

Cambridge Studies in Social and Emotional Development

PARENTING REPRESENTATIONS

THEORY, RESEARCH, AND
CLINICAL IMPLICATIONS

Edited by
OFRA MAYSELESS

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Parenting Representations

The study of parents from their own perspective, not just as socializing agents of their children, has been long neglected. This book summarizes and presents the new and surging literature on parenting representations, namely parents' views, emotions, and internal world regarding their parenting. Within this area, several prominent researchers typically coming from the attachment tradition suggested various ways of assessing parenting representations, mostly by way of semi-structured interviews. This book presents their conceptualizations and includes detailed descriptions of their interviews and their coding schemes. In addition, a review and summary of the growing number of findings in this domain and an integrated conceptualization that serves as a theoretical base for future research are presented. Finally, the clinical implications of the study of parenting representations are discussed at large. Clinical notions and conceptualizations regarding parenting representations are presented and thoroughly discussed, including detailed case studies that demonstrate, among other things, intergenerational transmission of representations.

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continued after the Index

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Theory, Research, and Clinical Implications

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OFRA MAYSELESS

University of Haifa



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אורי מייזלס

This book is dedicated to my precious, wonderful son – Oren Mayseless.

On August 20, 2003, not yet 22 years old, he was killed with his friend, Oren Simon, by a careless driver in the painfully beautiful, lush green landscapes of Alaska, far from his home – Israel.

Ouri was a bright-eyed child with a breathtaking life force, a creativity that always took us by surprise, an endless curiosity, and an open heart to love and embrace everybody – a heart of gold. From early on, I was highly curious to see what would become of him. How would he integrate these extraordinary capacities? I was sure it would be something unexpected and astonishing. Ouri grew up to be an amazing young person, naive, yet mature, fun-loving and yet highly dedicated and serious in his studies and sport pursuits, extremely bright, and above all exceptionally imaginative and creative. He studied electrical engineering and was a top A student. He had a wonderful, amazingly loving relationship with his one (and only) girlfriend, in which intimacy, trust, respect, and love were so vibrant and glowing – they both served as a model couple for their friends and for us. Before his last semester of studies, he went on a trip to Alaska. He wanted a relatively safe place of nature, to relax, have fun, and to contemplate.

As we flew to Alaska to bring him back home with us and I was all torn from within, I was struck by the sharp, excruciating realization that as a researcher whose passionate professional life was devoted to the study of the marvelous encompassing love of parents for their children, I now was witnessing firsthand how unbearable, unthinkable, and crushing such a blow to this bond can be.

Psychologists often wonder what makes people choose a certain subject for research; why researchers find certain topics challenging and captivating. For me the answer seemed quite obvious. I was fascinated with the strong force of loving and caring, which is manifested all around us in myriad ways and relations but which seemed to me to be most powerful, all-encompassing, and so wonderfully giving in the case of parents. I have been, of course, aware of the obvious evolutionary “explanation,” but this did not “explain” or clarify what I found so fascinating – the love (physical, emotional, cognitive, and behavioral) that parents have and express toward their children. Out of this focus grew the work on this volume, as I found like-minded scholars who were attracted to understand, reveal, and uncover more about the working of the parents’ mind and soul.

Little did I know that an almost impossible lesson about parenting awaited me just as I was about to finalize the work on this volume.

My friends and colleagues were not sure that I would be able to touch these topics again as they so directly bear upon my pain. But for me, the work on this volume and in particular my other parallel path to find meaning “through time and space” have been like a lighthouse in the middle of the storm. I did not search to elude pain, nor did I sink into it and embrace it, but in my personal life as in my professional life I wanted to see what does it mean. And mostly, I wanted to understand why.

I miss my son incessantly – in a physical sense as a part torn from my own body leaving me cut open, in an emotional sense as a flowing love and energy that now does not have an earthly address, and in a psychological sense as a friend and companion, as a growing evolving wonderful person, and as a fun and bright ally.

Ouri had two names and they both become him so well – *Ouri* which means in Hebrew *my Light* and *Shmuel* (in English – Samuel – who was a prophet and by God’s order nominated the first and second kings of Israel – *Shaul* and *David*). The meaning of the word *Shmuel* in Hebrew is “given/received from God.” I believe in a way Ouri had some of the qualities reflected in his two names – having both *Truth* and *Love* as his inner guiding lights, with a highly inquisitive mind and a passion to give and help others – he was God’s present to me.

I know that in a different sphere Ouri knows about this book and about this dedication, and that he – there – and I – here – know that it does not even come close to expressing how and what I feel for him and what he might have been able to accomplish – had he lived.

I know that like me when writing this dedication, his heart is aching and his tears are running, but he is content that the mission has been accomplished.

Contents

<i>List of Illustrations</i>	page xi
<i>List of Tables</i>	xiii
<i>List of Appendixes</i>	xv
<i>List of Contributors</i>	xvii
<i>Preface</i>	xix
<i>Acknowledgments</i>	xxiii

Part One Theoretical Perspectives

- 1 Studying Parenting Representations as a Window to Parents'
Internal Working Model of Caregiving 3
Ofra Mayseless
- 2 Maternal Representations of Relationships: Assessing
Multiple Parenting Dimensions 41
Donna R. Steinberg and Robert C. Pianta
- 3 Social Cognitive Approaches to Parenting
Representations 79
Duane Rudy and Joan E. Grusec

Part Two Research Applications

- 4 Communicating Feelings: Links Between Mothers'
Representations of Their Infants, Parenting, and Infant
Emotional Development 109
*Katherine L. Rosenblum, Carolyn J. Dayton, and
Susan McDonough*

- 5 The Dual Viewpoints of Mother and Child on Their Relationship: A Longitudinal Study of Interaction and Representation 149
Anat Scher, Judith Harel, Miri Scharf, and Liora Klein
- 6 Modeling and Reworking Childhood Experiences: Involved Fathers' Representations of Being Parented and of Parenting a Preschool Child 177
Inge Bretherton, James David Lambert, and Barbara Golby
- 7 Maternal Representations of Parenting in Adolescence and Psychosocial Functioning of Mothers and Adolescents 208
Ofra Mayseless and Miri Scharf
- 8 Like Fathers, Like Sons? Fathers' Attitudes to Childrearing in Light of Their Perceived Relationships with Own Parents, and Their Attachment Concerns 239
Ruth Sharabany, Anat Scher, and Judit Gal-Krauz

Part Three Clinical Implications

- 9 Intergenerational Transmission of Dysregulated Maternal Caregiving: Mothers Describe Their Upbringing and Childrearing 265
Judith Solomon and Carol George
- 10 Good Investments: Foster Parent Representations of Their Foster Children 296
John P. Ackerman and Mary Dozier
- 11 Intergenerational Transmission of Experiences in Adolescence: The Challenges in Parenting Adolescents 319
Miri Scharf and Shmuel Shulman
- 12 Interplay of Relational Parent–Child Representations from a Psychoanalytic Perspective: An Analysis of Two Mother–Father–Child Triads 352
Hadas Wiseman, Ruth Hashmonay, and Judith Harel
- 13 Why Do Inadequate Parents Do What They Do? 388
Patricia M. Crittenden

Index 435

Illustrations

4.1	The affective tone of mothers' representations of their infants by WMCI typology classifications	<i>page 129</i>
4.2	Mothers' emotion displays across the Still Face procedure, from the initial Free Play episode to Reengagement following the Still Face: Maternal positive affect	134
4.3	Mothers' emotion displays across the Still Face procedure, from the initial Free Play episode to Reengagement following the Still Face: Maternal hostile/angry behavior	135
13.1	Six memory systems as a function of cognitive and affective information	394
13.2	The Dynamic-Maturational Model of attachment	400
13.3	A clustering of parental representation organized around a patterned gradient of covarying psychological processes	404

