?

The majority of the mothers nevertheless seemed to enjoy their babies. The intervention encouraged reflection, and Murphy and colleagues (2011), studying the everyday concerns of mothers of young children and the motivation to seek ongoing parenting support from experts, have noted that increased reflection on the infant’s experience may affect esteem (confidence) of a mother. They wrote, “(I)t may be that the mothers who expressed concerns about their confidence/ambivalence about being a mother in the current study were more reflective about their feelings and wishes for their children” (Murphy, Zweifach, Hoffman, 2011, p. 9). Other psychotherapy studies rating outcomes suggest that in some studies these appear to worsen on discharge or after review—and that clients were possibly more in touch with difficulties. As also noted in evaluation theory literature, participants in a programme may not only gain knowledge, heightened interest and motivation but also increased anxiety (Weiss, 1997).

At this stage, a number of questions remain. While attributions to the baby may change after a single session because of the plasticity in this period that pushes development forward, other internal systems are likely to be more fixed and need more psychological work targeted at specific difficulties (Schechter, 2012). The mothers’ self esteem may not have improved more because they became less defensive than the control group, more in touch by projective identification with their baby’s anxiety, and able to be open about the distress because they knew that it would be heard nonjudgmentally. Four months may be early to assess that the mothers felt that they knew their baby well enough to feel good about their knowing. The rate of improvement in depression was better in the intervention group over time, however the difference in the rate between the two groups was not statistically significant.

Conclusion

While a number of questions remain and the study could not establish causality, nevertheless an association was identified between the intervention and quality of the mother–infant relationship. It is to be hoped that as any early change in the first four months would be helpful, even if it did not last in the long-term, one effect of the intervention may make it easier for the mothers to seek to access psychotherapeutic
input later. A case is therefore made for conducting a multi-centre randomised controlled trial as the next step to determine the impact of incorporating the intervention into maternity care for this vulnerable group.

References


INDEX

Note: *Italic* page numbers indicate information is to be found in a figure or a table.

Abarca, A. 286  
Abelin, E. 120  
Abidin, R. 76, 79  
Ablow, J. C. 60–61  
academic achievement  
and socio economic status 244–245  
home learning 284–285  
Achenbach, T. M. 76–77, 208, 249  
action representation, mirror neurone system 143–145  
action research 6  
adaptive regulation 8  
“adaptivity” and children at risk 220–222  
adoption, effect on parenting  
behaviour 62  
Adelman A. 91–92  
Adelson, E. 132, 172, 206  
adolescents  
effects of negative early experiences 29–30  
mother–infant relationship  
intervention 343–355  
resilience research 37–39  
study on uneducable 227–228  
teenage pregnancy 190  
Adult Attachment Interview (AAI)  
38, 144, 148, 206–207  
adversity  
and resilience 38  
effects of early 11–12  
affect/emotion regulation 27, 29, 32, 56, 100  
affective communication processing  
by traumatised mothers 90–114  
affiliation process 138–139  
aggression in children 190–191  
attachment-based programmes  
203–208  
dealing constructively with 195  
measurement tool 191  
origins of 200–201  
prediction of 202–203  
Aglioti, S. 139  
Ainsworth, Mary D. S. 30, 79, 145–146, 286  
Akhtar, S. 171  
Akin, B. 171  
Alarm Baby Distress scale (ADBB)  
78  
Albus, K. 30, 245  
Allen, J. -P. 37–38  
Alpern, L. 21, 245  
ambivalent attachment 31, 34, 252  
American Academy of Pediatrics 3, 12–13  
amygdala 55, 58–59, 141, 144, 147, 149–150  
Andresen, S. 298, 302
INDEX 359

Anna Freud Institut (AFI) 21–22, 43, 226
antenatal intervention, teenage mothers 346–347
antererior cingulate cortex (ACC) 55–59, 61, 149
antisocial and delinquent behaviour 217–218
Antwortregistern (response registers) 299
Asendorpf, J. 218
Asgari, A. 222
assessment tools 76–81, 289–290
Atashrouz, B. 222
Atkinson, L. 55
attachment
and mentalization capability 32–35
early development of 29–32
parental, brain studies 145–150
attachment-based parenting programmes 200–203
BASE® programme 207–208
SAFE® programme 203–207
attachment intervention for teenage mothers 343–344
antenatal component 346–347
neonatal component 347–349
research design 344–346
results 349–354
Attachment Q-Sort (AQS) 78
attachment styles/types 42
and neural response 60
assessment of using MCAST 42, 249, 252
cultural variations 30–31
EVA study 245–247, 249, 252–253
attachment-trauma 34–35
Atypical Maternal Behaviour Instrument for Assessment and Classification (AMBIANCE) 76, 80, 84, 97
audiovisual mirror neurons 143
authoritarianism, Germany 200–201
autistic defence, case study 35–36
Avenanti, A. 139
avoidant attachment 34, 252–253
Axelrod, S. 37, 39
babywatching programme 207–208
Bade, K. J. 261
Bakermans-Kranenburg, M. 84, 148, 207
Balint, M. 312–313, 315
Ballet, J. 203
Barone, L. 249
Barrett, J. 63
Bartels, A. 58, 140–141
BASE® programme 207–208
Bauer, J. 264
Bauer, R. M. 147
Baumert, J. 223
Bayley, N. 174, 289
bearable fear 328, 341
Beardslee, W. R. 3
Beck, E. 223
Beebe, B. 29, 101, 207, 264
Beeghly, M. 34
Begg, C. B. 74
behavioural disorders/problems 28, 208, 216–218, 253
and attachment type 253
Frankfurter Prevention Study 228
Bekman, S. 182
Bell, C. C. 3
Bell, R. G. 15
Bell, S. M. 286
Belsky, J. 245, 253
Benoit, D. 95, 97, 346
Berg, S. J. 142
Bergman, A. 13, 195
Berlin, L. 96, 264–265, 344
Berner, W. 248
Betz, T. 289
INDEX

