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An overview of attachment theory

The importance of attachment relationships for infant mental health

The relationship an infant has with their primary caregiver (in Australian society, this is usually the mother) has a profound impact on the infant's future development. It is now well recognised that experiences in the first weeks and months of life help shape the developing brain; the most important of these experiences is the attachment relationship between the infant and their primary caregiver.

One of most the important tasks of childhood is for the child to develop the ability to express and regulate their emotions; they start to learn to do this from birth with the help of a sensitive and responsive caregiver. The foundation for their future mental health is based on this capacity for emotional regulation.

Secure attachment relationships are fundamental to infant development, providing a foundation for healthy social, emotional and cognitive development. A secure attachment relationship begins with facial mirroring and interaction with the baby and moves on to one that involves opportunities for play, everyday activities and sharing of emotions. These relationships facilitate optimal brain development and stimulate the infant's curiosity to explore and learn. The importance of experiences within the attachment relationship for infant behavioural and emotional regulation, and the neurobiological mechanisms underlying the process of attachment, has been a clinical and research focus. Nurturing, contingent, stable, and predictable early experiences promote healthy brain development and the optimal regulation of physiological stress regulation systems. When early life experiences are full of threat, uncertainty, neglect, or abuse, the infant's stress management systems are overactivated. This disrupts the architecture of the brain and can contribute to negative health consequences throughout the lifespan. The earliest family relationships are where infants learn how to interact and relate, and this has implications for their sense of connectedness to others and for future participation in society.



Infants show attachment behaviours from birth

Attachment behaviours are 'biologically wired' and important for the infant's survival; these behaviours include sucking, clinging, following (not letting their primary caregiver out of sight or earshot), crying and smiling. These behaviours promote closeness between the infant and their caregiver building their reciprocal relationship. An infant will instinctively evoke a parental response to ensure the parent remains close. The attachment system is activated by anxiety or distress in the infant, something frightening or threatening in the environment, or the absence or movement away from the caregiver. Research about infant memory, as well as observation of infant behaviour, has confirmed that infants display attachment behaviours from birth and that they prefer their mother. John Bowlby was the first to articulate the theory - attachment theory - that explained the negative and long-lasting effects of separation from the primary caregiver on children's wellbeing and personality development.

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Attachment and exploration

Bowlby described attachment behaviours as complementary to exploration behaviours. When attachment behaviours are activated, for example by fear, then exploration behaviours shut down. When an infant is close to their primary caregiver, or feels safe or secure, attachment behaviours shut down and the infant is free to explore their environment.

Infants with a secure attachment relationship are freely able to move between their attachment figure – who provides a secure base – and the environment, which offers novelty and opportunity although at times can be frightening. Attachment behaviours are instinctual and not learned behaviour.

Child and family health nurses are well positioned to provide information, guidance and encouragement to parents in forming responsive and sensitive relationships with their babies. Research indicates that providing stable, responsive and nurturing relationships (positive attachment relationships) in the early years of life can prevent or even reverse the damaging effects of early life stress with lifelong benefits for learning, behaviour and health. Essentially, the role of the parent is one of being available, ready to respond when called upon, to provide a safe base for the infant, encourage and support exploration, perhaps to assist, but to intervene only when clearly necessary (Bowlby, 1988).

Secure attachment represents a child's fundamental trust in a primary caregiver, who can help her find a balance between behavioural activation and inhibition, differentiate her emotions, and regulate affect appropriately (Resch, in Papousek, 2008).

Infants have a hierarchy of attachment figures

When an infant has a secure attachment relationship with their primary caregiver, they can then explore and form other relationships; most infants have formed several attachment relationships by four months of age. These attachment relationships (for example, with their father, extended family, nanny, family friends) are in a hierarchy. Infants may insist on being picked up by their primary caregiver when she is present, but are happy to be cared for by a substitute for a short time.

The features that distinguish an attachment relationship from a 'playmate' are that the adult interacts with the infant and responds readily to their signals. In the presence of the adult, the infant feels secure and protected from danger and will seek them when tired, hungry, ill or alarmed. However, the greater the threat to the child's sense of security (pain, illness, or fear of the environment) the more insistently they will ask for their primary caregiver.