Tables

2.1	Descriptive Statistics for CPAP-PDI Construct Means after Adjustment for Skewness ($N = 80$)	<i>page 57</i>
2.2	Significant Correlations Representational Dimensions ($N = 80$)	58
2.3	Correlations between Demographic Variables, Maternal Psychological Characteristics, Maternal Behavior, and CPAP-PDI	60
4.1	Representational Typology Categories for the WMCI	124
4.2	Conceptual Grid Linking Elements of the Affective Organization of Parenting with Assessment Measures Employed in the Michigan Family Study	127
4.3	Correlations between Affective Tone Scales and Maternal Affective Behavior during the Still Face Procedure	133
5.1	Reliability Coefficients, Inter-correlations among the Parenting Representation Scales, and Correlations with Child Variables	159
5.2	Spearman Correlation Coefficients of Mother's Parenting Representations with Early Mother–Infant Interaction and with Child's Representations of the Mother Figure	160
6.1	Percentages and Frequencies of Men Who Mentioned Specific Topics When Comparing Themselves to Their Mothers and Fathers in Terms of Similarities and Differences	192
7.1	Caregiving Characteristics of Mothers in Adequate/Balanced, Flooded, and Restricted Categories of Parenting Representations	217
7.2	Cross-Tabulation of Mothers' Attachment and Parenting Representations	225

7.3	Parenting Representations as a Function of Mothers' Three Categories AAI	225
7.4	Parenting Representations as a Function of Mothers' Four Categories AAI	227
7.5	The Association between Mothers' Parenting Representations and Their Sons' Coping with Military Service – Time 2	228
7.6	Individuation of Sons as a Function of Their Mothers' Parenting Representations Categories	229
7.7	The Association between Mothers' Parenting Representations and Their Sons' Individuation – Time 3	230
8.1	Fathers' Attitudes to Childrearing and Their Perceived Relationships with Own Mother and Father	249
8.2	Fathers' Attachment-Related Concerns, Perceived Relationships with Own Mother and Father, and Their Childrearing Attitudes: Pearson Correlations	250
9.1	Life Events Summary	274
12.1	Interplay among Mother–Father–Child Relational Representations	370

Appendixes

2.1	Parent Development Interview, adapted from Aber, Slade, Berger, Bresgi, & Kaplan, 1985	<i>page</i> 69
2.2	Description of Parent Development Interview Constructs	70
4.1	The Working Model of the Child Interview	139
5.1	The Parenting Interview: Coding Scales	170
8.1	The Items Used from the CRPR (Block, 1981) and the Relationship Scales	257
10.1	“This is My Baby” Interview	312

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Preface

This book grew out of my deep interest in caregiving, a central encompassing motivation that, as I see it, “makes the world go round.” Parenting seemed to me to be the prototypical example of this motivation, yet the most taken for granted. From my own experience as a mother, I knew how powerful this bond and commitment to the well-being, happiness, and survival of your children is, and how central in my being, though not always in my doing. As I was focusing more on this emotion/feeling/bond/motivation, it became clearer to me that our motivation to give care, our love for our children, and the great many concessions and sometimes sacrifices that we are willing to make for them without expectation to be reciprocated and for the “sole” purpose that they will be healthy, happy, and fulfilled are not at all the same as our needs to be nurtured and protected. In other words, I became quite convinced that the caregiving motive is very distinct from attachment. Yet, unlike attachment which has been examined and studied from various angles, caregiving and in particular parenting have been much less explored.

This last statement is not fully true because developmental researchers as well as clinicians have devoted considerable contemplation and study efforts to uncover what a good parent is. In an effort to understand this issue, they explored for the most part parental behaviors and practices (and less so parental emotions and cognitions) and in particular looked at the effects of these on child outcomes. Thus, in most of the extant literature on parenting, the effects of parents’ actions and practices on their children were the focus of the investigation in an attempt to provide the world with a valid answer to the question how best to parent. Parents were viewed as a vehicle to promote the child’s success, welfare, and well-being. The focus on the parental subjective world, parents’ feelings and thoughts, emotions and attributions, love and

hate, dedication and guilt were considered less central in and of themselves. For example, whereas it seemed quite natural to fund investigations aimed at uncovering normative changes within the child, few such studies were conducted with regards to the normative development of parenting, before and after people become parents.

Recently (for the past two decades), a surge of interest in the subjective world of the parents has emerged. This involved a focus on the parents' subjective experience and grew out of the social cognition literature (as reviewed in Rudy and Grusec – Chapter 3), the psychoanalytic literature (see chapters by Scharf and Shulman – Chapter 11 – and by Wiseman, Hashmonay, and Harel – Chapter 12), and the attachment paradigm (see a review in Mayseless – Chapter 1 – and Steinberg and Pianta – Chapter 2). Most of the chapters in this volume reflect the growing interest within this latter paradigm – the attachment point of view – in parental representations as reflecting their internal subjective world.

As reviewed in Mayseless (Chapter 1), most researchers used interviews to explore parents' mind, which they analyzed in various ways. The chapters in this volume present a diverse set of studies with such interviews and describe the interviews they used and their coding scheme. Steinberg and Pianta (Chapter 2) present their work with the adapted version of the *Parent Development Interview* (PDI), which includes also issues of achievement and compliance. They demonstrate that these concerns have unique associations with child and mother characteristics as well as with her behavior and that they are distinct from attachment-related issues. Applying another adaptation of the PDI with mothers of six-year-old children, Scher, Harel, Scharf, and Klein (Chapter 5) show that mothers' sensitivity in infancy is associated with their parenting representations, which in turn are correlated with the children's representations of the maternal figure. Using the *Working Model of the Child Interview* (WMCi), Rosenblum, Dayton, and McDonough (Chapter 4) show that mothers' representations have a marked effect on emotion activation and regulation of mothers and infants. Finally, applying the *Parenting Representations Interview-Adolescence* (PRI-A) with mothers of adolescents, Scharf and Mayseless (Chapter 7) show that mothers' representations are associated with their own AAI and with the sons' psychosocial functioning one year and three years later.

In two chapters, the fathers', not mothers', parenting representations are assessed using interviews – the *Parent Attachment Interview* by Bretherton, Lambert, and Golby (Chapter 6) and questionnaires by Sharabany, Scher, and Gal-Krauz (Chapter 8). In both chapters the associations of these

representations with the fathers' perceived relationships with their own parents are described. Both studies suggest that fathers learn from their own fathers what not to do; that is, instead of emulation, fathers use compensation and reworking to define their own paternal role vis-à-vis that of their fathers.

Solomon and George (Chapter 9) too examine how parents' experiences with their own parents affect their parenting and the child's functioning. They suggest that childhood experiences of helplessness exhibited in a parental rage pattern are associated with similar helpless parenting representations and child's disorganized attachment. Four other chapters directly address clinical issues related to parenting representations. Ackerman and Dozier (Chapter 10) examine representations of foster parents and demonstrate the significant and central role of parental investment assessed using a special parenting interview (*This is My Baby Interview*). Like Solomon and George, Scharf and Shulman (Chapter 11) examine intergenerational transmission of parenting. They look at parents of adolescents and use interviews to examine the parents' own experiences as adolescents as well as their current parenting. Using case studies they demonstrate the powerful, and in many cases unsuccessful, attempts of parents to correct and undo past experiences with their own parents when they themselves were adolescents in their current relationships with their adolescents. Similarly, Wiseman, Hashmonay, and Harel (Chapter 12) examine processes of intergenerational transmission as they observe the connection between parents' representations of the child and the child's representations using the WMCI and the Core Conflictual Relational Theme method. Similar to Scher et al., they describe powerful associations between these two sets of representations. Interestingly, the three chapters that present clinical cases (Chapters 9, 11, and 12) underscore in particular cases of role reversal and enmeshment. Each suggests different ways by which parents can succeed to break the chain of intergenerational transfer of negative experiences.

