

An infant mental health service

The importance of the early years and evidence-based practice

This document gives detailed evidence for the importance of infant-parent psychotherapy, and related relationship-based interventions, as a therapeutic and preventative service for at-risk babies and their parents. Each section can stand alone; but helping small people seems to call for big explanations!

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Introduction

Probably the most important period in everyone's life is one they cannot remember. The first two or three years, the time before memory can be verbally tagged for later retrieval, set their stamp on all that comes after. This can be positive, as when a child gains the resource of being resilient in adversity so that later stressful events do not become a trauma; or negative, when a child's early parenting has left a 'basic fault' (Balint, 1968) because there was too great a discrepancy between the infant's needs and the quality of caregiving that was available. This discrepancy easily gets lost or ignored. Karr-Morse and Wiley (1997:278) pinpoint three obstacles that seem to prevent us facing the unpleasant reality of an increasing number of babies. 'The first of these may be grief, anger, or sadness from personal childhood experiences.' Sometimes these are too painful to re-awaken. There may also be sadness and regret for the memories we may have inadvertently created for our own children. 'A third barrier to acting on this information is to feel overwhelmed by the depth and breadth of the problem.' It is hard to feel helpless, especially if we face the world from the point of view of these babies. Emde (2001:23) draws attention to why the plight of many babies can be hard to contemplate and so gets pushed aside. 'It is often painful and difficult to recognise and address mental health problems in infants and young children.' Taking babies seriously opens Pandora's box. He lists four kinds of mental suffering that all would want to avoid and so might prefer not to think

about. 'Pain and distress from trauma, abuse, or loss of a caregiver; misery from neglect; suffering from cumulative stress; and suffering from lack of opportunity.' Distress can be relieved, but rescue or repair may be no more than myths created by wishful thinking unless the help is immediate. The emotional environment of infancy, which from the baby's point of view, consists of relationships with the parents, will be preserved on both a psychological and neurological level, for good or for ill. This can either be a disaster or a pathway to hope, as: 'The essence of infant mental health work lies within the parent-child relationship.' (Solchany & Barnard, 2001:46)

In many instances when an older child comes to the attention of specialist helping services provided by Education, Health or Social Services, it may appear difficult to differentiate between the effects of early experiences and reactions to current family dysfunction, which often predates the birth of the child anyway. Sometimes a simple change in parental understanding and attitude, or direct treatment of some form with the child, will enable the problem to become resolved. However, a significant population of children, whose effect and cost is out of all proportion to their number, cannot be helped in this way. It is just too late. This is why: 'Early intervention for disadvantaged children and their families can be a sound economic investment.' (Barnett, 2000:605) Babies cannot wait; for if they have been adapting to an emotionally inimical setting for any length of time then the damage caused by inappropriate caregiving will not be undone by a change of circumstances, as is all too clear with many children who have been fostered or adopted, and so much more intensive and long-term interventions becomes necessary with a subsequently greater drain on resources. These are the children who do not make use of education, who disrupt the classroom and demand attention as they become either bullies or victims, who sometimes harm themselves as much as others. As teenagers they attract labels as an alternative to success: – conduct disorder, disruptive pupil, delinquent or disturbed, and mental health diagnostic categories get dropped around them out of desperation.

In the beginning

Babies are born 'pre-programmed' to seek out and adapt to the relationship that they have with their parents. This is a biological given, evolution's answer to the prolonged period of helplessness in childhood and the need to

adjust to the infinite possibilities created within a family in interaction with the wider culture. 'Most of human knowledge cannot be anticipated in a species-specific genome ... and thus brain development depends on genetically based avenues for incorporating experience into the developing brain.' (Shonkoff & Phillips, 2000:53) The human genome transmits initial flexibility, evolutionary success is adaptation to unforeseeable social diversity. Thus the genetic imperative for the baby is fit into what you find. 'The child's first relationship, the one with the mother, acts as a template, as it permanently moulds the individual's capacities to enter into all later relationships. These early experiences shape the development of a unique personality, its adaptive capacities as well as vulnerabilities to and resistances against particular forms of future pathologies.' (Schore, 1994:1) Active, satisfying and reciprocal relationships with parents create the 'taken for granted' basis of a sense of identity, self-esteem, appreciation of others and self-control. 'Human relationships, and the effects of relationships on relationships, are the building blocks of healthy development. From the moment of conception to the finality of death, intimate and caring relationships are the fundamental mediators of successful human adaptation.' (Shonkoff & Phillips, 2000:27) More than that, the quality and content of the baby's relationship with his or her parents has a physical effect on the neurobiological structure of the child's brain that will be enduring.

Neurobiological development

Research on brain development, which has re-written the textbooks over the last decade with the advent of new techniques for imaging the functioning brain, has shown that: 'the infant's transactions with the early socioemotional environment indelibly influence the evolution of brain structures responsible for the individual's socioemotional functioning for the rest of the lifespan.' (Schore, 1994:540) Karr-Morse and Wiley, after an in-depth review of evidence from many different disciplines on the genesis of violent behaviour, return to the cellular level. 'The strength and vulnerability of the human brain lie in its ability to shape itself to enable a particular human being to survive its environment. Our experiences, especially our earliest experiences, become biologically rooted in our brain structure and chemistry from the time of our gestation and most profoundly in the first month of life.' (For a summary of recent research see: Balbernie, 2001.) The brain is at its most adaptable, or plastic, for the first

two years after birth, during which time: 'the primary caregiver acts as an external psychobiological regulator of the 'experience-dependent' growth of the infant's nervous system. These early social events are imprinted into the neurobiological structures that are maturing during the brain growth spurt of the first two years of life, and therefore have far-reaching effects.' (Schorre, 2001b:208). Thus: 'From a basic biological perspective, the child's neuronal system – the structure and functioning of the developing brain – is shaped by the parent's more mature brain. This occurs within emotional communication.' (Siegal, 1999:278) The older the child becomes, then the harder it can be to 're-wire' certain areas of the brain; which means that without intervention a child who has experienced abuse or neglect as an infant will unwittingly continue with patterns of responses that are engraved in the mind, even if circumstances change.