Biggeri, M. 303
Bighin, M. 134
“biology of adversity” 12
Bion, W. R. 171, 270, 330, 332–333
Biringen, Z. 274–275, 286, 290, 345–346
“black pedagogy” 200–201
Blakemore, S. Jr. 143
Blamey, A. 5
Blick, B. 346
Bøe, T. 244
Bohleber, W. 28
Bohlin, G. 245
Boris, N. 81
Bornstein, M. H. 283
Bortz, W. M. 8, 11
Bos, W. 216
Botvinick, M. 143
Boudon, R. 265
Bourne, V. J. 147
Bowers, D. 147
Bowlby, J. 13–14, 28–30, 75
Bradley, R. H. 76–77, 283–285, 289
Brady-Smith, C. 344
brain response in parents 57–59
Brancucci, A. 147
Brentano, F. 32
Bretherton, I. 30
Brisch, Karl Heinz 15, 202–203, 207, 264
Britton, R. 333
Brody, S. 37, 39
Bronfman, E. 21, 76, 80, 97
Brooks-Gunn, J. 182, 283, 344
Bruce, J. 30
Bruchstellen der Erfahrung (fragments of experience) 299
Buccino, G. 143
Bucci, W. 313, 324
Bürgin, D. 119
Burkhardt-Mussmann, Claudia, First Steps project 260
Burlingham, Dorothee 28
Busse, Annette, First Steps project 260–278
Büttner, G. 220
Cadoret, R. J. 218
Cain, C. A. 218
Caldwell, B. M. 76–77, 283–285, 289
Campbell, S. 133
Candelori, C. 132–133
Capability Approach (CA) 298–299
CAPEDP study, France 73–75
goals of the study 75–81
importance of supervision 84–85
overview of findings 82–84
scales, tests and assessment tools 77–80
theoretical and practical implications 85–86
caregiving system
development of during pregnancy 132
maturation of during adolescence 147–148
Carneiro, A. 134–135, 137
Carr, L. 143–145
Carter, C. S. 352
case supervision, day-care teams 229, 232–233, 236–237
Cash, S. J. 62
Cassidy, J. 30, 90, 120, 285
CAVES (Clinician Assisted Video-feedback Exposure Session)
100–101
as an aid to child–parent psychotherapy 109–111
CAVEAT intervention 113–114
clinical vignette 102–108
conclusion 112–113
identifying the process of change 111–112
setting and techniques 101–102
value of 108–109
Cerqueira, J. 146
Chazan-Cohen, R. 283–284
Chien, P. L. 3
child abuse 21, 29–30, 33, 92, 110
Child Behaviour Checklist 1½–5 (CBCL 1½–5) 77
child guidance clinics 201
child poverty 297–298
daily life of improvisation and routine 300–302
imitation as a social practice 302–305
research and theory 298–300
childrearing
cultural differences 171
Germany 200–201
children at risk 20
attachment types of 37
early prevention as a societal responsibility 20–22
EVA research project 244–254
individual development and adaptive education 215–223
out-reaching psychoanalysis 39–43
social integration of 22–23
Chiron, C. 146
Churchland, P. S. 352
Cicchetti, D. 34
Cierpka, Manfred 247–248, 260, 286
Clayton, J. 285
clinical applications
adolescent mothers 343–355
child’s fear, treatment of 328–341
primary care setting 309–325
Coates, S. 93, 95–96, 100–101
cognitive risk factors 220–221
cognitive stimulation, home learning environment 283–284, 287–291
Cohen, J. 350
Cohen, L. J. 132
Cohen, N. J. 170
Cole, R. 74
Collins, F. M. 10
Collins, W. A. 283
community-based participatory research (CBPR) 6
complexity of disorders 9
conflicts, everyday, avoidance of 230–231
Connell, J. P. 5
Connor, C. M. 283
Cooper, P. J. 61
co-parenting during pregnancy 132–133
Corboz-Warnery, A. 124, 130, 134–136, 138
Cox, J. L. 76–77
Crittenden, P. M. 30
Crockenberg, S. 168
Crolnick, W. S. 286
Crowe, R. R. 218
cultural differences in child rearing 171
Cyr, C. 31, 84
daily life of improvisation and routine, child poverty 300–302
Damasio, A. R. 264
Daudert, E. 249
Davies, M. 93, 95–96, 100–101
day-care centres, evaluation of early prevention programmes 242–254
Deane, K. 76, 78
Deater-Deckard, K. 63
De Bellis, M. 21, 30
Decety, J. 139, 143
DeKlyen, M. 265
delinquent behaviour 217–218
Denckla, M. B. 218
Denis, P. 134
Dennett, D. C. 32
De Palo, F. 134
depression see postpartum depression
Derogatis, L. R. 79, 135
De Toffoli, C. 312
developmental scores, immigrant low-SES children 175, 177
Devisch, R. 169
de Wolff, M. S. 286
diagnostics, 220
Die deutsche Mutter und ihr erstes Kind (Haarer) 201
Dinkmeyer, D. 287
Dishion, T. J. 8
dismissing attachment 148–150
disorders, complexity of 9
disorganised attachment 21, 33–34, 42, 245
AMBIENCE tool predictive of 97
and maternal behaviour 31, 75–76
children in EVA study 27–28, 253
Cultural variations 30–31
maternal factors leading to 84
dissociation 34–35, 201–202
Dolto, F. 169
domestic violence 100, 103
Döpfner, M. 248
Dornes, M. 249, 285
Dozier, M. 30, 56, 245, 265
Drotar, D. 30
Dugravier, Romain 75
early adversity, effects of 11–12
Early Child Development Program (ECDP) 192–193
early experience
importance of 8–9
long-term effects of negative 29–30