Different conceptual issues are addressed in all the chapters. Here I would like to pinpoint in particular three of the chapters. Rudy and Grusec (Chapter 3) address the extant literature in social cognition that has been applied to parenting representations. This literature provides a rich conceptual base for researchers focusing on parents' minds. Similarly, Mayseless (Chapter 1) provides an overview of studies of parenting representations and offers a general conceptual model as well as highlights future directions. Finally, Crittenden (Chapter 13) presents a challenging and valuable model of parenting representations of parents whose parenting goes awry. This model can serve as a very significant point of departure for clinicians who wish to understand

“what’s on this parent’s mind” when treating parents who mistreat, neglect, or abuse their children.

Together this whole collection of chapters presents new ideas, avenues for research, and clinical implications in the realm of parenting representations, as well as new insights into parents’ mind and soul – their feelings, emotions, and cognitions, their origin and their effect on children.

Acknowledgments

This work would not have been done had I not received extensive help from many people. First and foremost of them is Miri Scharf, my dear friend and colleague – whose encouragement, great ideas, and above all good and sound advice helped steer this work in the right direction at so many junctions. Other friends as well and in particular Anat Scher, Hadas Wiseman, and Ruth Sharabany have been highly helpful at different phases, when the idea first came up and when I was wholly invested in it, and at different levels, professional and personal.

Naama and Oded, my children, are the ones from whom I learned firsthand about parenting and about this great gift. They are the well and source of my love and insights – flowing and originating in them.

On a different sphere, the work on this topic and on this book would not have been realized at all – had I not my husband, Meir, at my side serving as my “holding environment” and anchor, a web of confidence and security.

Finally, I would like to thank my colleagues and friends who have contributed to this volume. Their enthusiastic participation, openness to my requests and suggestions, and professional investment in writing the chapters have made it a successful realization.

PART I

Theoretical Perspectives

1 **Studying Parenting Representations as a Window to Parents' Internal Working Model of Caregiving**

Ofra Mayseless

Abstract

This chapter examines the concept of parenting representations as embedded in the conceptualization of attachment theory regarding the caregiving behavioral system. The growing body of research on parenting representations is extensively reviewed, and the notion of “internal working model of caregiving” is presented in relation to the extant literature. In general, strong reliability and validity of various schemes for coding interviews assessing parenting representations are demonstrated, and their distinctiveness with regards to state of mind with respect to attachment is noted. The implications of this research and the concept of Internal Working Models (IWM) of caregiving are discussed, and future directions for theory and research are suggested.

Historical Overview

What's on a Parent's Mind

The study of parenting has a long history in clinical and developmental psychology. For the most part, researchers treated parents as the independent variable and were interested in them inasmuch as they affected the normal or pathological development of children. The interest in the parent, in most cases the mother, as a subject in and of itself, and the focus on the parent's own desires, wishes, thoughts, and affective world, has developed mostly in the last two decades. Four major fields of research displayed such a focus: (1) researchers in the psychoanalytic tradition (e.g., Kraemer, 1996; Stern, 1989; Stern-Bruschweiler & Stern, 1989; see a review in Wiseman, Hashmonay, & Harel, [this volume](#)), (2) scholars of a feminist outlook (e.g., Ruddick, 1989), (3) researchers taking the social cognition perspective in

developmental psychology (see a review in Rudy & Grusec, [this volume](#)), and (4) scholars in the tradition of attachment theory. This chapter focuses on the last-named, and examines the concept of parenting representations as embedded in the conceptualization of attachment theory regarding the caregiving behavioral system.

Attachment has been the major guiding theory in the area of emotional and social development for the past two decades and is one of the most influential theories in developmental psychology. From the start, Bowlby (1969/1982; 1973), the founder of the theory, discussed two relevant and reciprocal behavioral systems: attachment and caregiving. Attachment referred to the motivational system of the infant to receive care whereas caregiving referred to the motivational system of the parents to give care and protection. Since the inception of the theory, the study of attachment processes has flourished and evinced an increasing number of advances in theory and conceptualizations, as well as in measures (see, for example, the recent *Handbook of Attachment* edited by Cassidy & Shaver, 1999).

The study of the parenting motivational system lagged behind. But in the past few years interest in the caregiving system has surged and is exemplified by several publications. George and Solomon suggested that researchers should devote similar research efforts to the caregiving system as they have to the attachment behavioral system (George & Solomon, 1989). Following Bowlby, they further advocated that the two systems, though related, are separate, and each should be studied in its own right. In 1996 they edited a special issue of the *Infant Mental Health Journal* devoted to caregiving, which published several empirical studies of caregiving processes (e.g., George & Solomon, 1996). In the recent *Handbook of Attachment*, they wrote a central chapter on the caregiving system (George & Solomon, 1999a). A book highlighting caregiving from an attachment perspective has been written by Heard and Lake (1997) presenting the authors' perspective on the issue, including also a clinical focus. More recently, a major theoretical target article in *Psychological Inquiry* (Bell & Richard, 2000) was devoted to caregiving, with more than a dozen commentaries by prominent researchers in developmental psychology and other related areas.

Theoretical interest in the parenting motivational system (the caregiving behavioral system) has been paralleled by an empirical attempt to assess parents' views, emotions, and internal world regarding their parenting. This has culminated in a new and expanding area of research involving *parenting representations*. Several researchers in different laboratories have suggested various ways of assessing these. They have mostly employed semi-structured interviews, and have developed various different ways of analyzing those

interviews (e.g., Bretherton, Biringen, Ridgeway, Maslin, & Sherman, 1989; Benoit, Zeanah, Parker, Nicholson, & Coolbear, 1997; Aber, Belsky, Slade, & Crnic, 1999; see the review below). Though not openly stated, their focus on parenting representations seems to reflect an attempt to examine and investigate parents' Internal Working Models (IWMs) regarding caregiving (see the [next section](#)). In many respects that research followed the breakthrough in the development of the Adult Attachment Interview (AAI) with its new conception and method, which provided a way to assess adults' IWMs regarding attachment (Hesse, 1999).

In this chapter, I first present the concept of Internal Working Models and briefly describe the innovation in conceptualization and research following the development of the AAI (a thorough discussion of the research with the AAI can be found in Hesse, 1999). I then extensively review the growing body of research on parenting representations and summarize its main findings. Finally, I discuss the implications of this research and the concept of the Internal Working Model of caregiving, suggesting future directions for theory and research.

The Place of Internal Working Models in Bowlby's Theory

One of the major postulates of Bowlby's (1969/1982) theorizing was that the two motivational systems, attachment and caregiving, are not drives but function as behavioral systems that are characterized by several distinct features. First, behavioral systems are organized as goal-corrected, with specific set goals rather than a pre-wired sequence of behaviors. Behaviors change and adjust to serve the different goals, and this adjustment involves a feedback loop. Similar behaviors may reflect the operation of different goals and the same goal may be served by different behaviors in the same individual and across different individuals. The meanings of specific sequences of behaviors derive from the goals that govern them. In addition, Bowlby suggested that the different behavioral systems (e.g., attachment and caregiving) need to be coordinated in various ways to allow the achievement of the distinct goals. Finally, behavioral systems are seen as governed by higher processes of integration and control, and hence include IWMs, namely representations of the world and how the relevant set goals can be achieved. According to Bowlby (1969/1982; p. 82), working models include a model of the environment (social and non-social) as well as a representation of the person's own skills and potentialities. Because behavioral systems are seen as governed by these IWMs and because the significance of behaviors depends on the meaning imparted to them by these IWMs, researchers started focusing on the

study of IWMs as a major avenue to understand the workings of behavioral systems, in particular the behavioral system of attachment (Main, Kaplan, & Cassidy, 1985).

