PART 1: The Amazing Social Capabilities of Babies

Authors: Kate Dent Rennie and Sue Wright

From birth babies have some sophisticated social capacities (Beebe & Lachmann, 2002), which they use to maintain a relationship with their primary caregiver.

These social capacities are established in the days and weeks after birth. This three part series shares some insights into baby’s amazing capabilities.

Right from the beginning babies are capable of distinguishing between different people’s voices. They can detect the different ways in which we express ourselves. They are sensitive to rhythm (Condon & Sander, 1974), intonation (Morse, 1972), and other features of speech (De Casper & Fifer, 1980). A baby less than 3 days old will choose to listen to a recording of his/her own mother’s voice rather than another mother’s voice (DeCasper & Fifer, 1980), and they prefer to listen to her reading a familiar story (one read aloud during the pregnancy) over an unfamiliar one (DeCasper & Spence, 1986).

Newborn babies also know and prefer their mother’s smell, and will turn their heads towards the smell of their own mother’s breast milk, rather than that of another mother (MacFarlane, 1975).

Infants have an early tendency to orient towards faces (Johnson et al, 1991). A study of face processing found that babies of just 2 months old are using the majority of the parts of the brain that adults use in face processing (Tzourio-Mazoyer et al, 2002). They are already sophisticated readers of people.

Infants are sensitive after birth to another’s gaze. This is reflected in their preference for looking at
faces with eyes open rather than closed (Batki et al, 2000; Schacter & Mascovitch, 1984) and a tendency to orient towards direct eye contact from others (Farroni et al, 2002).

By three months infants will orient more to direct gaze and a fearful adult expression than direct gaze with a neutral face or averted gaze and either neutral or fearful expression (Hoehl et al, 2008). Their survival instinct to identify danger and seek support from people is already well established.

As Helen Fisher quoted “Touch is the ‘mother of all senses’”. Infants smile more to touch with an interactive face reaction than to still face and touch. Touch can reinforce and maintain high rates of infant eye contact responses, vocalisations and smiles during face-to-face contact with their mother (Parsons CE, Young KS et al, 2010).

From birth, infants work to maintain an optimal level of arousal, keeping themselves in a comfortable range.

The limited strategies they have available to them to do this include: choosing what to look at, sucking, self-touching and restricting their range of facial expressiveness (Beebe & Lachmann, 2002). For example, when faced with a display of flashing lights, infants in a low state of arousal (fed & swaddled) look longer at the lights as the tempo of the flashing increases, whereas infants in a high state of arousal (unfed & unswaddled) look less as the tempo increases (Gardner & Karmel, 1984).

In face-to-face interactions, infants use brief visual disengagement (i.e. looking away) from their parent, to regulate their arousal. A few seconds before the infant averts his gaze, his heart rate accelerates. Within 5 seconds of looking away (if the mother responds by becoming less active and ‘waiting’), his heart rate returns to baseline, and he quickly returns his gaze to her (Field, 1981).

Part 2 will be available in our next newsletter.

References


Kate Dent Rennie is a Co-director of the Centre For Attachment and a bioenergetic psychotherapist who has a Masters Degree in Infant Mental Health. The focus of her work is on supporting the development of secure infant-caregiver attachment relationships. She has a particular interest in adult attachment representations and the transmission of attachment patterns from caregivers to their children. In the past, she has worked in private practice and in the field of eating disorder treatment. She is a member of the Infant Mental Health Association Aotearoa New Zealand (IMHANNZ). Kate is the mother of four children.