Attachment measures in children

Attachment measures for children. There are a variety of measures used in the literature to assess a child's pattern of attachment.

The Strange Situation

See also: Attachment measures

Mary Ainsworth is a developmental psychologist who devised a procedure called The Strange Situation, to observe attachment relationships between a human caregiver and child. [1]

The most common and empirically supported method for assessing attachment in infants (12months-20months) is the Strange Situation Protocol, developed by Mary Ainsworth (see Patterns of Attachment).[2]

In this procedure the child is observed playing for 20 minutes while caregivers and strangers enter and leave the room, recreating the flow of the familiar and unfamiliar presence in most children's lives. The situation varies in stressfulness and the child's responses are observed. The child experiences the following situations:

1. Mother and baby enter room. 
2. Mother sits quietly on a chair, responding if the infant seeks attention. 
3. A stranger enters, talks to the mother then gradually approaches infant with a toy. The mother leaves the room. 
4. The stranger leaves the infant playing unless he/she is inactive and then tries to interest the infant in toys. If the infant becomes distressed this episode is ended. 
5. Mother enters and waits to see how the infant greets her. The stranger leaves quietly and the mother waits until the baby settles, and then she leaves again. 
6. The infant is alone. This episode is curtailed if the infant appears to be distressed. 
7. The stranger comes back and repeats episode 3. 
8. The mother returns and the stranger goes. Reunion behavior is noted and then the situation is ended.

Two aspects of the child's behavior are observed:

- The amount of exploration (e.g. playing with new toys) the child engages in throughout, and
- The child's reactions to the departure and return of its caregiver.

On the basis of predominately their reunion behaviours (although other behaviors are taken into account) in the Strange Situation Paradigm, infants can be categorized into three 'organized' attachment categories: Secure (Group B); Avoidant (Group A); and Anxious/Resistant (Group C). There are subclassifications for each group (see below). A fourth category, termed Disorganized (D), can also be
assigned to an infant assessed in the Strange Situation although a primary 'organized' classification is always given for an infant judged to be disorganized. Each of these groups reflects a different kind of attachment relationship with the mother. A child may have a different type of attachment to each parent as well as to unrelated caregivers. Attachment style is thus not so much a part of the child's thinking, but is characteristic of a specific relationship. However, after about age four the child exhibits one primary consistent pattern of attachment in relationships [3].

Secure attachment

A toddler who is securely attached to its parent (or other familiar caregiver) will explore freely while the parent is present, typically engages with strangers, is often visibly upset when the parent departs, and is generally happy to see the parent return. The extent of exploration and of distress are affected by the child's temperamental make-up and by situational factors as well as by attachment status, however.

In the traditional Ainsworth et al. (1978)[2] coding of the Strange Situation, secure infants are denoted as "Group B" infants and they are further subclassified as B1, B2, B3, and B4. Although these subgroupings refer to different stylistic responses to the comings and goings of the caregiver, they were not given specific labels by Ainsworth and colleagues, although their descriptive behaviors led others (including students of Ainsworth) to devise a relatively 'loose' terminology for these subgroups. B1's have been referred to as 'secure-reserved', B2's as 'secure-inhibited', B3's as 'secure balanced,' and B4's as 'secure-reactive.' In academic publications however, the classification of infants (if subgroups are denoted) is typically simply "B1" or "B2" although more theoretical and review-oriented papers surrounding attachment theory may use the above terminology.

Securely attached children are best able to explore when they have the knowledge of a secure base to return to in times of need. When assistance is given, this bolsters the sense of security and also, assuming the parent's assistance is helpful, educates the child in how to cope with the same problem in the future. Therefore, secure attachment can be seen as the most adaptive attachment style. According to some psychological researchers, a child becomes securely attached when the parent is available and able to meet the needs of the child in a responsive and appropriate manner. Others have pointed out that there are also other determinants of the child's attachment, and that behavior of the parent may in turn be influenced by the child's behavior.