Several researchers tried to elucidate and clarify the concept of Internal Working Model, in particular regarding the attachment behavioral system (e.g., Bretherton & Munholland, 1999; Collins & Read, 1994; Crittenden, 2000). First, it was claimed that these representations are built on actual experiences, and in the case of attachment on actual experiences with caregivers in attachment-related circumstances. Second, IWMs were seen as serving to regulate, interpret, and predict the person's as well as the caregiver's attachment-related behaviors, thoughts, and feelings. IWMs were not seen just as reflecting a reality but also as regulating and in some cases creating a reality. Third, IWMs were seen as somewhat flexible to some extent in that they can be updated in light of a person's new experiences and information, and modified by a person's changing capacities to interpret and reflect on different experiences. Fourth, the representations of the environment and the self were seen as involving several distinct memory systems: procedural, semantic, and episodic, at various levels of consciousness and involving varying degrees of affective load. Finally, IWMs were also seen as reflecting the operation of diverse defensive processes that serve to protect the person from unbearable anxiety and psychological suffering. These defensive processes are involved in all facets of the IWMs such as the representations of the environment and the self, the goals set, and the plans adopted.

The Adult Attachment Interview: A Conceptual and Assessment Breakthrough

With regard to the attachment behavioral system, the Adult Attachment Interview (AAI) and its coding (Main & Goldwyn, 1998) proved a very powerful means for gaining some understanding of working models of attachment. The AAI is an hour-long structured interview designed to arouse memories and emotions related to attachment experiences. Interviewees are requested to give a general description of their relationships with their parents (and of other caregivers who acted in an attachment-related capacity) and to support these descriptions by specific biographical incidents. Additionally, they are asked about specific experiences of separation, rejection, or abuse. Furthermore, they are asked to explain their parents' behavior, to describe the nature of their current relationship with their parents, and to assess the influence of childhood experiences on their development and personality. The interviews are

audiotaped and transcribed verbatim; the coding is based on the transcript. Scores are assigned to inferred childhood experiences of love, rejection, involvement, inattentiveness (neglect), and pressure to achieve exerted by each parent, and to the respondent's state of mind with regard to idealization, anger, derogation, insistence upon inability to recall childhood, passivity, and coherence. Some of the AAI scales refer to the content of the representations (e.g., parental love), but major coding is based on how the coder views the interviewee's reflections, evaluations, and defensive processes, what has been termed the *state of mind with respect to attachment*.

Specifically, from the transcript the interviewee's emotional access and openness to past attachment-related experiences are assessed, as well as the coherence in describing them. Adults with a *secure (autonomous)* state of mind with respect to attachment have somewhat easier access to past experiences, positive or negative, which they tend to describe openly and coherently. Insecure adults do not access past experiences easily, or they describe them incoherently. Specifically, *dismissing* adults tend to restrict the importance of attachment in their own lives, or to idealize their parents without being able to illustrate their positive evaluations with concrete evidence. They seem to use the defensive strategy of minimizing attachment behavior and feelings. They often appear to lack memory of childhood experiences related to attachment. *Preoccupied* adults are still greatly involved and preoccupied with their past attachment experiences and are, therefore, not able to describe them coherently and reflectively. They may express passivity or anger when describing current attachment relationships with their parents. In addition, a fourth category was proposed, for people who are *unresolved* with respect to loss or trauma. Such individuals are also placed in one of the other three major categories as a forced categorization.

The AAI was first developed and validated (Main et al., 1985) against the behavior in the Strange Situation of infants of the interviewed adults. Correspondence between the classification of the adult's IWM according to the interview and the infants' attachment classification served to validate the AAI (van IJzendoorn, 1995). In addition, the AAI was related, as anticipated, to observed parenting behaviors (Hesse, 1999). In all, the AAI has proved a valuable and valid measure of the internal working model of attachment as regards parent-child relationships (Hesse, 1999).

The development of the AAI was a major leap forward for understanding IWMs. Specifically, it demonstrated that with regard to predicting children's attachment relationships, the overt content of the caregiver's IWM as well as the presumed quality of the relationships with his or her own parents as

deduced from the interview by the coders are not as important as the current affective and defensive stance with regard to attachment experiences. Secure adults seem to be free to evaluate these experiences, good or bad; dismissing adults seem to reject parts of these experiences, whereas preoccupied adults seem to be over involved in them without the capacity to emotionally disengage and reflect on them.

The success in using the AAI to uncover an important part of a person's IWM in respect of attachment led to attempts by several groups of investigators (see the following sections) to examine parenting representations using similarly constructed interviews. These contained questions about the child and the parent's relationship with him or her instead of questions pertaining to the parent's own parents or caregivers. Though not explicitly stated, these efforts can be seen as aimed to uncover the parents' IWMs regarding their caregiving. The following sections review these efforts extensively.

Assessments of Parenting Representations: Coding Schemes and Findings

In presenting the different ways of assessing and examining parenting representations, I have chosen to organize the review according to the different researchers or assessment methods. I then review studies with a more particular focus on a specific clinical population or a special aspect of the representation. As happens so often in science, many of these investigations started around the same point in time in different laboratories, by different researchers often with only partial knowledge of the others' work at first. The order in which these studies are reviewed does not reflect their importance or their temporal sequence.

The Parent Attachment Interview (PAI): Bretherton and Her Colleagues

Within the attachment tradition, Bretherton and her colleagues (Bretherton et al., 1989) were among the first to suggest examining parents' representations regarding their parenting, and voiced surprise at researchers' neglect of the parental side of attachment till then. On the basis of Main's Adult Attachment Interview, Bretherton and her colleagues devised an in-depth structured yet open-ended interview, the *Parent Attachment Interview* (PAI), which focused on parents' attachment experiences with a specific child. Bretherton and her colleagues used the term attachment but referred to the parental side, namely the parent's provision of caregiving and the caregiving bond

that characterizes most of these relationships. They chose the term “parental attachment” advisedly. In their own words,

It is not only the infant who keeps tabs on the parent, and who becomes distressed upon separation; parents also tend to keep a watchful eye on their infant, to intervene when the infant is getting into a potentially painful or harmful situation, to experience feelings of alarm when the infant’s whereabouts are not known or the infant’s well-being is in danger, and to feel relief when the child is found or the danger past. In our view the term “caregiving”, though often used to describe the parental side of the attachment relationship, does not sufficiently reflect the depth of the parent-to-child bond. (Bretherton et al., 1989; p. 205)

The interview adapted for mothers of toddlers included structured questions followed by probes asking for examples and elaborations (see Bretherton, Lambert, & Golby, [this volume](#)). The questions revolved around the following issues: mother’s thoughts and feelings at the baby’s birth, the baby’s personality, experiences at nighttime and during other separations, autonomy-related negotiations, compliance issues, mother’s feelings such as joy, anger, worry, or guilt, comparisons with her own parents’ caregiving, and projection into the future. The interview was first administered to 37 mothers of two-year-olds as part of a longitudinal study which included assessments of a number of other constructs (e.g., temperament, maternal personality, attachment Q-sort). Data analysis included content analysis, which focused on the mother’s thoughts and feelings regarding particular attachment issues, and a global analysis using a nine-point scale assessing sensitivity/insight concerning the mother’s relationship with the infant (see Bretherton et al., [this volume](#)). Content analyses exposed meaningful variations among the mothers as well as several joint themes such as quite high tolerance of inconvenient attachment behavior at night. The sensitivity/insight scale was significantly associated with security of attachment as indexed in the Strange Situation, attachment Q-sort, and attachment story completions. The scale was also significantly and positively associated with the child’s perceived attention span and sociability and negatively with the child’s emotionality. Similarly, it was positively associated with mother’s extroversion and cohesive and adaptable family relations.