The importance of the attachment relationship

Attachment theory, developed by the British Psychiatrist and Psychoanalyst John Bowlby, has provided a framework for studies on both the immediate and long-term effects of early relationship experiences on the developing child. Attachment research has integrated the inner, psychological, world with the outer world of behaviour to demonstrate that: 'the patterning or organization of attachment relationships during infancy is associated with characteristic processes of emotional regulation, social relatedness, access to autobiographical memory, and the development of self-reflection and narrative.' (Siegal, 1999:67)

Secure attachment is a protective factor, conferring confidence and adaptability, although not a total guarantee of future mental health, and without this emotional resource neither child nor adult will feel free to make the most of their life's possibilities. An insecure child has too many anxieties that get in the way of investigating the world, so horizons stay safely near. Research makes it clear that: 'In general, secure children show more concentrated exploration of novel stimuli and more focussed attention during tasks. Secure attachment provides the best-known psychological precondition for tension-free playful exploration.' (Grossmann, et al., 1999:781)

By the time infants enter into their second year of life there are consistent observable differences in their behaviour that depend upon the level of security they have experienced in the relationship with their parents. Thompson

(1999:274) gives a summary of decades of research to describe how: 'securely attached children show greater enthusiasm, compliance, and positive affect (and less frustration and aggression) during shared tasks with their mother, as well as affective sharing and compliance during free play with their mothers. Securely attached infants tend to maintain more harmonious relations with parents in the second year.' Attachment provides the launch-pad, if it is firm and trustworthy then better the take-off and the more successful is the flight!

The three categories of insecure, or anxious, attachment make the child increasingly vulnerable to life's events; but apart from the most serious classification, insecure attachment by itself is not necessarily a disorder, although it can lead to one. Goldberg (2000:209) summarises how in the relevant research: 'A very common finding is that the history of psychiatric patients is riddled with negative attachment-related experiences such as loss, abuse or conflict.' Insecure attachment is a risk factor that will interact with other risks present in the emotional and physical environment of the growing child; the level of attachment disturbance is equivalent to a level of vulnerability that is difficult to change without help.

Children with problems related to insecure attachment begin to soak up statutory resources from early on when 'externalising' behaviour (aggression, non-compliance, negative and immature behaviours, etc.) demands a response. (Speltz, et al., 1990) This is probably the largest group of children that Social Services, Special Education and the Child and Adolescent Mental Health Service are expected to deal with. 'The social and economic costs of these types of disorders are staggering.' (Greenberg, et al., 1997:197) Studies have consistently demonstrated: 'a high rate of insecure attachments among clinic-referred boys and their mothers.' (p. 216) The same applies to children in special educational provision (E. B. D. schools). A recent study compared emotionally disturbed children with two control groups from other school settings. Most of these children had been diagnosed as having attention deficit disorder, the rest as either conduct disorder or depression, with half the sample having more than one diagnosis. They were found to be: 'strikingly different from their counterparts in regular classrooms in the extent to which they had experienced major disruptions in their relationships with both mothers and fathers.' (Kobak et al., 2001:252) The different categories of insecure

attachment predispose towards specific difficulties in later life.

Avoidant attachment is a strategy often developed by an infant whose parents have discouraged overt signs of either affection or distress, and who do not readily offer sympathy or comfort. The conviction that others do not see you as someone worth loving, or even responding to, can lead to low self-esteem and subsequent aggression. Close relationships are avoided as the child gets older, and such adults may mask their insecurity by becoming addicted to work, acquisitions or achievement, or retreat behind obsessional and ritualistic behaviours. 'Avoidant attachment would also seem to be a component of compulsive personality traits. At its extreme, the compulsive personality is the nightmare version of the uptight, authoritarian father who is determined to banish all emotions. He lives in a constricted world, his attentions narrowed to schedules, rules, and tidiness; and he is obsessed with trivia.' (Karen, 1994:391) The isolated child: 'who also has an avoidant attachment history and perhaps certain genetic leanings, may, if things continue to go poorly, develop into a schizoid personality.' (ibid)

Ambivalent, or resistant, attachment stems from the infant's experience of inconsistent parenting when the child is never quite sure if his or her expressions of anxiety and distress will be suitably attended to. There is a lack of consistent nurturing and protection from the parent that makes it hard for the infant to feel that exploring the world is a safe option. Thus the child has a low threshold for distress, but no confidence that comfort will be forthcoming. When upset he or she tries to get close to the caregiver, but only to become angry and resist contact. This pattern can be carried into adulthood and there reveals itself in relationship difficulties where there is either a withdrawal from others or a compulsion to be dependent. This is the hysterical personality who: 'flees from intimacy, and, like the ambivalent child, she tends to be demanding or clingy, immature, and easily overwhelmed by her own emotions. (Karen, 1994:392) A longitudinal study found that adolescents diagnosed with anxiety disorders were significantly more likely to have had resistant attachments with their parents when they were infants. (Warren, et al., 1997)

Avoidant and ambivalent attachments may be anxious, but at least they are coherent and provide the child (and grown-up) with some sort of unconscious set of strategies for relating to others. These are internal working models of what once did, and is now expected to, occur in

interpersonal exchanges. At least something is predictable, and a certain amount of meaning and satisfaction can be gained within mature relationships. This is not true for the most serious form of insecure attachment, labelled as disorganised and controlling, which is caused by pathological conditions and gives rise to pathological ways of relating.

The effect of trauma and neglect

Disorganised attachment occurs when the parent either has so many unresolved emotional issues from their own past that they have no mental space left over for their baby or, more grave, is a threat. The baby is biologically impelled to seek safety through closeness to the caregiver. When the parent is the source of fear (and this may be the result of neglect) the paradox cannot be resolved, and the child's faith in the world of relationships is demolished by their 'scaregiver' and he or she is left with no coherent means of relating to other people. 'Abuse and neglect in the first years of life have a particularly pervasive impact. Pre-natal development and the first two years of life are the time when the genetic, organic, and neurochemical foundations for impulse control are being created. It is also the time when the capacity for rational thinking and sensitivity to other people are being rooted – or not – in the child's personality.' (Karr-Morse & Wiley, 1997:45) The impact can be visible almost straight away, as it has been found that the rate of disorganised attachment associated with failure to thrive is extremely high (Wood, et al., 2000).