Early Head Start (EHS) 6–8, 12
early object relations 24–28
and resilience 36–39
early parenting education
programme 186–189
aggression profiles 190–191
changes in the mothers’ functioning 191–193
limitations of study and lessons learned 196–197
nineteen year follow-up study 189–190
thirty-two and thirty-seven year follow-ups 193–196
early prevention programmes
attachment-based parenting 200–209
early parenting education 186–197
for families at high risk
intergenerational violence 90–114
for immigrant parents and infants 165–182
intersubjectivity in mothers and fathers 129–152
mental health programme for vulnerable families 73–86
triadic perspective for parenting and early child development 118–127
Early Steps (Frühe Schritte) project 235–237, 239–240
evaluation of 246–247
early trauma, influence of 28–29
Easterbrooks, A. N. 274
Eccles, M. P. 6
Edinburgh Postpartum Depression Scale (EPDS) 77
efficacy and efficiency 6
Egeland, B. 245, 265, 285
Egle, U. T. 21, 286
Eickhorst, Andreas 260, 283, 286
Eidelman, A. I. 52
Einsiedler, W. 287
Ekelin, M. 133
Elting, P. 249
Emde, R. N. 7–8, 10–12, 23, 130, 144, 151, 165, 168, 180, 182, 203, 264, 268, 270, 274, 286, 290
emotional availability 274–275
“emotive brain”, right hemisphere 146
empathic abilities, neural correlates of 142–145, 146, 148, 149–150
empathy, causes of lack in 201
empathy training programme 207–208, 247–248
Eng, E. 6
Erikson, E. 13
Erste Schritte see First Steps
Esser, H. 262
ethnic risk factors 216
Euser, E. M. 31, 84
EVA research project
textual content
contextual framework 242–243
Early Steps 246–247
EVA study 244–246
Faustlos 247–248
Frankfurt Prevention Study 243–244
future perspectives 253–254
interviews with parents 250–251
preliminary results 252
sample selection 248–250
experimental trials 4–6
face processing 58–59
family physicians and psychologists, joint working 316–324
implications for psychoanalytic theory and practice 324–325
fathers, preoccupation in 51–52
Faustlos programme, evaluation of 247–248
Fava Vizziello, G. 133
Favez, N. 124, 134
fear in toddler, treatment of 328–341
Fearon, R. 245, 253
Feeney, B. C. 148
Fegter, S. 298
Feldman, R. 51–52, 60, 63, 130, 140, 142, 352
Felice, M. E. 30
Fermanian, J. A. 78
Fiese, B. H. 182
FILU (Feinfühlige Interaktionsgestaltung und Gestaltung von Lernumgebungen) project 283–284
first results and outlook 290–291
methodology 288–290
First Steps project 165, 260–262
challenges of 276
counsellor’s role 170–171
cultural differences in child rearing 171
cultural meanings of mothers group meetings 169
empirical research on 173–181
history of project 166–167
immigrant children growing up in poverty 174–178
immigrant fathers 173
impact on developmental risk 178–180
individual-level goals 262–266
meeting room 169–170
migration waves 172–173
project-level goals 266–276
psychodynamics of migration 171–172
reaching the target group 168
school trajectory of immigrant children 180–181
scope of problems 167–168
summary 181–182, 276–278
Fischbach, A. 216
Fischmann Tamara 21, 37, 217
EVA research project 242–254
Fisher, P. A. 30
Fitzgibbons, R. P. 191
Fitzgibbons Anger Inventory (FAI) 191
Fivaz-Depeursinge, E. 124, 130, 134–136
Fleming, A. S. 55, 63, 142
Fletcher, P. C. 8
Flouri, E. 245
fMRI (functional Magnetic Resonance Imaging) 54–55, 58, 60, 140, 142–150
Foa, E. B. 110
foetal image, ultrasound studies 130, 133–139
Fogassi, L. 143
Fonagy, P. 21, 60, 91, 98, 140, 144, 152, 265, 286
mentalization 32–35
Fraiberg, Selma 13, 81, 132, 172, 206
France, CAPEDP project 74–86
Francis, D. D. 147
Frankenburg, W. F. 178
Frankfurt Prevention Study 228–230, 232, 235–237, 243–244
Frascarolo, F. 124, 134
Freud, A. 4, 13, 28, 39–40
Anna Freud Institut (AFI) 21–22, 43, 226
Freud, S. 13, 310
see also Sigmund-Freud-Institut
Freyberg, T. v. 39, 227
Friedmann, N. 220
Friedrich, L. 22–23, 244–245, 260, 264, 275
Fritzemeyer, Korinn, First Steps project 260–278
Frühe Schritte (Early Steps) project 235–237, 239–240
Gallese, V. 131, 143, 145, 151
Garza-Guerrero, C. 171
gene-environment interaction 9, 13, 217–218
Geneva study, CAVES intervention 99–112
George, C. 132, 147, 245
Gergely, G. 29, 32, 144, 265, 286
German Research Foundation (DFG) 227
“ghosts in the nursery” 172
Gloger-Tippelt, G. 31–32
Gobbini, M. I. 59, 140
Goldberg, S. 346
Golden, E. 37–38
Goldman, A. I. 144
Gonzalez, A. 55
“good life”, imagining 302–305
Goodman, R. 248–249
Goodwin, D. 344
Gordon, I. 52, 60, 63, 130, 142
Gordon, T. 287
Göttken, T. 122
Gourand, L. 133