In another study with 40 mothers and their toddlers (Biringen, Matheny, Bretherton, Renouf, & Sherman, 2000), the interview was further scored using Westen’s (1991) six dimensions of the SCORS-Q: Affect tone of relationship schemas, Understanding of social causality, Experience and management

of aggressive impulses, Cognitive structure/complexity of representations, Capacity for emotional investment in moral standards, and Self-esteem. Associations between these scores as well as the sensitivity/insight score and mother's sensitivity and structuring during observations with her child at 18, 24, and 39 months were examined. Several aspects of the maternal representation (but not the global scale of sensitivity/insight) were associated with the mother's behavior. For example, experience and management of aggressive impulses, capacity for emotional investment in moral standards, and particularly self-esteem were associated with observed maternal sensitivity at 18 months. By 24 and 39 months, observed maternal structuring during the interactions was significantly associated with the mother's self-esteem, which refers to her having realistically positive views of herself in the relationship.

Lately the PAI was used to examine maternal representations in divorced mothers (Golby & Bretherton, 1999), and as reported in [this volume](#) (Bretherton et al.) it was also administered to intact couples including the fathers. In both cases parents' interviews were subjected to a content analysis aiming to identify themes and categories of responses rather than quantitatively assess specific dimensions in parents' representations. For example, in the divorced-mothers study themes of resiliency were identified and highlighted.

In general the PAI has been employed mostly with parents of toddlers and pre-school children, and has been analyzed qualitatively and also by use of quantitative scales reflecting global aspects of the interview narrative such as insight/sensitivity or self-esteem and sense of competence in the maternal role. It has shown moderate association with a diverse set of measures of attachment security of the child and was associated with mother's behavior during an observed interaction with the child.

Parent Development Interview (PDI): Aber, Slade, and Colleagues

At the same time as Bretherton and her colleagues devised the PAI, Aber and his colleagues (Aber et al., 1985) developed a somewhat similar interview, the Parent Development Interview (PDI), to assess parenting representations. In general the interview addressed similar issues and had a similar format: open-ended questions, followed by probes with a request for specific examples and elaboration. This interview asked the parents to describe the relationships with the child, not his or her personality as in the PAI. In addition parents were asked what they liked or disliked about their child, how different or similar they were to the child and to their own parents, pleasures and difficulties in their relationship with the child, and their own strengths

and weaknesses as parents. They were asked about separations and various feelings and challenging situations (e.g., mother could not give the child her full attention). The PDI is distinguished by the specific coding scheme developed by Slade and her colleagues (Slade, Belsky, Aber, & Phelps, 1999). In this coding scheme, three general dimensions are assessed by means of several rating scales which are scored based on the interview as a whole: (1) parents' representation of their own affective experience, (2) parents' representation of their child's affective experience, and (3) parenting state of mind or thought processes. Parents' own affective experience is measured on scales assessing anger, neediness, separation distress, guilt, joy and pleasure, and sense of competence and efficacy. Child's affective experience is measured on scales assessing child's anger, separation distress, and dependence-independence. Finally, scales for state of mind assess general coherence and richness of perception, the latter adapted from Zeanah, Benoit, Hirshberg, Barton, and Regan (1994).

In a large sample of 125 mothers of first-born *male* toddlers, the PDI was administered twice: when the children were 15 and 28 months old (Aber et al., 1999; Slade et al., 1999). In addition mothers were administered the AAI and observed twice at home with their toddlers. Though they assessed quite a large number of separate constructs in the PDI, following factor analyses the researchers used three major scales: (1) coherence/joy, comprising coherence, richness of perception, and joy-pleasure; (2) anger, comprising degree, acknowledgment, and modulation of parental anger; and (3) guilt/separation distress, comprising parent's degree and acknowledgment of guilt and separation distress. The other scales were not included in the analyses in that study. Coherence/joy was negatively associated with anger to a small to moderate degree.

In terms of validation, these researchers (Aber et al., 1999, Slade et al., 1999) reported that mothers with an autonomous state of mind assessed by the AAI scored highest on the joy-pleasure/coherence dimension of the PDI, and mothers classified as dismissing on the AAI scored highest on the anger dimension of the PDI. In addition, the joy-pleasure/coherence dimension was positively associated with a general scale of positive mothering as observed on the two home visits. Thus, parenting representations of toddlers as measured on global scales reflecting content (i.e., anger) as well as thought processes (i.e., coherence) were associated, as expected, with mothers' state of mind with respect to attachment and their behavior with their toddlers.

Parenting representations were stable across this year at a range of 20–25% of explained variance. Additionally, there was a general increase in anger as the children moved into the terrible-twos; anger at 15 months contributed

negatively to joy/coherence, whereas coherence/joy contributed negatively to anger a year later, after accounting for simple stability between identical scales. Daily parenting-related hassles contributed to anger identified in the interview at 28 months, and positive mothering as observed on the home visits contributed to joy/pleasure over and above the stability of parenting representations. Together, these findings demonstrated that parenting representations sensitively reflect changes in the relationships and in the general parenting context.

In another sub-sample ($N = 40$) of a larger sample of middle class mothers of infants (girls and boys), the PDI was again administered along with the AAI (Slade, Grienemberger, Bernbach, Levy, & Locker, 2001). Mothers and infants were also observed in the Strange Situation. This time the PDI was analyzed by the application of a modified assessment of what Fonagy terms reflective function (Fonagy, 1996; Fonagy & Target, 1998). Mother's reflective function in the PDI was manifested in her capacity to attribute mental states to her child and to herself in relation to the child, namely to keep the baby in mind and reflect on the baby's experience. Mothers' reflective function was associated, as expected, with autonomous state of mind in the AAI, with infants' attachment security in the Strange Situation, and with mothers' low levels of atypical maternal behaviors assessed by the AMBIANCE coding scheme (Lyons-Ruth, Bronfman, & Parsons, 1999) during the Strange Situation. The authors advise caution in interpreting this result because of the small sample and the small to moderate association between mother's AAI and child's attachment security. Still, they report that this moderate association was fully mediated by maternal reflective functioning as attested in her parenting interview. Again, parenting representations as assessed with the PDI proved associated with maternal state of mind with regard to attachment, the child's attachment security, and maternal behavior.

Parent Development Interview (PDI): Modification by George and Solomon

Modifying the PDI, George and Solomon (1989) extended the use of the interview to mothers of older children (aged six years) and incorporated changes relevant to parenting in this age group (for example, they included questions regarding separation to go to school). In the first study, with 32 mother-child dyads, they suggested two complementary rating scales, which were applied to the whole transcript: a *secure base* scale, which assesses how effective the mother is as a secure base for her child, and how much she displays a goal-corrected partnership with her child; and a *competence* rating scale, which assesses how far she fosters autonomy and growth in her child, who reacts

positively to these endeavors. Both scales reflect *maternal strategies and behaviors*, unlike the coding of the PDI which focuses on the *relationships between the mother and the child*. The two scales correlated highly, and were also strongly correlated with attachment security of the child as exhibited in a reunion procedure in the laboratory; but they were weakly associated with Q-sort items derived from observations of child's behavior at home.