Separation

Infants can manage small chunks of time away from their primary caregiver provided they know the non-primary caregiver and sense them to be a source of safety and security. Infants react to prolonged separation initially with protest – clinging, crying, screaming and anxious searching behaviours. If the separation lasts too long, the infant will move into despair, becoming listless, showing no interest in surroundings, often refusing food, and shedding occasional tears. At this stage the infant is preoccupied with their primary caregiver but has lost

hope of recovering her. The next stage of coping with prolonged separation is detachment, where the infant only interacts superficially with other people and becomes more invested in objects than relationships.

Building a secure attachment relationship - responsivity and sensitivity

Maternal sensitivity to infant cues is important to allow an infant to develop the confidence that their primary caregiver will notice and respond to them. This sensitivity involves:

- 1 promptly noticing that the infant is communicating something
- 2 interpreting the cue, and
- 3 responding to and satisfying the infant's need.

Primary caregivers cannot always magically know what their infant is communicating. However, it is important that the primary caregiver is emotionally available and they genuinely attempt to engage with and respond to their infant.

There is a strong possibility that an insecure attachment relationship (discussed further on p3) may develop if the infant's needs are only partially met (either rejected or ignored) or responded to inconsistently (including when the primary caregiver is overcautious, over-alert, or overstimulating).

Characteristics of sensitive maternal caregiving:

- Appropriate (congruent) affect
- Clarity of perception of and appropriate maternal responsiveness to infant cues
- · Awareness of timing
- Flexibility (in attention and behaviour)
- Variety and creativity in modes of play
- Acceptance of infant
- Providing structure without being intrusive.

Quality of attachment relationships

The quality of the attachment relationship between an infant and their caregiver should not be confused with attachment behaviours. A child showing heightened attachment behaviours – crying, seeking, clinging – is not necessarily more strongly attached or loves their primary caregiver more, than another securely attached child. If you are concerned about a child's attachment relationship with their primary caregiver, you will need to refer the family on for an assessment. Any assessment of the attachment relationship needs to take into account the context in which the attachment behaviours are being demonstrated and whether there is a situation (internal distress or threatening environment) that has activated attachment behaviours and shut down exploratory behaviours.

Infant-parent attachment relationship styles

Most infant-parent attachment relationships can be classified as organised (secure or insecure), although a small percentage are classified as disorganised (these will be discussed later). Infants in an insecure attachment relationship do not

necessarily have an attachment disorder although they are at a greater risk for psychopathology including behavioural problems, impulse control problems, conflict with caregivers, low self-esteem and problematic peer relationships. Infants may have a different attachment relationship style with different attachment figures.

Secure

About 60% of infants have a secure attachment relationship with their primary caregiver. These infants are accustomed to sensitive caregiving and anticipate that their caregiver will be readily available to comfort and support them when they need it. They are able to freely go to their attachment figure or to explore the environment depending on their wishes and prevailing circumstances.

Insecure avoidant

Infants with an avoidant attachment relationship with their primary caregiver – about 20% of infants – tend to be overly oriented to the environment and not confident that their primary caregivers will positively respond to their attachment behaviours. Over time they learn to be dismissive of attachment issues, and do not show distress when separated.

Insecure ambivalent

Infants with an ambivalent (sometimes called resistant) attachment relationship with their primary caregiver tend to cry on separation and approach their primary caregiver on reunion. However they resist comfort, are not easily soothed, and, unlike a child with a secure attachment, take a long time to settle and resume playing. About 10% of infants demonstrate an ambivalent attachment relationship.

Infants with an ambivalent attachment relationship style are preoccupied with their attachment figure. This is often a result of inconsistent care – at times the primary caregiver is sensitive and responsive, at other times she is harder to engage or so preoccupied with her own distress that she misreads the infant's attachment overtures. This preoccupation and

ambivalence means that the infant is not free to explore the environment even when it is safe, as they are lacking a sense of secure base.