grandmother transference 351
Grasso, D. J. 56
Greacen, Tim 74
Green, J. 21, 245, 249
Greenacre, P. 28
Greenberg, D. L. 149
Greenberg, M. T. 265
Greenspan, S. 170
grey matter volume, increase in during postpartum period 57
Grimm, H. 217
Grinberg, L. 171–172
Grinberg, R. 171–172
Grossmann, K. E. 148, 283, 285–286
Grotevant, H. D. 30
group meetings
mother–child, 272–276
parents 169
growth-promoting parenting 194–195
Grumm, M. 220
Guedeney, Antoine 14, 74, 77–78, 82, 84
Gullone, E. 151
Gunnar, M. R. 30
Guo, G. 244–245
<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haarer, J.</td>
<td>201–202</td>
</tr>
<tr>
<td>Haddad, Alain</td>
<td>73–74</td>
</tr>
<tr>
<td>Haddow, J.</td>
<td>344</td>
</tr>
<tr>
<td>Hagekull, B.</td>
<td>245</td>
</tr>
<tr>
<td>Haggerty, R. J.</td>
<td>4–5, 15</td>
</tr>
<tr>
<td>Haneder, A.</td>
<td>208</td>
</tr>
<tr>
<td>Hänggi, Y.</td>
<td>289</td>
</tr>
<tr>
<td>Hann, D. M.</td>
<td>344</td>
</tr>
<tr>
<td>Hanson, M. J.</td>
<td>245</td>
</tr>
<tr>
<td>Hardy, I.</td>
<td>287</td>
</tr>
<tr>
<td>Harlow, H. F.</td>
<td>147</td>
</tr>
<tr>
<td>Harrison, T.</td>
<td>59, 140</td>
</tr>
<tr>
<td>Hasselhorn, M.</td>
<td>218, 220</td>
</tr>
<tr>
<td>Hauser, S. T.</td>
<td>37–38</td>
</tr>
<tr>
<td>Haxby, J. V.</td>
<td>59, 140</td>
</tr>
<tr>
<td>health practice, current trends</td>
<td>10–11</td>
</tr>
<tr>
<td>health promotion 6–8</td>
<td></td>
</tr>
<tr>
<td>Health Psychology, University of Rome study</td>
<td>317–324</td>
</tr>
<tr>
<td>Heckman, J. J.</td>
<td>12</td>
</tr>
<tr>
<td>Hédervári-Heller, E.</td>
<td>285</td>
</tr>
<tr>
<td>Heim, C.</td>
<td>148</td>
</tr>
<tr>
<td>Heinicke, C. M.</td>
<td>152</td>
</tr>
<tr>
<td>helplessness in children 91–92</td>
<td></td>
</tr>
<tr>
<td>Hertel, Silke</td>
<td>285</td>
</tr>
<tr>
<td>Hill, H. C.</td>
<td>223</td>
</tr>
<tr>
<td>Hilsenroth, M. J.</td>
<td>350</td>
</tr>
<tr>
<td>Hinojosa, C.</td>
<td>96–98</td>
</tr>
<tr>
<td>Hofer, M. A.</td>
<td>90, 146</td>
</tr>
<tr>
<td>Hoffer, W.</td>
<td>28</td>
</tr>
<tr>
<td>Hoffmann, S. O.</td>
<td>21</td>
</tr>
<tr>
<td>Hollands, G. J.</td>
<td>8</td>
</tr>
<tr>
<td>Hölling, H.</td>
<td>244</td>
</tr>
<tr>
<td>Holodynski, M.</td>
<td>269</td>
</tr>
<tr>
<td>home learning environment 284–285</td>
<td></td>
</tr>
<tr>
<td>home-visits, First Steps programme</td>
<td>270–272</td>
</tr>
<tr>
<td>Hoover-Dempsey, K. V.</td>
<td>285</td>
</tr>
<tr>
<td>hormonal changes, parents’ brains</td>
<td>142</td>
</tr>
<tr>
<td>Horton, P. C.</td>
<td>147</td>
</tr>
<tr>
<td>“hotline” intervention 207</td>
<td></td>
</tr>
<tr>
<td>Humphries, M. L.</td>
<td>350</td>
</tr>
<tr>
<td>Iacoboni, M.</td>
<td>143–144</td>
</tr>
<tr>
<td>IDeA (Individual Development and Adaptive Education for Children at Risk) Center 218–219, 242</td>
<td></td>
</tr>
<tr>
<td>ongoing discussions and future prospects 222–224</td>
<td></td>
</tr>
<tr>
<td>research objectives 220–222</td>
<td></td>
</tr>
<tr>
<td>structure of 219–220</td>
<td></td>
</tr>
<tr>
<td>identification with another, neurobiological correlates of 144</td>
<td></td>
</tr>
<tr>
<td>Ikounga N’Goma, G.</td>
<td>75</td>
</tr>
<tr>
<td>imagination, pretend-mode 33–35</td>
<td></td>
</tr>
<tr>
<td>imitation</td>
<td></td>
</tr>
<tr>
<td>as a social practice 302–305</td>
<td></td>
</tr>
<tr>
<td>of emotional face, brain areas activated 150</td>
<td></td>
</tr>
<tr>
<td>of foetal movements by parents 138–139</td>
<td></td>
</tr>
<tr>
<td>role of mirror neuron system in empathy 143–145</td>
<td></td>
</tr>
<tr>
<td>immigrant children growing up in poverty</td>
<td></td>
</tr>
<tr>
<td>developmental profiles 174–178</td>
<td></td>
</tr>
<tr>
<td>follow-up of school trajectory 180–181</td>
<td></td>
</tr>
<tr>
<td>impact of First Steps early prevention on developmental risk 178–180</td>
<td></td>
</tr>
<tr>
<td>immigrant fathers in a transgenerational perspective 173</td>
<td></td>
</tr>
<tr>
<td>implementation science 6</td>
<td></td>
</tr>
<tr>
<td>infant cry/distress, neural response to 55–56, 58, 60–61</td>
<td></td>
</tr>
<tr>
<td>infant faces/familiarity, brain responses to 58–59</td>
<td></td>
</tr>
<tr>
<td>infant frustration 201, 203</td>
<td></td>
</tr>
<tr>
<td>infant signals, individual differences in parental response to 59–62</td>
<td></td>
</tr>
<tr>
<td>insecure-ambivalent attachment 31, 34, 252</td>
<td></td>
</tr>
<tr>
<td>insecure attachment 252</td>
<td></td>
</tr>
<tr>
<td>AMBIENCE tool predictive of 97</td>
<td></td>
</tr>
</tbody>
</table>
INDEX