Anxious-resistant insecure attachment

In general, a child with an anxious-resistant attachment style will typically explore little (in the Strange Situation) and is often wary of strangers, even when the parent is present. When the mother departs, the child is often highly distressed. The child is generally ambivalent when she returns. In the traditional Ainsworth et al. (1978)[2] coding of the Strange Situation, anxious-resistant infants are denoted as "Group C" infants and they are further subclassified into C1 and C2 infants. C1 infants are so judged when: "resistant behavior is particularly conspicuous. The mixture of seeking and yet resisting contact and interaction has an unmistakeably angry quality and indeed an angry tone may characterize behavior in the preseparation episodes" [3].
C2 infants are often seen as demonstrating 'passive' resistance. As Ainsworth et al. (1978) originally noted:

"Perhaps the most conspicuous characteristic of C2 infants is their passivity. Their exploratory behavior is limited throughout the SS and their interactive behaviors are relatively lacking in active initiation. Nevertheless, in the reunion episodes they obviously want proximity to and contact with their mothers, even though they tend to use signalling rather than active approach, and protest against being put down rather than actively resisting release...In general the C2 baby is not as conspicuously angry as the C1 baby".[2].

**Anxious-avoidant insecure attachment**

In general, a child with an anxious-avoidant attachment style will avoid or ignore the parent when he or she returns (in the Strange Situation) - showing little overt indications of an emotional response. Often, the stranger will not be treated much differently from the parent. In the traditional Ainsworth et al. (1978)[2] coding of the Strange Situation, anxious-avoidant infants are denoted as "Group A" infants and they are further subclassified into A1 and A2 infants. A1 infants are so judged when there is:

"conspicuous avoidance of the mother in the reunion episodes which is likely to consist of ignoring her altogether, although there may be some pointed looking away, turning away, or moving away...If there is a greeting when the mother enters, it tends to be a mere look or a smile...Either the baby does not approach his mother upon reunion, or they approach in 'abortive' fashions with the baby going past the mother, or it tends to only occur after much coaxing...If picked up, the baby shows little or no contact-maintaining behavior; he tends not to cuddle in; he looks away and he may squirm to get down"[2].

A2 infants are often seen as demonstrating a mixture of both some avoidance and resistance. Often, though not always, A2 infants are judged Disorganized (D). As Ainsworth et al. (1978) originally noted:

"[the A2 infant] shows a mixed response to mother on reunion, with some tendency to greet and approach, intermingled with a marked tendency to move or turn away from her, move past her, avert the gaze from her, or ignore her...there may be moderate proximity-seeking, combined with strong proximity-avoiding...If picked up, the baby may cling momentarily; if put down, he may protest or resist momentarily; but there is also a tendency to squirm to be put down, to turn the face away when being held and other signs of mixed feelings [i.e., resistance/ambivalence][2].

**Disorganized attachment**

A fourth category termed disorganized attachment (Main & Solomon, 1990) [4] was subsequently identified and empiricized when a sizeable number of infants defied classification in terms of Ainsworth's original tripartite classification scheme. It can be conceptualized as the lack of a coherent 'organized' behavioral strategy for dealing with the stresses (i.e., the strange room, the stranger, and the comings and goings of the caregiver) of the Strange Situation Procedure. Evidence from Main et al. has suggested that children with disorganized attachment may experience their caregivers as either frightening or frightened. A frightened caregiver is alarming to the child, who uses social referencing techniques such as
checking the adult's facial expression to ascertain whether a situation is safe. A frightening caregiver is usually so via aggressive behaviors towards the child (either mild or direct physical/sexual behaviors) and puts the child in a dilemma which Main and colleagues have called 'fear without solution.' In other words, the caregiver is both the source of the child's alarm as well as the child's haven of safety. Through parental behaviors that are frightening, the caregiver puts the child in an irresolvable paradox of approach-avoidance. This paradox, in fact, may be one explanation for some of the 'stilling' and 'freezing' behaviors observed in children judged to be disorganized. Human interactions are experienced as erratic, thus children cannot form a coherent, organized interactive template. If the child uses the caregiver as a mirror to understand the self, the disorganized child is looking into a mirror broken into a thousand pieces. It is more severe than learned helplessness as it is the model of the self rather than of a situation. It is important to note that when a child is judged disorganized, he or she is given a secondary best-fitting 'organized' (i.e., secure, ambivalent, avoidant) classification as well. This reflects the fact that attachment disorganization is thought to be a breakdown of an inchoate organized attachment strategy. The degree to which the organized strategy is fragmented however is often different in degree across infants judged to receive a primary 'disorganized' classification.