Subsequently, George and Solomon (1989) suggested a somewhat different way of analyzing the interview, again focusing on the maternal side. They relied on their elaborate theoretical model (Solomon & George, 1996) of different parenting strategies for giving protection: *flexible protection*, *distant care*, *close care*, and the partial or full *abdication of the protective role* (Solomon, George, & De Jong, 1995). They developed four rating scales reflecting these general parenting strategies, which in turn are expected to yield different attachment patterns in the child. The four scales, *secure base*, *rejection*, *uncertainty*, and *helplessness*, are expected to be associated with secure attachment (flexible care), avoidant attachment (distant care), ambivalent attachment (close care), and disorganized or controlling attachment (abdication of protection), respectively. They are based on the whole interview and on the content of the interview, as well as its narrative style reflecting the mother's thought processes. Depending on her highest score, a mother could be categorized into one of the four caregiving strategies. In the sample described previously, George and Solomon reported strong association between these scales, and the caregiving categories based on them, and the mothers' corresponding AAI categories, as well as the child's corresponding attachment categorization determined following a reunion procedure (Solomon & George, 1996).

A similar interview was applied with a larger sample of 144 mothers (married and divorced) and their toddlers (Solomon & George, 1999). The interview was again coded with the secure base scale as a global assessment of parenting representations. In addition, for divorced or separated mothers another scale, psychological protection, was used to analyze the questions pertaining to father's visits. This scale assesses the extent to which the mother is judged as taking active measures to avoid or mitigate the child's distress during paternal visitation. The two measures correlated moderately, and both were independently associated with infant's attachment security in the Strange Situation. Replicating the findings in the small sample of six-year-olds, this study showed a clear association of parenting representations with infants' attachment security, too.

In sum, like Bretherton and her colleagues (e.g., Bretherton et al., 1989) and Aber, Slade, and their colleagues (e.g., Aber et al., 1999; Slade et al., 1999), George and Solomon also demonstrated a significant association between

mothers' parenting representations (specifically, the secure base scale) with mothers' autonomous state of mind with respect to attachment as assessed by the AAI as well as with attachment security of their children (one-year-olds and six-year-olds). George and Solomon further suggested an interesting and promising conceptualization of four caregiving strategies assessed by four general scales applied to the whole interview and categories based on these scales.

*Parent Development Interview (PDI): Modifications
by Pianta and Colleagues*

The PDI was modified by Button Pianta, and Marvin (2001) as well. As described more fully in Chapter 2 (Steinberg & Pianta), these researchers suggested extending the examination of parenting representations beyond attachment-related aspects, affect, and thought processes (i.e., narrative style) to issues of compliance and achievement in the mother-child relationship and to issues of boundaries between the two. They suggested using a coding scheme that marks the existence of a certain theme or issue on a question-by-question basis rather than relying on a global coding of the whole interview. They examined a large sample of 112 mothers with children aged one to four years, including children diagnosed with cerebral palsy or epilepsy and a control group. Mothers' representations proved to reflect their children's clinical status: children with more severe disability were associated with less mention of compliance issues and more pain; and pain was positively associated with longer time since the diagnosis. Enmeshment in thought processes was associated with experiencing more worry and pain in the relationship and more pressuring behavior in a problem-solving task. Representations of worry about the child's future were associated with less support and less positive affect in an interaction with the child.

The same interview was applied in Australia by Shamir-Essakow, Ungerer, Rapee, and Safier (2004) to examine mothers' representations of 103 children aged three to four years (of whom 71 were identified as inhibited). Maternal anxiety was associated with higher levels of anger, worry, and guilt in the caregiving representations. Mothers of inhibited children described more incidences of comforting and safe haven and lower levels of neutralizing/defensiveness in their thought processes regarding caregiving than other mothers. In the inhibited group, mothers who had secure children as assessed by the preschool version of the Strange Situation scored higher on perspective taking and lower on neutralizing/defensiveness and emotion invalidation in their caregiving representations than mothers of insecure children. In sum,

the research using this extended coding scheme found significant associations between parenting representations and mothers' behavior with the child; also, parenting representations reflected the different nature of the child's clinical condition or temperament and were associated with the child's attachment security. This approach, which considers other issues besides attachment, may be an important extension of other ways of analyzing the interviews.

Working Model of the Child Interview (WMCI): Zeanah and Benoit

About the same time as Bretherton and her colleagues developed the PAI, and Aber and his colleagues devised the PDI, Zeanah and his colleagues (Zeanah, Keener, Stewart, & Anders, 1985; Zeanah, Keener, & Anders, 1986) started examining mothers' and fathers' prenatal perceptions and feelings with regard to their expected infant (see later). Consequently, Zeanah and Benoit (1995) developed the Working Model of the Child Interview (WMCI: see Wiseman et al., [this volume](#)) to assess parents' perceptions and subjective experience of their infants, and their relationships with their infants.

Similar to the other interviews (the PAI or the PDI), the WMCI is an hour-long structured interview, which includes general questions followed by probes eliciting examples and elaborations. It was administered to parents from as early as pregnancy to when the child was five. It begins with a developmental history of the infant, from conception and birth. Parents are asked to describe impressions of the child's personality and behavior, in what way the infant is like or unlike the parents, and times when the infant is upset or difficult. They are asked about their relationships, what in the child pleases and displeases them, and how they envision the child in the future. Besides being audiotaped and transcribed, as in the other interviews, this one can be analyzed from videotapes by means of continuous Likert scales.

Eight primary Likert scales refer to richness of perception, openness to change, intensity of involvement, coherence, caregiving sensitivity, acceptance, infant difficulty, and fear for safety. Eight secondary rating scales assess the affective tone of the representations: joy, anxiety, pride, anger, guilt, indifference, disappointment, and other emotions expressed by the caregiver. The transcripts are categorized into one of three categories of representations: balanced, disengaged, or distorted. Balanced representations are characterized by moderate to high coherency, high levels of involvement, acceptance, and sensitive caregiving; also moderate to high scores on openness to change and richness of perception, joy, and pride, and low scores on anxiety, anger, disappointment and indifference. Balanced representations are expected to be associated with secure attachment.

Disengaged representations are characterized by coolness, emotional distance, and indifference, and are expected to be associated with avoidant attachment. Distorted representations reflect internal inconsistency within the representation and are expected to predict ambivalent attachment. The parent may be confused or anxious, self-involved, and insensitive, and may have unrealistic expectations of the infant. Intense feelings, both positive and negative, are expressed. In distorted representations the parent's interview evinces high scores on intensity of involvement, anxiety, and/or anger.

The WMCI was first administered to 45 mothers of infants (Zeanah et al., 1994) and showed a significant concurrent association with the infants' Strange Situation classification (69% concordance). A second study (Benoit, Parker, & Zeanah, 1997) replicated and extended these findings with a sample of 85 mothers. Again, mothers' categories of parenting representations were significantly concurrently associated with infants' Strange Situation classifications; in particular the balanced-secure concordance was apparent. In this sample the WMCI was administered during the third trimester of pregnancy also. High stability of categorizations (80%) was demonstrated, in particular regarding the balanced and distorted categories. Prenatally assessed WMCI categories also significantly predicted Strange Situation classifications. Again, the balanced-secure concordance was the most prominent.

Benoit, Zeanah, Parker, Nicholson, and Coolbear (1997) also examined the parenting representations of several at-risk groups: mothers of infants with failure to thrive, mothers of toddlers with sleep disorders, and mothers of infants seen in a general infant psychiatry clinic ($N = 54$), and compared them with a group of mothers of matched controls ($N = 45$). As expected, the prevalence of insecure representations (disengaged and distorted) was greater in each clinical group than in the control groups, with 81% insecure as opposed to 62%, respectively. Mothers in the clinical groups differed significantly from controls on several of the specific scales. They scored lower on richness of perception, openness to change, intensity of involvement, sensitivity, acceptance, and joy.