language development and mother–child interaction 264–266
Largo, R. 286
Laucht, M. 245
Laurent, H. K. 61
Lave, J. 287
learning disorder 216–217
Lebiger-Vogel, J., First Steps project 260–278
Lebovici, S. 119–120, 131
Leckman, J. F. 51–52, 60, 63, 131–132, 140, 142
Leerkes, E. 168
Lehmann, E. 125–126
Lehmann, M. 218
Lehmkuhl, U. 207
Leibenluft, E. 59, 140
Lengning, A. 286
Lenzi, D. 54, 131, 143–146, 148–151
Leuzinge-Bohleber, Marianne 27, 29–30, 37, 92, 217, 226–228, 237
EVA research project 242–254
First Steps project 260–278
Levenstein, P. 286
Levine, S. 147
Lieberman, A. F. 92, 101
Liebermann, A. F. 172–173, 264–265
limbic region of the brain 99, 145, 147
Linkersdörfer, J. 220
LOEWE excellency initiative 218–219, 242
Loewenstein, G. 60–61
Long, B. 15
Lonstein, J. S. 58
Lorberbaum, J. P. 51, 58, 140
Love, J. M. 12
Lundervold, A. 244
Luster, T. 344
Luyten, P. 30, 98, 174–175
Lyons-Ruth, K. 21, 80–81, 84, 92, 97, 245
MacDonald, K. 60, 286
MacDonald, T. 60
Mackenzie, M. 5
MacLeod, J. 31
Magill, M. K. 312
Mahler, M. S. 13, 195
Main, M. 30, 97, 120, 144, 148, 150, 285
Mallinger, M. 344
maltreatment 33, 62, 92, 95
Manning, J. T. 147
Manzano, J. 132
Markman, H. J. 15
Marmot, M. G. 15
Martineau, T. M. 8
Massie, H. 37–39
maternal depression 61–62, 82
see also postpartum depression
maternal love, neural correlates 141
maternal self-esteem 353–354
Matthis, I. 312
Mattick, J. S. 9
Mavroveli, S. 245
Mayr, T. 249
Mazzoni, S. 134–135, 151
MCAST, attachment classification tool 42, 249, 252
McCaw, J. 96–97
McDonough, S. 81, 100–101, 103, 109, 170
McLaughlin, K. A. 15
McMenamy, J. M. 286
Meaney, M. J. 9, 147
“medical home” 11
medical information, sharing of 11
medical profession, biological focus of 312
meeting room, First Steps project 169–170
Meins, E. 348  
Meltzoff, A. N. 129–130, 139, 143  
Menozzi, Francesca 134–135, 151  
mental health professionals, stigma associated with 315–316  
mental health programmes, French CAPEDP study 73–86  
mentalization 32–35, 93  
mental representations during pregnancy 131–133  
Mercy, J. A. 3  
Meurs, Patrick, 15, 167–168, 174–175, 182, 270  
migration  
psychodynamics of 171–172  
vulnerabilities of immigrants 172–173  
Mikulincer, M. 151  
Minagawa-Kawai, Y. 147  
Minkler, M. 6  
mirror neuron system 142–145  
Missonnier, S. 133–134  
Mittendorfer-Rutz, E. 344  
Mittman, B. S. 6  
Modood, T. 171  
Montoya, J. L. 58  
Moore, M. K. 129–130  
Moore, P. S. 91  
Moro, M. -R. 166  
Morrison, F. J. 283–284  
Moser, J. S. 56, 114  
Moses-Kolko, E. L. 61  
Moss, E. 222, 225, 245, 265  
mother–child interaction, promoting 264–266  
Mrazek, P. J. 4–5, 15  
Muir, E. 170  
Mullan-Harris, K. 244–245  
Murphy, S. M. 354  
Murray, K. T. 286  
Murray, L. 61, 346, 352  
Musser, E. D. 60–61  
“mutual regulation” of arousal/emotions 90–91, 99  
Myers, J. E. 344  
Myers, M. 93, 95–96, 100–101  
nameless dread 328, 332–333  
nameless fear 332–333  
negative maternal attributions, violence-related PTSD affecting 92–93, 96, 101  
neglect  
prosperity neglect 230–231  
traumatic effects of 21, 26–28, 30  
Nelson, C. A. 98  
Nelson, D. C. 245  
Nelson, G. 31  
Neonatal Behavioural Observation 349  
neonatal intervention, teenage mothers 347–349  
Neubert, Verena 226, 250  
neurobiology of parenting 50–55, 139–142  
attachment behaviour 145–150  
brain response in parents 57–59  
differences between parents and non-parents 55–57  
implications for preventive interventions 151–152  
limitations of parental brain research 62–65  
mirror neuron system and parental empathy 142–145  
response to infant signals 59–62  
New York parent–child interaction project (NY-PCIP) 94–95  
behavioural findings 97–98  
neuroimaging findings 98  
psychological findings 96  
replication of study in Geneva 99–112
INDEX