Disorganised attachment relationship

Infants with a disorganised relationship style show behaviour typical of both avoidant and ambivalent attachment relationships. A disorganised attachment relationship style is usually evident in children who have suffered major trauma, including severe neglect or abuse. In fact it has been argued that the name 'disorganised attachment' is a misnomer. The name arose out of the observation that these infants showed a combination of avoidant and ambivalent responses to their primary caregivers and seek proximity to primary caregivers in strange and disoriented ways. Their attachment behaviours are contradictory, for example they may express distress on separation and no distress on reunion, they may seek proximity with strangers, demonstrate stereotypical behaviour (dazed expression, sit and stare into space) and they show apprehension or direct fear of their parent or may freeze (no activity for 20–25 seconds).

It is hypothesised that these infants are struggling with a dilemma that cannot be resolved because their only available attachment figure and potential secure base is in fact the source of fear and harm. Parental behaviours that contribute to a disorganised infant-parent attachment relationship include severe distortions in communication of affect (maternal response), role/boundary confusion, fearful and disoriented behaviour, intrusive and hostile behaviour, or extreme withdrawal and lack of responsiveness.

Attachment disorders

Attachment disorders are distortions in the infant-parent relationship that result in the infant's inability to experience their parent as emotionally available and a reliable protector from external danger or internal distress.

Secure infant behaviour	Indicators for concern
Showing affection and seeking comfort from caregiver	Avoidance of caregiver (sustained gaze avoidance, not responding to primary caregiver's voice)
	Lack of affection to caregiver
	Indiscriminate affection to strangers
	Not seeking comfort when distressed
	Not reaching for or approaching primary caregiver through vocalisation or crawling
Reliance on caregiver for help	No reliance or excessive dependence on caregiver
Exploratory behaviour	Failure to check with caregiver in unfamiliar setting
	Systematic unwillingness to explore
Reunion responses	Failure to re-establish contact with caregiver

Implications for practice

Understanding the importance of early infant/family relationships has implications for professionals working with families. Early relationships form the basis of an infant's early emotional health and development (including the stress response system), impact on cognitive development and learning and it is through these relationships that infants learn how to interact and relate to their peers and adults. This first relationship between an infant and their primary caregiver reverberates throughout their life span, influencing future relationships, one's sense of connectedness and future participation in society. Providing appropriate support, care and education for new parents to form healthy attachment relationships with their infant is a key role for professionals who work with families.

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Reflection questions

Do you routinely discuss infant/parent attachment or bonding with new parents?

When talking about 'crying babies' with parents what is the key strategy to give parents if on occasions their baby is inconsolable?

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Perinatal depression

Achieving a stronger, healthier, more productive future for all Australians begins at the start of life. Although motherhood is a time of great joy and celebration, the experience of new motherhood is, for many mothers, not necessarily what they expected. Many women will struggle with the changes and challenges that come along with accommodating and nurturing a new baby. The unexpected difficulties and challenges that accompany new parenthood can present risks to both mothers' and fathers' wellbeing and mental health, as well as to the development and mental health of the infant.

Maternal mental health has a significant impact on children's mental health and later life outcomes (O'Hara & Swain, 1996; Gutteling et al, 2005; Weissman et al, 2006). It is estimated that one in seven mothers will be diagnosed with perinatal depression in Australia each year (Deloitte, 2012), which poses significant challenges to both maternal and infant mental health, and the future health and wellbeing of the child (Vos, Flaxman, Naghavi, Lozano, Michaud et al, 2012).

Depression during the childbearing years has the same symptom profile as depression diagnosed at other life stages and occurs across all cultures.

Depression is the leading cause of non-fatal disability in Australia, and makes a greater contribution to the global burden of disease than chronic heart disease and cancer; it contributes to:

- reduced workforce productivity
- increased health expenditure
- impact on families and caregivers
- premature mortality (Deloitte, 2012; Vos et al, 2012).

Maternal depression during pregnancy is associated with low birthweight, preterm birth and early breastfeeding cessation (Falceto, Giugliani & Fernandes, 2004; Hobel, Goldstein & Barrett, 2008). For children born to mothers who experience depression during and/or after pregnancy, the likelihood of later externalising and internalising behavioural disorders is increased (Glover, 2011) and evidence suggests



that maternal mental health problems also have long-term effects on child, adolescent and adult health outcomes (Wash, Black, Engle, 2009).