Another at-risk sample consisting of 50 preterm babies was examined by Cox, Hopkins, and Hans (2000). They administered a modified version of the PAI to mothers of 19-month-old infants but used the WMCI coding scheme. They found a significant association between mothers' parenting representations (balanced, disengaged, and distorted classifications) and the infants' secure/insecure Strange Situation classification. When specific insecure parenting representations and Strange Situation categories were examined, there was a significant association between the balanced and the secure classifications and between the disengaged and the avoidant ones, but not

between the distorted representation and infants' ambivalent and disorganized classifications.

These studies were extended by Rosenblum, McDonough, Muzik, Miller, and Sameroff (2002). With a sample of 100 mothers, these researchers (see also Rosenblum, Dayton, & McDonough, [this volume](#)) showed that mother's representations were associated with her behavior during a still-face procedure with her seven-month-old infant. Specifically, only babies of mothers with balanced representations returned to a high level of positive affect during the reengagement phase following the still-face episode, and the levels of maternal positive affect of mothers with balanced representations mediated this effect. In addition, disengaged representations were associated with maternal rejection as observed during the still-face procedure, and infants of mothers with disengaged representations demonstrated more negative affect during the initial baseline episode.

In a large sample of 206 mothers, Huth-Bocks, Levendosky, Bogat, and von Eye (2004) administered the WMCI to pregnant women along with a questionnaire measure of their attachment experiences. Risk factors such as domestic violence, low SES, and single parenthood were also assessed. A year later, infants were observed in the Strange Situation. The authors used six major scales from the WMCI, related to thought processes and to content of the representations (richness of perception, openness to change, coherence, caregiving sensitivity, self as mother, and acceptance), to model mothers' prenatal representations of caregiving in Structural Equations Modeling. Maternal attachment experiences were significantly related to their prenatal representations of caregiving, which were significantly related to the infant's attachment. Maternal risk factors were strongly associated with mothers' prenatal representations of caregiving. In an extension of this last point, Huth-Bocks, Levendosky, Theran, and Bogat (2004) looked more closely at the association between domestic violence and prenatal representations. They showed that domestic violence was associated with more negative and insecure parenting representations (e.g., more anger, depression, and anxiety, as well as a perception of the not yet born infant as more difficult, lower openness to change, and lower acceptance).

In sum, the WMCI has been used fairly extensively by various researchers, including the original group who developed the coding scheme and others. Maternal representations as assessed using the WMCI with pregnant women as well as with mothers of preschool children, demonstrated high stability and the expected association with (1) the Strange Situation classifications of the infants, (2) maternal positive and negative affect during interaction with the baby, (3) the baby's emotion regulation, (4) maternal perceived attachment

experiences, and (5) clinical status or risk factors. The balanced and the disengaged categories proved more informative than the distorted one. Similarities to and differences from the mother's state of mind with regard to attachment have not yet been explored.

*Parenting Representations Interview – Adolescence (PRI-A):
Mayseless and Scharf*

Extending the examination of parenting representations to parents of adolescents, Mayseless and Scharf (this volume; 2001) devised an extensive interview, the PRI-A (Parenting Representations Interview – Adolescence), which builds on the PAI, the PDI, and the WMCI but adds aspects relevant to parenting of adolescents, such as monitoring, enabling autonomy, and partnership/mutuality (Scharf & Mayseless, 1997/2000). Mayseless and Scharf (2001) used scales referring to narrative style (i.e., balanced, restricted, and flooded) and scales referring to the content of the representations. These included scales for the mother (competence and self-understanding), the child (confidence in the child, child's understanding), the relationship (warmth/affection, monitoring, enhancing autonomy, mutuality/partnership, role-reversal, push to achieve, and capacity to envision future relationships with the child), and strength of various negative feelings (anger, guilt, worry, pain) (Scharf, Mayseless, & Kivenson-Baron, 1997/2000). With a sample of 82 mother–adolescent son dyads (Scharf, Mayseless, & Kivenson-Baron, 2004), these authors found mothers' representations to be associated with their state of mind as assessed by the AAI (Mayseless & Scharf, this volume) and their physical and psychological symptoms (Mayseless & Scharf, 2001). In general, autonomous mothers differed from preoccupied mothers in their evincing higher competence, self- and child understanding, confidence in the child, warmth/affection, partnership/mutuality, autonomy promotion, monitoring, and balanced representations. Preoccupied mothers were most conspicuous in their role reversal and flooded parenting representations and their high levels of symptoms. Dismissing mothers showed the lowest levels of negative emotions regarding their parenting and the highest level of restriction in their narrative.

Mothers' parenting representations were also associated, as expected, with the son's AAI (Mayseless, Scharf, Kivenson-Baron, & Scharf, 2005). Specifically, in contrast to dismissing adolescents, autonomous adolescents had mothers whose representations reflected higher levels of competence, warmth/affection, monitoring, and partnership/mutuality. Finally, mothers' parenting representations were associated with psychosocial functioning of their sons concurrently and at two other points in time: a year later during

their home-leaving transition to mandatory military service and four years later at the end of the three-year military service (Mayseless et al., 2005). For example, mother's competence, her confidence in her child, and partnership/mutuality were concurrently associated with the son's secure attachment style, the son's capacity to provide emotional support, and the quality of his relationship with his best friend – notably emotional closeness and balanced relatedness.

These same qualities in mothers' parenting representations as well as warmth/affection and a flooded narrative (reversed) were associated with better coping with the home-leaving transition to mandatory military service as indexed by the son's and peers' reports. Finally, some of these qualities in maternal representations as well as mother's understanding of herself and her son, and degree of balance in the narrative, were predictive of the son's level of individuation four years later. By extending research of parenting representations to parents of adolescents, and including outcomes not assessed previously, this study attests to the importance of mothers' parenting representations in predicting a host of psychosocial outcomes in their sons. These associations still need to be examined with adolescent girls and with fathers' parenting representations as well.

Assessment of Particular Aspects in the Representations

Applying a specific interview to examine resolution of their child's diagnosis, Pianta, Marvin, and their colleagues (Pianta, Marvin, Britner, & Borowitz, 1996; Marvin & Pianta, 1996; Sheeran, Marvin, & Pianta, 1997; Welch, Pianta, Marvin, & Saft, 2000) suggested that facing a diagnosis of a child with a disability is a crisis and is experienced by parents as loss or trauma which they need to resolve to be able to care effectively for their child. Resolution was assessed by the capacity to integrate the experience of the diagnosis and its consequences into parenting representations and to reorient and refocus on problem solving in the present and the future. In a large sample ($N = 97$), Sheeran et al. (1997) found that mothers who were resolved felt less stressed with their parenting and perceived more support from their family, and their husbands felt more satisfied in the marriage. In addition, mothers' resolution of the diagnosis was significantly associated with infants' attachment security as assessed by the Strange Situation (Marvin & Pianta, 1996), but was not related to qualities of feeding interactions (Welch et al., 2000) or to diagnosis type, severity of condition, developmental age, and time since receiving the diagnosis (Pianta et al., 1996). Thus, the general concept of parenting representations can be extended to include

coping, at the representational level, with child's disability or diagnosis of a chronic illness.

In another application of an interview to assess a particular aspect of parenting representations, Dozier and her colleagues (e.g., Bates & Dozier, 2002; Tyrrell & Dozier, 1999) examined foster parents' representations; they focused on several specific aspects by designing specialized questions. In a study comparing biological mothers with foster mothers ($N = 50$), Tyrrell and Dozier (1999) investigated mothers' perceived attachment-related difficulties of the infant, and mothers' understanding of attachment strategies (e.g., their capacity to explain why a child would avoid a mother after a separation and their understanding that the child nevertheless needed the caregiver but had difficulty expressing it). Mothers' understanding of attachment strategies was significantly related to their observed sensitivity during a home visit. Foster and biological mothers showed no difference in such knowledge and sensitivity, but as expected, the former perceived more attachment-related difficulties than the latter. Mothers' capacity to reflect on attachment-related issues and understand them was associated with their greater observed sensitivity.