Nicolson, S. 343
Nishitani, S. 56
Nitschke, J. B. 58, 140–141
Noll, L. K. 61
Noriuchi, M. 58, 140
Norman, J. 328–330
Nugent, J. K. 349
Numan, M. 54, 142
Nurse Family Partnership programme (NFP) 74, 86
German version, Pro Kind 126
nurturing aptitude of mothers 147
Nussbaum, M. 299, 302–303
object relations, early 24–28, 36–38
observation
  of foetus by parents 134–135
  of mother–infant interaction 202, 207–208
  participatory 234
  video observation 290
obstetric ultrasound 133–139
O’Connor, T. G. 30
O’Hara, J. 286
O’Hara, T. 344
Olds, David L. 15, 23, 74, 126, 132, 152, 268–269
Oppenheimer, D. 76, 80, 84
orbitofrontal cortex (OFC) 57–61, 141, 146–149
Ormel, J. 8
Osofsky, J. 344
out-reaching psychoanalysis 20
  at the Sigmund-Freud-Institut 39–43
clinical case study 24–27
development of self and attachment 29–32
eyear object relations and traumas, effects of 27–29
eyear prevention as a societal responsibility 20–22

German and international studies 22–24
  mentalization capability 32–35
  resilience research 36–39
  “outreach psychoanalysis” 14
Overland, S. 244
oxytocin and maternal behaviour 60, 352
Pakdaman, S. H. 222
Panksepp, J. 131, 264
Papastefanou, C. 284
Papousek, H. 52–53, 130, 134, 137–138
Papousek, M. 130, 134, 137–138
Paren, H. 15, 187–203, 207–208, 270
parental attachment, brain studies 145–150
parental brain responses to salient infant cues 140–141
parental empathy and the mirror neuron system 142–145
parental sensitivity 52–53, 142, 285–287
Parental Stress Inventory (PSI) 79
parent training, FILU project 283–284, 287–291
Parker, E. A. 6
Parsons, E. 76, 80, 97
Parsons, M. 347
partnered participatory research 6
paternal brain changes 63, 142
pathology, origin of 325
Pauen, S. 289
Paul, Luca-Sandra, First Steps project 260–278
Pea, R. 287
Pedersen, C. A. 142
Peebles, C. D. 93, 344
periaqueductal grey (PAG) 57–58
perinatal period, importance of 152
Petermann, F. 289
Petrill, S. A. 63
Petukhova, M. 8
physical symptoms, psychological causes
  case studies 311–312, 314–315, 321–324
  Katharina case, Freud 309–311
Pianta, R. 245
Piefke, M. 149
Pierfederici, A. 135
pilot trials 5
  adolescent mothers 343–355
  First Steps 261–262
Pine, D. S. 13, 30, 195
Piontelli, A. 134
PMI (Protection Maternelle et Infantile) 74–84
Poloczek, S. 220
Porges, S. W. 91
postnatal parent groups 205–206
postpartum depression (PPD) 26, 29, 61–62, 205, 271, 274
  CAPEDP project 75–76, 82, 84, 86
post-traumatic stress disorder (PTSD) in mothers 91–92
  and negative attributions 92–93
  child as trigger of pre-existing PTSD 93
Geneva study, CAVES
  intervention 99–112
  immigrant mothers 172–173
  New York parent–child interaction project 94–99
poverty, immigrant children’s exposure to 297–305
Powers, S. I. 148
Prange, A. J. 142
pregnancy
  parental representations during 131–133
  prenatal parent groups 204–205
  ultrasound studies 133–139
Prelec, D. 60–61
Prenzel, M. 262
preschool prevention projects 226–240
Préfet, A. L. 220
pretend-mode 33–35
prevention concepts 4
prevention principles 6–10
prevention sciences 3–4, 6
preventive interventions 8–9, 10
primary care, psychologists working with physicians 317–324
primary maternal preoccupation 51–53, 63, 132
Programme for International Student Assessment (PISA) 261
Pro Kind programme, Germany 126
prosocial behaviour 123–124
Protection Maternelle et Infantile (PMI) 74–84
protoconversations 147
Proverbio, A. M. 55
psychiatric diagnosis 325
psychoanalytic contributions 13–15
psychoanalytic early prevention 22–24
  clinical example 24–27
  early object relation experiences, trauma and resiliency 27–28
psychoanalytic opportunities 9–10
psychodynamics of migration 171–172
psychologists
  cooperation with physicians 313
  effects of late intervention by 314–315
  intervention study, Rome 317–324
  services, availability of 316–317
PTSD see post-traumatic stress disorder
INDEX 371