Disorganised attachment, frequently the result of maltreatment, becomes in itself a major risk factor that, in the 'wrong' circumstances, can disrupt many different areas of development. In a summary of research Moss et al. (1999:160) conclude that; 'Disorganized/controlling attachment is predictive of the development of behavioural problems at preschool and school age in both high-risk and normal samples. Studies indicate that both externalizing and internalizing symptoms characterize the behaviour problems of disorganized school-aged children between 5 and 9 years of age. Although at preschool and early school age, it is primarily an aggressive, disruptive behaviour pattern that is associated with disorganization, anxieties and fears related to performance, abilities, and self-worth become more pronounced in middle childhood.' The difficulties begin to be visible almost straight away. 'Children on trajectories towards serious externalizing problems are

likely to have insecure, particularly disorganized, attachments in the first year.' (Shaw, et al., 1996:697) In addition, it is now accepted that: 'severely compromised attachment histories are ... associated with brain organizations that are inefficient in regulating affective states and coping with stress, and therefore engender maladaptive infant mental health.' (Schorer, 2001a:16)

Disorganised attachment in infancy has been linked by both longitudinal and retrospective studies to a number of severe mental health problems in adulthood, such as borderline personality disorder (Fonagy, et al., 1995) or dissociative (multiple personality) disorder (Liotti, 1999), and a large number of: 'odd, intrusive controlling, or incompetent social behaviours' (Lyons-Ruth & Jacobvitz, 1999:539). A long-term prospective study of early attachment and later disturbance (Carlson, 1998) found that disorganised/controlling attachment had a marked effect on later mental health problems, most significantly on dissociative experiences.

A recent summary of the research on the connections between early attachment experiences and adult psychopathology (Dozier, et al., 1999) looks at 'attachment related circumstances' and their effect on later mental health problems. 'Loss predicts multiple disorders, including depression, anxiety, and antisocial personality disorder ... Depression is associated generally with the early loss of the mother. Major depression in particular ... has been found to be related to permanent loss of a caregiver, whereas depression characterized by anger and other externalizing symptoms has been found to be related to separation. Anxiety appears to be associated more closely with threats of loss and instability than with permanent loss. Antisocial personality disorder is associated with loss through desertion, separation and divorce.' (p. 513) It appears that the quality of a child's early parenting can put them on the pathway to different destinations. 'Affective and anxiety disorders tend to be associated most frequently with parental rejection combined with loss. Antisocial personality disorders are most frequently associated with parental rejection, harsh discipline, and inadequate control. Eating disorders are associated with maternal rejection and overprotection combined with paternal neglect, and borderline personality disorder is associated most consistently with parental neglect.' (p. 514)

The early relationship between caregiver and baby acts as an external system for the child's

internal regulation of affect. Attachment is, in many ways, a measure of self-control. The growing infant, who began totally dependent on mother for soothing, stimulation and emotional regulation, gradually claims the ability to manage alone. In other words: 'early development entails the gradual transition from extreme dependence on others to manage the world for us to acquiring the competencies needed to manage the world for oneself.' (Shonkoff & Phillips, 2000:121) Caregivers maintain the baby within comfortable, or acceptable, feeling states by intuitively recognising what their child is experiencing and how they can help to restore equilibrium. The parents' ability to do this depends on their baby's grandparents. In order to achieve such sensitivity the adult's emotional awareness is a taken for granted resource that enables an automatic acknowledgement of need and a subsequent response. 'A caretaker with a predisposition to see relationships in terms of mental contents permits the normal growth of the infant's mental function. His or her mental state anticipated and acted on, the infant will be secure in attachment.' (Fonagy, et al., 1991:214) Comfort is not always an automatic presence, in dire circumstances it can seem unattainable.

The secure child (and adult) has the psychological, and neurological, capacity to self-modulate recognised affects. Responses to stressful or exciting circumstances can be thought about rather than acted out. 'As a result of being exposed to the primary caregiver's regulatory capacities, the infant's expanding adaptive ability to evaluate on a moment-to-moment basis stressful changes in the external environment, especially the social environment, allows him or her to begin to form coherent responses to cope with stressors.' (Schorer, 2001a:14) However, when the infant has been exposed to relationships likely to engender disorganised, or controlling, attachment they have no choice about adapting to these emotional conditions, leading to: 'brain organizations that are inefficient in regulating affective states and coping with stress.' (p. 16) An inability to think about others' feelings coupled with an equal inability to control impulses will have serious long-term consequences.

The roots of violence

Infants who have suffered adverse relationships become teenagers and adults who are grossly over-represented in the criminal justice system. This is not only a direct drain on resources, it

also signifies a large population who are not in a position to contribute to the wider society (the same applies to those who never leave their dependency on mental health provision). Delinquent, antisocial and violent behaviour, frequently associated with no sense of either empathy or remorse, has been traced back to being on the receiving end of abuse and neglect during the first two years of life. (de Zulueta, 1993; Karr-Morse & Wiley, 1997) Even having a conscience cannot be taken for granted, as it has been demonstrated that this is cultivated by: 'caregivers who are warm and provide clear expectations for child behaviour that are consistently reinforced.' (Shonkoff & Phillips, 2000:243)

It has been found that attachment problems in adolescence predict later criminal behaviour (Allen, et al., 1996); and an attachment based study of prisoners with a psychiatric disorder confirmed the hypothesis that: 'criminality arises in the context of weak bonding with individuals and social institutions and the relatively ready dismissal of attachment objects. Criminal behaviour may be seen as a socially maladaptive form of resolving trauma and abuse ... Violent acts are committed *in place* of experienced anger concerning neglect, rejection and maltreatment. Committing antisocial acts is facilitated by a nonreflective stance regarding the victim.' (Fonagy, et al., 1997: 255) As de Zulueta (1993:76) puts it, violence: 'is the manifestation of attachment behaviour gone wrong.' The ability to be mindful of another's mind, and thus mind how you treat them, is derived from the infant's relationship with their caregiver.

