

## **John Bowlby**

A more naturalistic study on human children was done by John Bowlby during the last half of the 1940s. Bowlby studied children who were brought up in institutions such as foster homes and orphanages; in these institutions they were physically well-cared for but often lacked intimate bodily contact. Such children tended to be timid and asocial.

Bowlby identified several phases of the attachment process. In the first (pre-attachment) phase, which lasts several weeks, the infant reacts identically to every adult and smiling face. By about three months of age, the second phase of attachment is reached in which the infant discriminates between familiar and unfamiliar faces. Only at six months do we see the infant seeking out and responding specifically to the mother. From nine to 12 months, the bonding intensifies and the child begins expressing stranger anxiety—a fear of strangers. In the second year, the child reacts to the mother's absence with strong protest—he referred to this behavior as separation anxiety. In the third year, the child is able to separate from the mother without prolonged distress.

## Mary Ainsworth

Mary Ainsworth demonstrated the universality of this sequence with a study of Ugandan infants. Ainsworth devised a laboratory experiment, the "strange situation procedure", to study the quality of the parent (mother)-child attachment relationship. During the experiment, the attachment figure (the mother) brings the child into an unfamiliar room with many toys. A series of three-minute episodes follows. First, the child is free to explore the room and play with the toys. Next, a stranger comes into the room remaining silent at first, and eventually talks to the mother and plays with the infant. Then the mother leaves the room and the stranger interacts with the infant. Next, the mother returns and the stranger departs. Then the infant is left alone in the room. Next, the stranger returns to the room and interacts with the infant. Finally, the mother returns and the stranger leaves the room.

Ainsworth observed and assessed infant's behavior, focusing on the infant's reaction to separation and reunion behavior. Ainsworth classified behavior into three basic types : insecure / avoidant attachment (Type A), secure attachment (Type B), and insecure / resistant attachment (Type C). Insecure / avoidant infants are not distressed when left alone with the stranger, and avoid contact with the mother upon her return. Securely attached infants are mildly distressed during separations from the mother but greet her positively when she returns. Insecure / resistant infants are distressed during the separation and are inclined to resist physical contact with the mother upon her return.