Puntambekar, S. 287
Purhonen, M. 56

Radloff, L. S. 135
Raikes, H. H. 12, 23, 283
Ramey, S. L. 15
Ramsauer, B. 42, 275
randomised controlled trials (RCTs) 4–5, 23
Ranote, S. 58, 140
Raphael-Leff, J. 132, 140
Rappaport, J. 81
Rauch, W. A. 220
regulation 8
affect/emotion 27, 29, 32, 56, 100
and joint attention 97–98
mutual 90–91, 99
of stress 202–203
Reichle, B. 31–32
Reijneveld, S. A. 244
Reliford, A. 96
Repacholi, B. 21, 245
Rescorla, L. A. 76–77, 249
resilience, 36–39
Reunier, G. 289
reward and brain response 58–59, 61–62
Rick, S. 60–61
Ricken, G. 250
Rietz, C. S. 220
right hemisphere 145–147, 151
Ripp, C. 147
risk factors
cognitive risk factors 220–221
immigrant children 260–261
social risk factors 216–217, 221
Rizzolatti, G. 143, 145
Robert-Tissot, C. 100
Robinson, J. 74
Robinson, J. L. 7–8, 168, 268, 286, 290
Rodrigo, M. J. 62

Rogoff, B. 287
romantic love, neural correlates 141
Rosenfeld, H. R. 341
Roth, T. L. 9
Rusconi-Serpa, S. 100, 102–103, 109
Rutschky, K. 200–201
Rutter, M. 3, 9, 30
Sadler, L. 15, 23, 132, 268
SAFE® programme 203–207
Sagi, A. 43, 252
Saias, Thomas 75
Salomonsson, B. 329–330
Sameroff, A. 8, 182
Sandell, A. 328, 330–331
Sander, K. 58
Sanders, M. R. 287
Sandler, J. 29, 144
Saul, J. 3
scaffolding, 287–288, 290–291
Scattergood, E. 188, 270, 274
Schechter, D. S. 14, 61, 91–101, 264, 351, 354
Scheeringa, M. S. 93
Schick, A. 247–248
Schmidt, R. M. 344
Schmucker, G. 207
Scholfield-Kleinman, K. 96–98
Schore, A. N. 141, 146–147, 151
Schultz, A. J. 6
Schultz, R. T. 140
Schulz, P. 220
science, current trends 11–12
Scott, S. 248–249
secure attachment
and sensitive maternal behaviour 286
protective factor 245
SAFE® programme 203–207
Seeger, D. 269
Seifritz, E. 55, 140
self, early development of 29
Sen, A. 299
sensitivity, maternal 31, 58, 91, 130, 152
attachment intervention promoting 344–346
sensitivity, parental 52–53, 142
assessment instruments 289
home learning environment 285–286
training sessions 291
separation anxiety 92–93, 98, 195
separation, impact on child 28
separation–reunion
Geneva Study 99–112
NY-PCIP study 94–99
Sepulveda, S. 30
Sewell, M. D. 63
sexual development 196
Shapiro, V. 132, 172, 206
Shaver, P. R. 30, 151
Shonkoff, J. P. 3, 12
Shure, M. B. 15
Siegel, D. J. 147
Siegert, M. 22–23, 244–245, 260, 264, 275
Sieratzki, J. S. 147
Sigmund-Freud-Institut (SFI) 21–22
early prevention research at 242–254
IDeA 218–219
“out-reaching psychoanalysis” at 39–43
preschool prevention projects 226–240
“silent trauma” 28–29
Simonelli, A. 134
Simoni, H. 119, 133
Simons, R. 56
Singer, T. 143
Singletary, W. 188, 192
Sirin, S. R. 244–245
Slade, A. 132, 152
Sluzki, C. 263, 276
Smith, V. 21, 245, 249
Smyke, A. T. 98
social risk factors 216–217, 221
Social Support Interview (SS-A; SS-B) 78
socio economic status (SES)
and child psychopathology 244–245
and development of immigrant children living in poverty 174–178
Solano, L. 309, 312–313
Solomon, J. 132, 147–148, 245
somatic symptoms, psychoanalytically inspired psychology 313
Son, S. -H. 283–284
Soulé, M. 119, 121
Spannungsbogen (fragments of experiences) 300
Spencer, M. B. 167
Speranza, A. M. 148, 151
Spicer, P. 8, 165
Spieker, S. J. 245
Spitz, Rene 13, 21, 28, 119
“spoiling” an infant, concern over 201
Spoth, R. L. 8
Sroufe, L. A. 30
Stacks, A. M. 245
Stadelmann, S. 119, 123
Stallmann, F. 269
Stanat, P. 217
Stanley, C. 21, 245, 249
Starthilfe (Jump Start) project 233–237, 239
Steele, B. F. 14
Steele, H. 91, 144, 249
Steele, M. 91, 144, 249
Stern, J. M. 58
St.-Laurent, D. 222
Storch, S. A. 283
Storey, A. E. 142
Strange Situation Procedure (SSP) 79
strange situation test 30, 84, 93
Strathearn, L. 51, 59, 140
stress, “toxic” 11–12
stress regulation 202
stress trauma 28
subjectivity of analyst 330–331
substance using mothers 62, 189
Suchman, N. E. 64–65
Suess, G. J. 286
Sulllivan, M. W. 145
Suomi, S. J. 147
supervision
of cases, day-care teams 229, 232–234, 236–237
of psychologists under training 84–85
Swain, J. E. 51, 60, 131, 140–142
Sweatt, J. D. 9
Sylva, K. 284–285
Symptom Check-list (SCL-90) 79
symptoms, value of 324
Szajnberg, N. 37, 39