Implications of the research data

If the early relationship between the baby and his or her parents is given the attention it deserves then this has two major implications. – Firstly, many later emotional and mental health problems can only be reworked in a similar fire as forged them. Long-term, intensive and (this time) thought-about relationships may be necessary to help those who carry the mental imprint of early trauma and neglect. For as long as the brain retains sufficient plasticity in the relevant areas then its neurochemical structure will continue to adapt to the effect of affect. Evidence suggests that psychotherapy: 'probably initially changes the functional connections among neurones, and then later converts these functional changes into changes in the actual structure of the cerebral cortex itself.' (Vaughan, 1997:68) But less effort would have been called for when the mind was, by

design, more readily adaptable. – Secondly, by recognising that the parent-infant relationship is the crucible for change and development, for good or ill, we can look beyond the individuals to the wider conditions that impinge upon this relationship. Looking for reasons removes blame. Every parent always does the best they can for their baby within what is possible for them. A broader perspective, trying to understand rather than passing judgement, points to the importance of a catalogue of known risk factors. It is feasible to anticipate what sort of situation tends to lead to insecure attachment, and thus offer treatment or some other form of help before anything goes drastically wrong. That is, before responses get so 'hard-wired' into the brain that they become increasingly hard to change.

Caregiving in jeopardy

There is a large body of research on risk factors, with general agreement on what these are and how they affect parenting. (e.g. Balbernie, 2002; Fonagy & Higgitt, 2000; Karr-Morse & Wiley, 1997; Osofsky & Thompson, 2000; Sameroff, 2000; Zeanah, et al., 1997) The parent-baby relationship is always located in a wider context, within which are found both risk and protective factors. These can harm the baby directly (e.g. pollution, unhealthy housing) but mostly are titrated into the relationship via their effects on the parents' functioning, since they dictate the baby's immediate experiences.

Nurture and nature can no longer be regarded as discretely separate issues. 'Genetic susceptibilities are activated and displayed in the context of environmental influences. Brain development is exquisitely tuned to environmental inputs that, in turn, shape its emerging architecture. The environment provided by the child's first caregivers has profound effects on virtually every facet of early development, ranging from the health and integrity of the baby at birth to the child's readiness to start school at age 5.' (Shonkoff & Phillips, 2000:219) Some (but certainly not all) of the risk factors known to adversely affect the parent-baby relationship are: problems intrinsic to the baby, such as low birth weight or congenital abnormalities; a parent who lacks the ability to sensitively attune to the baby's needs, who does not interact with their infant or maltreats him or her; one or both parents struggling with a mental health or addiction problem, or with a background of abuse, neglect or loss in their own childhood; inadequate income or sub-standard housing,

family dysfunction and (extremely harmful) domestic violence; single teenage mother without support. (These examples from Landy, 2000:345; and see also Sameroff, 2000:12) So many factors external to the baby and parent can mess up their relationship that problems here can be taken as a sign that the child, without intervention, will grow up struggling with emotional harassment from many different directions.

A working assumption that can direct both early and later intervention is that: 'attachment disruption may be a marker or summary variable for a number of pathogenic factors in the child's environment.' (Kobak et al., 2001:254) The baby has no comparisons, what is met is simply how the whole world is organised. You get born, you take your chance! 'As a source of risk, the home may reflect an atmosphere of disorganization, neglect, or frank abuse. As a source of resilience and growth-promotion, it is characterized by regularized daily routines and both a physical and a psychological milieu that supports healthy child-caregiver interactions and rich opportunities for learning.' (Shonkoff & Phillips, 2000:345)

The research on risk factors means that babies who might be likely to have adverse developmental pathways through life, because of stresses in their initial relationship with their parents, can be identified early on. Even the unborn child cannot be assumed to be safe. The foetus can be directly harmed by a number of toxins which can cause disability, regulatory disorders, attention difficulties or skill deficits; any one of which may make it hard for the neonate to settle into an attachment relationship. 'Children born already impaired are more likely to be the brunt of destructive parenting behaviours and abuse.' (Karr-Morse & Wiley, 1997:55) A major risk, the single biggest cause of cognitive delay in developed countries, is maternal alcohol consumption during pregnancy. It is now accepted that: 'the teratogenic effects of alcohol are not limited to heavy chronic exposure, or to exposure during a specific time during the gestation period.' (Fitzgerald, et al., 2000:129)

Over and above the effects of the drug on the embryo, a child born to parents with addiction problems may well develop attachment difficulties as addiction in any form flags up an attachment-related disorder, insofar as it gives the illusion of a 'safe' dependency where the object of desire is controllable. A vulnerable baby does not have to experience distress and damage that he or she cannot

comprehend before help is offered. The greater the number of risk factors found in a family's total ecology then the greater the need for immediate assistance. But sadly, the more a family is under stress then the harder it becomes to make full use of any help available. Only a relationship can change a relationship, but if you are ground down by inner and outer circumstances a new relationship is hard to contemplate.

Getting the first, prototypical, important relationship of anyone's life more or less right is a necessity, not a luxury. This is the most sensible and economic time to put in therapeutic resources. And furthermore, unique to this stage of life, one can guarantee that the child both wants to co-operate and has not got stuck in the trap of gaining self-esteem from antisocial acts. This is society's best chance to help itself. 'The interactive process most protective against later violent behaviour begins in the first year after birth: the formation of a secure attachment relationship with a primary caregiver. Here in one relationship lies the foundation of three key protective factors that mitigate against later aggression: the learning of empathy or emotional attachment to others; the opportunity to learn control and balance feelings, especially those that can be destructive; and the opportunity to develop capacities for higher levels of cognitive processing.' (Karr-Morse & Wiley, 1997:184)

The analysis of risk factors, which: 'is an exercise in estimating probabilities, not finding causes' (Sameroff, 2000:28), shows clearly how the relationships within a family can be distorted by external pressures which need intervention on a social level as much (if not more) as their emotional consequences need help on a personal level. For instance, the single most important broad risk factor that predicts later maladjustment is poverty (Brooks-Gunn, et al., 2000; Halpern, 1993) since this amplifies and concentrates all the other risks. 'Low income creates a particularly stressful context in which positive interactions with children are threatened, and punitive or otherwise negative relationships may result. The high prevalence of depression, attachment difficulties, and posttraumatic stress among mothers living in poverty serves to undermine their development of empathy, sensitivity, and responsiveness to their children, which can lead to diminished parenting behaviours and thus decreased learning opportunities and poorer developmental outcomes.' (Shonkoff & Phillips, 2000:353) The effects of inadequate financial resources can be partially addressed in many

instances, as can other adverse factors, but ultimately it takes individualised responsive care to change a pattern of caregiving.