In another study, Bates and Dozier (2002) again focused on specific dimensions in the foster mothers' parenting representations and designed an interview that specifically focuses on these issues: the "This is My Baby Interview" (TIMB; see Ackerman & Dozier, [this volume](#)). This quite short interview (compared with the PDI or the WMCI) takes about 10 minutes and inquires about mother's view of the baby's personality, whether she ever wished she could raise the child to adulthood, missing the child, how she views the effect of the current relationships on the child, and what she wants for the baby for now and in the future. Three dimensions are scored: *Acceptance* (i.e., pleasure, delight, and respect), *commitment*, and *belief in her influence* on the child. In the study, these dimensions were quite highly intercorrelated. The results ($N = 48$) indicated that autonomous mothers (as assessed by the AAI) were more accepting and had stronger belief in their capacity to influence the infants in their care when these children were placed earlier than when they were placed later. Child's age at placement was not associated with these parenting representations for non-autonomous mothers. The parenting representations of autonomous mothers sensitively reflected the contextually important variable of child's age at placement.

Focusing on foster mothers' investment, Ackerman and Dozier (2003; described in Ackerman & Dozier, [this volume](#)) found that high levels of caregiver investment were associated with more positive self-evaluations among school-age foster children and lower levels of aggressive response biases towards peers. Furthermore, as indicated in the chapter in [this volume](#)

(Ackerman & Dozier), foster mothers' representations indicative of investment proved an important predictor of other indicators of psychosocial development of children. Caregiver representations reflecting investment may serve as a protective factor in foster children's psychosocial development.

Parenting Representations Before the Baby Is Born

Several researchers were interested in the images and expectations that parents have of their child during pregnancy, namely even before the child is born, and how these change after the birth as the parents begin to form a relationship with a "real" baby.

Zeanah et al. (1985; 1986) examined mothers' and fathers' prenatal perceptions of their infant using a quantitative self-report questionnaire. They asked parents to report on the infant's temperament as presumed during the third trimester of pregnancy, and then one month and six months postnatally. Parents were also interviewed regarding the infant's personality and their relationship with the infant at the same points in time, and these interviews were analyzed qualitatively (Zeanah, Zeanah, & Stewart, 1990). Parents were able to give prenatal descriptions of their child, and these were associated with those obtained postnatally. These perceptions (e.g., activity level, affect, sociability) varied considerably, and, as expected, parents' descriptions became richer and fuller with infant's age. Parents harbor images of their children before they are born and these representations are associated with those they hold later on, after they form an actual relationship with their child.

Ammaniti, Baumgartner, and Candelori et al. (1992) similarly explored the content and structure of maternal representations using an interview and a questionnaire asking mothers for descriptions of themselves and the baby with a sample of 23 primiparous women in their third trimester of pregnancy. Already then the research exposed a complex set of representations of the mothers and their baby (Ammaniti, 1991). In the interview mothers were asked to describe themselves as mothers and their as yet unborn baby. These descriptions were similar in general style (e.g., richness of description, coherence). However, their separate descriptions of themselves, their own mothers, and their expected baby, using a list of adjectives, were quite different. In most cases mothers had more positive views of their coming baby than of themselves or their mothers. Fave-Viziello, Antonioli, Cocci, and Invernizzi (1993) found similar results and emphasized that these representations evolve and change after the baby is born. In particular, representations of the mother of herself as a mother and of

her baby seem to change, reflecting the actual relationships formed between the two.

A similar finding was reported by Ilicali and Fisek (2004), who asked each of 23 pregnant women and 22 mothers of infants to describe five different significant figures, namely her child, herself as mother, herself as a person, her own mother, and her partner, using a list of 18 adjectives. In addition these authors used a brief interview with the same women, which was analyzed in reference to several scales: coherence, congruence of affect, richness, and flexibility, as well as positiveness of perceptions of each of the persons described. There were no significant differences between the mothers-to-be and the actual mothers. Mothers' representations showed a strong association between self as mother and self as person, and a moderate association between self as mother and the perception of the child. For the pregnant women, perception of the child and the self as person were moderately associated with perceptions of partner. Interestingly, perception of own mother was not significantly associated with perceptions of other figures. These findings underscore that while the pregnant women entertained various images and perceptions of their as yet unborn child, these representations, though mostly projective, reflected only moderately their perceptions of other important figures in their lives.

Using a similar method with two large groups of high- and low-risk pregnant women in Finland ($N = 84$ and 296 , respectively), Pajulo, Savonlahti, Sourander, Piha, and Helenius (2001) found that representations of child, self, own mother, and partner were more negative in the high-risk group. Still, child ratings were the most positive of all, and were the closest to those of the low-risk group. These results attest to the association of clinical risk and representations of the child and the mother even before the child is born; yet they show a tendency in future mothers to a positivity bias in their perceptions of the as yet unborn child, one noted by Stern (1991) and discussed by him as indicating an adaptive process.

Changes in Parents' Representations Following Therapy

Changes in maternal representations following therapy were also examined (Cramer & Stern, 1988). Cramer et al. (1990) examined maternal representations of 38 mothers of children less than 30 months old who were referred to therapy because of various symptoms such as sleep and behavior disorders. Dyads underwent two kinds of a brief (less than 10 sessions) mother–infant psychotherapy. Mothers were asked to fill out questionnaires, were observed interacting with their child, and engaged in an interview termed *R* developed

by an international research group (Stern et al., 1989) and also employed by Ilicali and Fisek (2004). The interview examines representations of the child, the mother in her mothering role, the mother and father as persons, and the mother's own mother. It probes for affects, wishes, anxieties, and self-esteem and asks the mother to evaluate past and present influences on her mothering. Therapy success was evaluated one week and six months following termination of the therapy by means of questionnaires, observed interaction between mother and child, and the *R* interview.

Maternal representations became more positive following the therapy, showing a medium effect size, and this improvement was retained at the six-month follow-up. Specifically, infants were seen as calmer, more affectionate, more independent, and less aggressive. Mothers perceived themselves as happier, more active, calmer, and with higher self-esteem when relating to themselves as persons, but surprisingly showed no change in their perceptions of themselves as mothers. Their own mothers were perceived as more anxious but also as more available and more satisfied in their role as mothers. Finally, mothers felt less sadness in their relationship with the child, and more positive affect overall. Some of these effects, in particular positive changes in self-esteem and in positive affective tone, persisted even 12 months following the intervention (Robert-Tissot et al., 1996). Though not targeted directly in the psychotherapeutic interventions, parenting representations reflected the change in the relationships brought about by the psychotherapy.

General Discussion

General Summary of Research

The rich body of studies reviewed above demonstrates the burgeoning interest of developmental researchers and clinicians in assessing parenting representations. Most of the studies used measures modeled after the AAI, namely a structured or a semi-structured interview of an hour to an hour and a half. The questions pertained to the child, the mother, and in particular their relationship, and respondents were asked to supply concrete examples besides general descriptions. Researchers tended to include a core of questions pertaining to several major issues such as parents' general descriptions of the child and the relationship, positive and negative emotions, and comparison with their own childhood experiences. Depending on their focus, researchers were quite ready to include additional questions. The WMCI, concentrating on pregnancy, includes a large section pertaining to this experience. George and Solomon (1989), when referring to mothers of six-year-olds, added questions