Tambelli, R. 129, 132–133, 138, 148
Target, M. 32–34, 144, 265
targeted intervention 4, 12, 14, 81
immigrant parents and infants 165–182
Taylor, L. 285
teenage pregnancy 190
Teicher, M. H. 30
Tereno, Susana 75–76
Teti, D. M. 60
Thomas, L. A. 21, 30
Thompson, K. L. 151
Thompson, L. A. 63
Titz, C. 218
Todd, B. K. 147
toddlers
affective communication
processing by traumatised mothers 90–114
clinical case, fear 328–341
cognitive stimulation and parental sensitivity 283–291
Tomasello, M. 129
Toth, S. 30
“toxic stress” 11–12
training
for parents, FILU project 283–284, 287–291
in psychoanalytic child therapy 234
of staff 269–270
transition to parenthood 129–131
implications for preventive interventions 151–152
neural correlates of parenting behaviour 139–150
parental representations during pregnancy 131–139
translational research 6, 151–152
trauma in early life
effects of 28–29, 35–36
and resilience 36–39
trauma therapy 204, 206
traumatised mothers 90–114
trends in health practice and science 10–13
Trevarthen, C. 130, 147
triadic capacity 118–119, 132–133
and family alliance 124–126
and prosocial behaviour 123–124
five dimensions of 121–122
triadic perspective for parenting 118–119
clinical research programme 124–126
family relationships and early child development 119–124
research programme involving prevention 126–127
Tronick, E. Z. 90–91
Turner, J. B. 96–98

ultrasound 133–139
Umiltà, M. A. 143
uneducable adolescents 227–228
universal intervention 4
Unoka, Z. 29
unresolved traumatic experiences 206

van den Boom, D. C. 100, 344
Van de Pol, J. 287–288
Van IJzendoorn, M. 30–31, 43, 84, 148, 207, 252, 286
videofeedback 102–103, 113, 275
videotaped parent–infant interactions 204–206
violence, intergenerational, prevention of 113–114
violence-related PTSD 91–92, 100–101
“violent attachment” 34
Vogel, J. 27, 37, 243
Volmann, M. 287
Voss, T. 223
Votruba-Drzal, E. 283–285
Vulnerable Attachment Style Questionnaire (VASQ) 79

Wai Wan, M. 249
Waldenfels, B. 297, 299
Wallerstein, N. 6, 11
Warren, B. 346
Waters, E. 76, 78, 93, 148
Weinfield, N. S. 245, 265
Weiss, C. H. 354
Weller, A. 51–52
Wells, K. 64
Welniarz, Bertrand 73
Wendland, Jaqueline 73
Wenger, E. 287
Wennberg, J. E. 10
Werbner, P. 171
West, K. K. 265
Whitman, T. L. 344
Wicker, B. 60–61, 143
Widmayer, S. M. 349
Wilfong, E. 76, 79
Wilke, D. J. 62
Willheim, E. 96–98
Williams, S. K. 62
Wimmer, G. E. 60–61
Wittling, W. 146
Wolff, Angelika 22, 39, 227, 286
Woll, B. 147
Wolraich, M. L. 30
Woolfolk Hoy, A. 223
Working Alliance Inventory (WAI) 79
Working Model of the Child Interview (WMCI) 95, 102
response from 103–108
World Vision Childhood Study 302–303
Wynne-Edwards, K. E. 142
Zagoory-Sharon, O. 52, 60, 63, 142
Zeanah, P. D. 81
Zeki, S. 58, 140–141
Zelenko, M. 100