Early intervention services: an overview

The major review by the American National Research Council (part of the National Academy of Sciences) of many different lines of research carried out on the development of children, summarises a conservative core of replicated findings over thirty years of evaluating early intervention programmes. (Shonkoff & Phillips, 2000:342) To paraphrase slightly, and omitting their extensive references, these are as follows:

- Well-designed and successfully implemented interventions can enhance the short-term performance of children living in poverty.
- Such interventions can promote significant short-term gains on standardised cognitive and social measures for young children with developmental delays or disabilities.
- Short-term impacts on the cognitive development of young children living in high-risk environments are greater when the intervention is goal-directed and child-focussed in comparison to generic family support programs.
- Measured, short-term impacts on the cognitive and social development of young children with developmental disabilities are greater when the intervention is more structured and focussed on the child-caregiver relationship.
- Short-term I.Q. gains associated with high-quality preschool interventions for children living in poverty typically fade out during middle childhood, after the intervention has been completed; however, long-term benefits in higher academic achievement, lower rates of grade retention (repeating a year), and decreased referral for special education services have been replicated.
- Extended longitudinal investigations into the adolescent and adult years are relatively uncommon but provide documentation of differences between the intervention and control groups for economically disadvantaged children in high school graduation, income, welfare dependence, and criminal behaviour.
- Analyses of the economic costs and benefits of early childhood intervention for low-income children have demonstrated medium- and long-term benefits to families as well as savings in public expenditure for special education, welfare assistance, and criminal

justice.

On the other hand, there appears to be a relative lack of evidence that wide-scale projects that broadly target a general population have much long-term effect. At the end of a review of American Federal and State interventions, such as Head Start. Farran (2000:525) finds it disheartening that: 'A great deal of money was spent on programs that have not been shown to be more effective than doing nothing at all.' This is a reminder that families do not exist in isolation.

Where a child appears to have a disadvantaged start in life the whole context of the baby-parent relationship needs to be taken into account. 'Competence is the result of a complex interplay between children with a range of personalities, the variations in their families, and their economic, social, and community resources.' (Sameroff, 222:9) There are a large number of therapeutic interventions that have been demonstrated to help the relationship between parent and infant, but results cannot be sustained in a vacuum. None of the programmes reviewed by Farran (2000:525): 'made any difference to the income, housing conditions, or employment of the parents involved, despite the fact that the families were often chosen because they had extremely low incomes.' Exactly the same adverse influences that have impinged on the adult members of the family will probably continue to exert an effect on the child throughout his or her development, making specific predictions difficult unless wider issues (such as standards of education and employment prospects) are also tackled head on. 'That is to say, significant medium- and long-term benefits of early childhood intervention may be viewed as a continuing developmental pathway that is contingent on a chain of positive effects that increase the probability of remaining on track.' (Shonkoff & Phillips, 2000:352) Perhaps it will not be possible to gauge the most important long-term effect of early intervention until follow-up studies are carried out on these infants when they have become parents in turn.

The components of an early intervention service

Two recent reviews examine what appears to be necessary for early intervention services for high-risk parents and babies if they are to meet the needs of this group (Zero to Three, 1998, 18 (4); Shonkoff & Phillips, 2000:360-367). The guiding principle of early intervention is that services need to be carefully tailored to their

client population, there is no single answer. For instance, findings from a home visiting service for high-risk mothers and babies indicated: 'that higher-risk mothers benefited more from a mental health curriculum than an educational curriculum whereas lower-risk mothers benefited more from the educational curriculum than the mental health curriculum.' (Berlin, et al., 1998:13)

Services can be roughly divided between those that are centre-based and those that are delivered in the home. 'Center-based services are more likely than home-based programs to target children directly – especially in terms of their cognitive and language development.' (p.7) Whereas: 'Home-based services, which virtually always include the child's principle caregiver, may be especially well-suited to enhancing parents' well-being and the child-parent relationship.' (p. 6) Whatever the setting, it is important that services are targeted appropriately, the aim of every provision should be clear. 'For young children where development may be compromised by an impoverished, disorganized, or abusive environment ... interventions that are tailored to specific needs have been shown to be more effective in producing desired child and family outcomes than services that provide generic advice and support.' (Shonkoff & Phillips, 2000:360) Evidence also supports the principle that proactive programmes beginning either pre-natally or at birth, have the greatest and most sustained effect. (MacLeod & Nelson, 2000) Such services can be either universal or targeted on an individual basis. The earlier the better. The best results are attained with strength-based approaches that focus on parental empowerment and involvement.

Even if an intervention seems to fit the bill, there is no guarantee it will deliver results unless the service created is appropriately funded and staffed. There can be an 'implementation gap' set up by: 'the discrepancy between the intervention that program designers plan and the intervention that families receive.' (Barnard, 1998:23) This can lead to a lower than expected take-up of services. 'The impact of quality has been shown to be particularly important for children from families who bear the burden of multiple risk-factors.' (Shonkoff & Phillips, 2000:362) Everyone wants the best for their baby, but many have no choice about what is on offer.

The intensity and duration of any intervention are obviously important, but as aspects of quality they are hard to measure. Few researchers have addressed these variables, as

there are frequently ethical implications to conducting randomised experimental studies on a vulnerable, clinical, population. However, there are some suggestive data. It has been found that I.Q. scores measured at 36 months increased with the amount of times a child attended a day centre, the number of home visits and the frequency with which parents attended relevant meetings. (Ramey, et al., 1992) Greater involvement with helping services, whether in the home or a centre, was also associated with higher ratings of the family home environment when the child was one year old, and higher I.Q. scores at age three. Mothers who actively participated in the Prenatal / Early Infancy Project for two years were less likely to abuse their children than those mothers who had only been engaged for nine months. And a fifteen years later follow-up showed an inverse relation between the amount of service received and a number of negative maternal outcomes, including child maltreatment, repeat pregnancy, welfare dependence, substance abuse and brushes with the law. (Olds, et al., 1997) Two studies of a home visiting service for infants in families living in poverty, where one used random assignment to set up a treatment and control group, found that weekly visits resulted in higher child development test scores than fortnightly visits, which in turn obtained higher scores than monthly visits. (Powell & Grantham-McGregor, 1989)

It seems a truism to stress that quality of service provision is entirely dependent on the calibre of the staff. 'Early intervention service providers carry out intensive and emotionally demanding work. Their personal characteristics – especially their ability to be emotionally available and empathic – and their training and work experience influence the ways in which they deliver services.' (Berlin, et al., 1998:8) Infant mental health services demand a core of specialised knowledge and skills congruent with the wide range of risk factors and developmental issues that need to be considered. In many ways only a dedicated, specialised, well-functioning team can hope to move between such matters as discordant attachment relationships, adult mental health and substance abuse, and the problems forced upon a family by poverty. 'In this context, the ultimate impact of any intervention is dependent upon both staff expertise and the quality and continuity of the personal relationship established between the service provider and the family that is being served.' (Shonkoff & Phillips, 2000:365)

Different approaches to infant mental health.