There is a growing body of research on the links between abnormal parenting, disorganized attachment and risks for later psychopathologies. Abuse is associated with disorganized attachment. The disorganized style is a risk factor for a range of psychological disorders including Reactive attachment disorder. Other Approaches

Main & Cassidy attachment classification system

This system, devised in 1988, analyses the reunion of child and parent after a 1 hour separation. It is aimed at 6 year olds and classifies their attachment status.

Disturbances of Attachment Interview (DAI)

More recent research uses the Disturbances of Attachment Interview or "DAI" developed by Smyke and Zeanah, (1999). This is a semi-structured interview designed to be administered by clinicians to caregivers. It covers 12 items, namely having a discriminated, preferred adult, seeking comfort when distressed, responding to comfort when offered, social and emotional reciprocity, emotional regulation, checking back after venturing away from the care giver, reticence with unfamiliar adults, willingness to go off with relative strangers, self endangering behavior, excessive clinging, vigilance/hypercompliance and role reversal. This method is designed to pick up not only RAD but also Zeanah et al's (1993) suggested new alternative categories of disorders of attachment.

Other Approaches

With older toddlers, children, and teens, three different techniques to determine their state of mind with respect to attachment are used. The first is the Story Stem in which children are asked to complete and...
describe stories having been given the 'stem' or beginning. The second method asks children to respond to pictures. The third involves asking children actual questions about their attachment relationships.

**Narrative Story stem techniques**

These method uses dolls and narrative to enact a story. The dolls represent family members. The interviewer enacts the beginning of the story and then hands the dolls over for the child to complete it with varying degrees of prompting and encouragement. These techniques are designed to access the child's internal working models of their attachment relationships. Methods include the MacArthur Story Stem Battery (MSSB) developed in 1990 for children between the age of 3 to 8 years; the Story Stem Assessment Profile (SSAP) developed in 1990 for children aged 4 - 8; the Manchester Child Attachment Story Task (MCAST) developed in 2000 for children aged 4.5 - 8.5 and the Attachment Story Completion Test. Results are usually videod and coded.

**Picture response techniques**

Like the stem stories, these techniques are designed to access the child's internal working models of attachment relationships. The child is shown attachment related pictures and asked to respond. Methods include the Separation Anxiety Test (SAT) developed in 1972 for children aged between 11 and 17. Revised versions have been produced for 4 - 7 year olds.

**Direct Interview techniques**

**Child Attachment Interview (CAI)**

This is a semi-structured interview designed by Target et al (2003) for children aged 7 to 11. It is based on the Adult Attachment Interview, adapted for children by focussing on representations of relationships with parents and attachment related events. Scores are based on both verbal and non-verbal communications.[12]

**Attachment Interview for Childhood and Adolescence (AICA)**

This again is a version of the Adult Attachment Interview (AAI) rendered age appropriate for adolescents. The classifications of dismissing, secure, preoccupied and unresolved are the same as under the AAI described below.

**Adult Attachment Interview (AAI)**

Developed by Mary Main and her colleagues, this is a semi-structured interview that takes about one hour to administer. It involves about twenty questions and has extensive research validation to support it. A good description can be found in Chapter 19 of Attachment Theory, Research and Clinical Applications, edited by J. Cassidy and P. R. Shaver, Guilford Press, NY, 1999. The chapter title is "The Adult Attachment Interview: Historical and Current Perspectives," and is written by E. Hesse.
Some of the strongest external validation of the measures involves its demonstrated ability to predict interviewees' children's classifications in the Strange Situation. The measure also has shown to have some overlap with attachment constructs measured by the less time-intensive measures of the peer/romantic attachment tradition (Hazan & Shaver, Bartholomew), as reported by Shaver, P. R., Belsky, J., & Brennan, K. A. (2000). However, there are important differences in what is measured by the AAI--rather than being a measure of romantic attachment, it taps primarily into a person's state of mind regarding their attachment in their family of origin (nuclear family).

Other measures of attachment in childhood

- Attachment Story Completion Test [14]
- Preschool Assessment of Attachment ("PAA", Crittenden 1992),
- Observational Record of the Caregiving Environment ("ORCE")
- Attachment Q-sort ("AQ-sort").
- Disturbances of Attachment Interview or "DAI" developed by Smyke and Zeanah, (1999).
- The separation and reunion procedure
- Inventory of Parent and Peer Attachment

Other Approaches

Narrative and story-stem approaches are often used with older toddlers, children, and teens to determine their state of mind with respect to attachment. The Attachment Story Completion Test is one such methodology.

References