Maternal Health Study

Most studies that investigate maternal physical and mental health have focussed on pregnancy and the first 12 months post-partum. After this time, little is known about maternal mental health. The Maternal Health Study was designed to address gaps in what is known about women's health and wellbeing after childbirth. The study recruited 1500 first-time mothers in early pregnancy in order to investigate the health and wellbeing of women during pregnancy and after having their first baby. Women in the study completed questionnaires and interviews up until their first child was four years of age, and are now being followed up when their first child turns 10 (Woolhouse, Gartland, Mensah, Brown, 2014).

Maternal depression was assessed at six different points over the course of the study – in early pregnancy, when the infant was 3, 6, 12 and 18 months of age, and again at four years of age – using the Edinburgh Postnatal Depression Scale (EPDS). Nearly a third of the women studied, 31 per cent, reported depressive symptoms at least once over the study period. Most startling, the prevalence of maternal depression was higher when the first child was four years of age than at any point in the first 18 months post-partum (Woolhouse, Gartland, Mensah, Brown, 2014).

Women may experience increased social isolation around the time that their first child is four years of age. Visits to the child and family health nurse have stopped for many mothers – rates drop to 65 per cent by the time the child is 3.5 years and are lower again for vulnerable

mothers and those of non-English-speaking backgrounds (KPMG, 2006) – and the social contact that can come with the school years is yet to begin.

The strongest predictor of depressive symptoms at four years postpartum was previously reported depressive symptoms in either early pregnancy or the first 12 months postpartum. Other associated factors were:

- young maternal age (18–24)
- stressful life events or social adversity in the year before the four-year follow up
- intimate partner abuse
- low income.

Supporting women at risk of or experiencing depression

There are significant risks for both mother and baby when the mother is experiencing perinatal depression. Self harm and suicide are very real concerns for the mother. For the children, there is likely to be an impact on their attachment relationship, which then presents follow-on risks for the child's development. Child and family health nurses have a major role to play in supporting mothers through any depressive episodes and working to minimise any impact on the woman, her child and the family as a whole.

Identifying and managing perinatal depression

Health services approaches to perinatal depression should consider the following:

 Always consider the possibility that depression may be present – ask about it or use the EPDS.

- Early identification and treatment will minimise the longer term consequences of depression.
- Think about the mother, the infant, the partner and any other children. Paternal depression is correlated to maternal depression; ask how he is coping.
- Given the strong association between maternal depression and intimate partner abuse consider whether this might be a factor affecting women's emotional well-being, and tailor support strategies accordingly. Encourage women experiencing abuse by an intimate partner to develop a safety plan, and provide information about agencies that may be able to provide assistance.
- Inquire about things happening in women's lives, and assist women to access support from services if needed.
- Observe the mother interacting with her baby and how she responds to and interprets the baby's behaviour.
- Discuss with the woman, her partner and her family what support is available and what would be helpful. Encourage the mother and partner to enlist the help and support of their extended family and friends, where that is possible.
- Develop a treatment plan in conjunction with the family. The plan may focus on maternal symptoms (see www. beyondblue.org.au), mother-infant interaction, partner relationship, partner's mental health, specific baby management, parenting, support or risk management.
- Refer for specialist intervention where required, general practitioner, psychiatrist, psychologist, Mother-Baby unit, Crisis Assessment and Treatment Team (CATT), or other services specific to your state or territory.
- Inform the family about phone-based and other support services that are available, including supports such as PANDA, which offers peer support for both mother and father.

If you suspect depression, devise a plan and provide emergency contact numbers. Follow up and support the parent concerned to take up the help offered.

You can visit www.panda.org.au, the Post and Antenatal Depression Association, for detailed factsheets on care in all areas of ante- and perinatal depression and adjusting to the challenges of new parenthood.

For more information on the incidence of maternal depression when children are four, you can read the Policy Brief on the topic prepared by the authors of the Maternal Health Study, available at http://www.mcri.edu.au/research/researchprojects/maternal-health-study-2014/

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About the Centre for **Community Child Health**

The Royal Children's Hospital Centre for Community Child Health (CCCH) has been at the forefront of Australian research into early childhood development and behaviour since 1994.

The CCCH conducts research into the many conditions and common problems faced by children that are either preventable or can be improved if recognised and managed early.

Community Paediatric Review

Community Paediatric Review supports health professionals in caring for children and their families through the provision of evidence-based information on current health issues.

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