It appears, then, that well-planned and well-funded services for babies and parents at risk can redirect a likely developmental pathway along a new, healthier direction. 'Programs that combine child-focussed educational activities with explicit attention to parent-child interaction patterns and relationship building appear to have the greatest impacts.' (Shonkoff & Phillips, 2000:379). Whereas: 'services that are supported by more modest budgets and are based on generic support, often without a clear delineation of intervention strategies matched directly to measurable objectives, appear to be less effective for families facing significant risk.' (ibid) Early intervention can have a differing emphasis on two approaches: the first is prevention (targeting a population, or a family, identified by risk factor analysis), and the second is treatment (working with referred cases where something has already gone amiss). This is a rather artificial divide, since in practice both goals are compatible with each other within a single programme; e.g. working with families at risk will inevitably reveal 'hidden' disturbances that need to be referred on to a more specialised therapeutic service. However, conceptualising early intervention services in this way does provide a framework for examining the results of projects that were set up with different aims and methods.

Preventative services can either be centre- or home-based, just as treatment options are either clinic- or home-based as well. (And many families will be able to make use of either site for different services.) A 20 year research project following the outcome of the Nurse Home Visitation Program is a good example of a preventative intervention targeting an at risk population. This involved two randomised trials (in Elmira, New York, and Memphis, Tennessee) plus one other which is still in progress (in Denver). The investigators (Olds, et al., 1999:44) have concluded that: 'The program benefits the neediest families (low income unmarried mothers) but provides little benefit to the wider population. Among low-income unmarried women, the program helps reduce rates of childhood injuries and ingestions that may be associated with child abuse and neglect, and helps mothers defer subsequent pregnancies and move into the workforce. Long-term follow-up of families in Elmira indicates that nurse-visited mothers were less likely to abuse or neglect their children or to have rapid successive pregnancies. Having fewer children enabled women to find work,

become economically self-sufficient, and eventually avoid substance abuse and criminal behaviour. The children benefited too. By the time the children were 15 years of age, they had fewer arrests and convictions, smoked and drank less, and had fewer sexual partners.' The home visiting began before birth and: 'Compared with counterparts randomly assigned to receive comparison services, women who were nurse-visited experienced greater informal and formal social support, smoked fewer cigarettes, had better diets, and exhibited fewer kidney infections by the end of pregnancy.' (p.45) By the time their children were four years old the cost of the programme was less than the savings that had been made. This intervention: 'explicitly promoted sensitive, responsive, and engaged caregiving in the early years of a child's life.' (p.48) It was found that the biggest obstacle to benefiting from the service was the presence of domestic violence, with treatment effect diminishing as the level of violence increased. (Eckenrode, et al., 2000)

An example of a centre-based early intervention service is the Carolina Abecedarian Project where high-risk children received intensive early education five days a week, beginning at six weeks and ending at five years. Two groups of similar babies were selected, all with mothers who had educational difficulties. The control group, who only received free milk and nappies, were all (except one) eventually assessed as being retarded or of borderline intelligence. In the intervention group all the children tested within the normal range of intelligence by age three; by age 15 they scored significantly higher in general knowledge, reading and mathematics, and only 24% (48% in the control group) needed special education services. (Cambell & Ramey, 1994 & 1995) Furthermore, (according to the project's website) when the children reached 21 years of age 35% of the intervention group were at college, compared to 14% in the control group; and 65% were in employment compared to 50% in the other group. The children whose mothers had the lowest I.Q. appeared to gain the most from this intervention, and those who had a follow-up programme into elementary school benefited further still.

A bridge to a purely treatment-based programme is provided by the relationship-based intervention for very high risk mothers that has been set up in Los Angeles. This involved a randomised trial to create a similar comparison group who were only given paediatric appointments. These were all mothers who almost invariably would have

come to the attention of an infant mental health service, had one been available. The project workers were all mental health professionals with experience in child development and the family systems approach. The primary goal of the intervention was: 'to offer the mother the experience of a stable trustworthy relationship that conveys understanding of her situation, and that promotes her sense of self-efficacy through a variety of specific interventions.' (Heinicke, et al., 1999:356) When compared with the control group: 'The mothers became more responsive to the needs of their infants and more effectively encouraged their autonomy and task involvement. Moreover, the children in the intervention as opposed to nonintervention group were more secure, autonomous, and task involved on a variety of indices at 12 months.' (p. 371) The two groups were compared again when the children were two years old, by which time: 'the mothers experiencing the intervention, in comparison with those that did not, also used more appropriate forms of control, and their children responded more positively to these controls. Mothers who did not experience the help of the intervention had significantly more difficulty controlling their child if it was a boy as opposed to a girl. They used the least appropriate methods of control and the boys responded more negatively to these controls.' (Heinicke, et al., 2001:458)

A similar clinical-type intervention was carried out in Holland, the difference being that the risk factor resided in the infant, not in the surrounding family. The aim of the programme was to help mothers with infants who demonstrated an irritable temperament, since there is evidence that negative emotionality in babies leads on to later behavioural problems. Mothers were helped to respond more to both positive and negative emotions in their child, and at the same time encouraged to show less intrusive behaviour and detached uninvolved involvement. The quality of attachment between parent and child appears to be enhanced by the parent's ability and willingness to be sensitively responsive to their child. This was confirmed by the finding that: 'more toddlers whose mothers participated in the intervention were securely attached than there were securely attached control group dyads.' (van den Boom, 1995:1809) At age two years, the mothers in the intervention group still demonstrated a greater responsiveness and involvement with their toddlers. And at three years both parents were more attuned to their child than those in the control group.

'Intervention children continued to be more secure in their relationship with their mother, exhibited less behaviour problems, and were better able to maintain a positive relationship with the peer than the control group children.' (p. 1811) Helping parents respond in a more sensitive, or thoughtful, way to their infants promotes secure attachment.

Depressed mothers are another high-risk group, as when the condition is severe it will interfere with the ability to tune into their baby's signals and provide a sensitive and emotionally nurturing caregiving environment. Post-natal depression is linked to an increase in insecure attachment in toddlers, behavioural disturbance at home, less creative play and greater levels of disturbed or disruptive behaviour at primary school, poor peer relationships, and a decrease in self-control with an increase in aggression. (Cummings & Davies, 1994; Murray, 1997; Sinclair & Murray, 1998; Murray et al., 1999; Zeanah et al., 1997) Direct psychotherapy with depressed mothers has been shown to increase their capacity to recognise emotional expressions, including negative ones, and be more accurate in affective language communication. (Free, et al., 1996) Although this could be expected to improve the quality of attachment, this was not measured. However, another study that compared the effect of toddler-parent psychotherapy between two, randomly assigned, groups of mothers with a major depressive disorder found that attachment was improved by the end of treatment. The two groups were further compared with another where the mothers had no mental health problems. 'Toddlers of depressed mothers who received TPP evidenced rates of secure attachment that were no different from those of the non-depressed control group following the conclusion of this intervention.' (Cicchetti, et al., 1999:58) These were mothers with a relatively high level of income, education and family support who may well have been: 'better able to utilize an insight-oriented mode of therapy than women confronted with a multitude of daily living challenges.' (p. 59) The authors of the study go on to speculate that: 'as mothers become freed from the 'ghosts from their pasts' their internal working models became more positive and they were increasingly able to focus on the present, including their relationship with their child.'

As a contrast, another approach to infant mental health intervention is provided by 'interaction guidance', which does not rely on insight to bring about change in the parent-

baby relationship. This technique uses video feedback in order to encourage positive aspects of caregiver-infant interaction, helping parents: 'in gaining enjoyment from their child and in developing an understanding of their child's behaviour and development through interactive play experience.' (McDonough, 1993:414) This form of treatment was specifically tailored to reach families over-burdened with multiple risks, and probably exemplifies the strength-based philosophy intrinsic to all infant mental health therapy more than any other approach. It does not explicitly focus on exploring the caregiver's internal representational world of feelings and memories, although such material will be addressed if it arises during the course of work. 'This nonintrusive method of family treatment has proven to be especially successful for infants with failure to thrive, regulation disorders, and organic problems. Parents who are either resistant to participating in other forms of psychotherapy, young or inexperienced, or cognitively limited respond positively to this treatment approach.' (ibid) Interaction guidance has also been successfully used to improve sensitivity and decrease the amount of disrupted communication between mothers and babies with feeding problems (Benoit et al., 2001).

The technique of interaction guidance, with its use of video recordings to emphasise responsive and pleasurable mother-infant interactions, can be either clinic- or home-based; and it is sometimes used in conjunction with, rather than as an alternative to, more psychodynamic methods of treatment. For instance, a child-guidance clinic in Stockholm that uses both approaches to help mothers and babies, with the additional provision of three long group sessions each week, has carried out an in-depth follow-up evaluation of their work. Out of ten randomly chosen mother-infant pairs that were looked at only one had not made considerable progress during treatment. (Karlsson & Skagerberg, 1999) A combination of intervention methods appeared to achieve the most gains.

A research project in Geneva has compared the results achieved by brief insight oriented, infant-parent psychotherapy with those attained by the more behaviourist method of interaction guidance. In the process, both forms of intervention were demonstrated to bring about appreciable, positive, changes in the mother-infant relationship. Since the study was carried out on families who had been referred to a child guidance clinic it was felt to be unethical to have a control group, although

comparisons could be made with a non-clinical but otherwise matched sample. The results of both forms of treatment were evaluated, and: 'marked symptom relief was observed in several areas, with the greatest improvements in sleeping, feeding and digestion (i.e. symptoms affecting physiological functions).' (Robert-Tissot, et al., 1996:105) In general, mothers became less intrusive and infants more co-operative, with maternal sensitivity to the baby's signals increasing after treatment. 'The results of the study indicate that brief mother-infant psychotherapies were effective in treating cases consulting for early functional disorders.' (p. 108) The only differences between the two approaches were that interactional guidance brought about more change in mothers' sensitivity, while psychodynamic therapy had a greater impact on maternal self-esteem.

In psychodynamic infant-parent psychotherapy the 'patient' is the relationship between baby and caregiver. It is to be expected that this approach would directly affect maternal self-esteem, since emotional difficulties from past relationships are addressed within the context of a new relationship which is secure enough to both withstand and encourage exploration. 'The quality of the relationship between therapist and parent is perhaps the more crucial in infant-parent psychotherapy than in any other form of treatment, because it is intended to be a mutative factor in the parent's relationship with his or her child.' (Lieberman & Pawl, 1993:430) In a study designed to evaluate the effectiveness of infant-parent psychotherapy, which compared an intervention group of mothers and infants with a similar control group, it was found that: 'Mothers who formed a strong positive relationship with the intervenor tended to be more empathic to their infants at outcome, and their children in turn tended to show less avoidance on reunion.' (p.434) However, the most important treatment variable turned out to be the mother's ability: 'to use infant-parent psychotherapy to explore her feelings towards herself and toward her child.' (ibid) The two randomly assigned groups of mother-infant dyads where the child had been assessed as demonstrating insecure attachment were further compared with a second control group of securely attached infants and their mothers in order to examine outcomes. Evaluation took place when the child was two years old, after one year of treatment. 'The intervention group performed significantly better than the anxious

controls in the outcome measures and was essentially indistinguishable from the control group.' (p. 440) Those mothers who became most engaged in the therapeutic process became more actively attuned to their children, who in turn: 'showed less anger and avoidance, more security of attachment, and more reciprocal partnership in the negotiation of mother-child conflict.' (p. 441) Again, it is relationships that change relationships.

A final, more recent, example of a well-researched, intervention for parents and infants is the technique of 'Watch, Wait and Wonder' used in the Toronto Infant-Parent Program. In this form of infant-parent psychotherapy the parent is encouraged to be more directly involved with their child by engaging in playful interaction that follows the lead of the child. The parent is then invited to explore the feelings and thoughts that were evoked by what he or she observed and experienced in the preceding play session. Allowing the child to be spontaneous can be hard for a parent haunted by 'ghosts in the nursery'; and a defensive infant, who is more used to complying to the pattern of available caregiving in order to extract the maximum available sense of felt-security, can be equally stumped. The research project set out to compare the effects of traditional infant-parent psychotherapy with Wait, Watch and Wonder. A broad range of outcome measures were applied before and after treatment, and again on follow-up six months later. The majority of children referred to this service were insecurely attached. Both forms of treatment were delivered by highly trained clinicians. It was found that by the end of the intervention the Wait, Watch and Wonder method was associated with a more pronounced move towards secure attachment. The infants in this group also: 'exhibited a greater capacity to regulate their emotions with a concomitant increase in cognitive ability.' (Cohen, et al., 1999:445) Their mothers: 'reported more satisfaction with parenting than mothers in the PPT group and lower levels of depression at the end of treatment.' (ibid) Both forms of treatment showed similar positive gains. 'They were associated with a reduction of presenting problems, improvement in the quality of the mother-child relationship, and reduction in parenting stress.' (ibid) However, at the six-month follow-up the two groups were similar on all measures. The Wait, Watch and Wonder group had retained its positive gains while the group receiving parent-infant psychotherapy had 'caught up'. It was concluded that both approaches are helpful,

but the effects of Wait, Watch and Wonder came about more quickly.

Wait, Watch and Wonder, with its dual emphasis on positive interaction and insight, is a hybrid of behavioural (i.e. interaction guidance) and psychodynamic approaches. As with the other treatment modalities that have been mentioned, this technique could, theoretically, be offered in any CAMHS setting provided there were suitably qualified staff, since, again theoretically, the age-range for clients begins at zero. But infant mental health work does not naturally belong in the same stable as the interventions (and facilities) for older children and their families. This is not just a matter of site, access, noise- and intimidation-level, or the lack of suitably trained clinicians. As Barrows (2000:19) argues, it is: 'only within the context of a service that is dedicated to Infant Mental Health that (the) focus on the parent-infant *relationship* is likely to be sustained, and to feature as the prime focus of any therapy.' A consideration of the wide range of risk-factors that must be addressed makes it clear that a multi-disciplinary team is essential, since the caregiver-infant relationship will be influenced by seemingly distal pressures.

The infant mental health specialist (a discrete profession in America) needs to call upon a wide range of skills and strategies that together: 'contribute to the parent's understanding of the infant, the awakening or repair of the early developing attachment relationship, and the parent's capacity to nurture and protect a young child.' (Weatherston, 2000:6) This means strengthening relationships, whether between parent and child, therapist and parent, or within the boundaries of the infant mental health service. Starting from the fundamental premise that all parents want to do the best they can for their babies, the infant mental health team builds on strengths in order to remove obstacles to a natural state of affairs. Parents, unsurprisingly, may not appreciate other know-it-alls thinking they need 'training', indeed, such an attitude: 'may send a message of presumed incompetence, which might undermine a mother's or father's self-confidence and contribute inadvertently to less effective performance.' (Shonkoff & Phillips, 2000:371) Infant mental health specialists may be experts, but they relate to parents on the basis of partnership, not power, modelling the relationships they wish to promote.

Conclusion

There is a growing body of evidence that

demonstrates how early, targeted and strength-based interventions focussing on relationships can bring about positive changes in the emotional environment of vulnerable babies. As summarised by Professor Fonagy (1998:132) in an overview of the field: 'early preventative interventions have the potential to improve in the short term the child's health and welfare (including better nutrition, physical health, fewer feeding problems, low-birth-weight babies, accident and emergency room visits, and reduced potential for maltreatment), while the parents can also expect to benefit in significant ways (including educational and work opportunities, better use of services, improved social support, enhanced self-efficacy as parents and improved relationships with their child and partner). In the long term, children may further benefit in critical ways behaviourally (less aggression, distractibility, delinquency), educationally (better attitudes to school, higher achievement) and in terms of social functioning and attitudes (increased prosocial attitudes), while the parents can benefit in terms of employment, education and mental well-being.'

To complement the evidence of clinical impact, longitudinal research, both psychological and neurological, has confirmed the vital importance of the early attachment relationship for future development. 'The time of greatest influence, for good or ill, is when the brain is new. If we want to help the next generation we should be working with their parents while they are babies now' (Balbernie, 2001:253). This is simply a technical confirmation of what every parent has always known, although they may not have time to think about it until they are grandparents. It is something which somehow gets avoided when the implications have to be turned into policy or command resources. Who really doubts that: 'The childhood shows the man, as morning shows the day.'? (Milton, 1671:Paradise Regained)

If the first two years of life are cradled within secure attachment then the growing child feels good about him or herself, can appreciate the feelings of others and see their point of view, is able to take full advantage of education and has inherent psychological resiliency to fall back upon in times of stress. At the other end of the spectrum, the infant with disorganised attachment, who has often suffered abuse or neglect, will become the child who cannot trust relationships, who has no empathy for people or respect for social rules, who disrupts, attacks and tries to dominate what may be on offer in

both the family and school, and who might well be seriously vulnerable to later mental health problems. And furthermore, most importantly, these patterns of behaviour stand a good chance of being passed on to the next generation as the attachment experiences of infancy cut the template for the caregiving behaviours of adulthood. 'By failing to understand the cumulative effects of the poisons assaulting our babies in the form of abuse, neglect, and toxic substances, we are participating in our own destruction.' (Karr-Morse & Wiley, 1997:12) Early intervention within the remit of an infant mental health service is an effective way of beginning to break the cycle of insecure attachment as it takes advantage of both the neurological plasticity of the baby and the fluid dynamics of a family in the process of adapting to a new member. Leave it too late and both the structure of the brain and family interactions become increasingly established and consequently harder to change.

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