

The construct of coherence as an indicator of attachment security in middle childhood:

The Friends and Family Interview

Howard Steele and Miriam Steele (2005).

Appeared in K.Kerns & R. Richardson (Eds) Attachment in middle childhood (pp 137-160) New York: Guilford Press.

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**Note: The research on which this chapter was based was supported by a generous grant from the Köhler Stiftung, Germany, administered by the Anna Freud Centre, London. To the families participating in the research, who kindly give of their time and interest, we owe an enormous debt of gratitude.**

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This chapter draws on findings obtained in the context of our 11-year follow-up of the London Parent-Child Project, where we had previously observed the parents of these first-born children during the prenatal period, and later followed up the children during infancy (Steele, Steele & Fonagy, 1996). Given that attachment during infancy is a relationship-specific construct (Sroufe, 1988), with much evidence that infant-mother attachments are statistically independent from infant-father attachment, further research is needed to elucidate the processes whereby representations of specific relationships to mother and to father during early childhood become, in the course of development, integrated within higher-order meta-representational systems. In this chapter we report on our attempts to observe such evidence of meta-representations of attachment in 11-year old children, and the extent to which these were related to previously observed attachment characteristics of the children or their parents. Both attachment research and the broader domain of normative developmental research provided the impetus to design “The Friends and Family Interview” which, we will argue, is appropriate to the aim of assessing representations of attachment in middle childhood.

Middle childhood is the period when meta-theoretical perspectives on one’s own and other’s cognitions and emotions have been widely documented (Broughton, 1978; Harter, 1998; Selman, 1980), and this topic customarily receives prominent attention in textbooks of child development when the focus is upon the late elementary school years or middle childhood (e.g. Dehart, Sroufe, & Cooper, 1999; Hetherington & Parke, 1999). From both the Piagetian and

information-processing perspectives, normally developing 11-year old children have become highly proficient at hierarchical classification or semantic organisation, i.e. organising information to be remembered by means of categorisation and hierarchic relationships. Against this background, children of this age should be able to recall past interactions that illustrate their higher-order views or evaluations of themselves and their relationships to their mother and their father. Such achievement should be fuelled by the normatively developing capacities for using others as a source of information to evaluate one's self (e.g. Ruble, 1983). Further, their growing awareness that different situations may require different behaviour toward others (Damon & Hart, 1988) should contribute to the likelihood that 11-year old children would be able to compare and contrast their relationships to their mothers and fathers, and comment upon features of these relationships they would most like to preserve, and other features they would most like to change. We expected that young people who had benefited from security in their early family experiences would be best able to meet this challenge of demonstrating meta-representational awareness of the positive and negative elements of relationships with family and friends, and strategies for how to resolve interpersonal and intra-personal conflicts.

With respect to children's developing understanding of emotions, it has been suggested that the capacity to label and understand mixed or blended emotions, and diverse emotions arising in the same person toward a target person or situation is normally evident by 11-years of age (Harter & Buddin, 1987). We have previously shown that individual differences in this capacity may be linked to individual differences in early attachment, and when a child is benefiting from security in the mother-child relationship an understanding of mixed emotions may be evident as early as 6-years of age (Steele, Steele, Croft, & Fonagy, 1999). Similarly,

others have observed that children benefiting from security in their attachment relationship to mother have an enhanced understanding of negative emotion in particular (Laible & Thompson, 1998), presumably stemming from more frequent, wide-ranging and open discussions of emotion in the home. Thus, we anticipated that discussions of self and attachment relationships at 11 years of age may be similarly influenced by previously assessed individual differences in attachment because of the varying patterns of emotional communication known to underpin, and result from, differing attachment patterns. Briefly insecure, especially avoidant, infant-parent attachments are linked to restricted parental responsiveness to negative emotions (Grossmann, Grossmann, & Schwan, 1986) and secure infant-mother attachments are linked to later evidence of open, balanced and flexible patterns of mother-child conversation concerning emotion (Etzion-Carraso & Oppeneheim, 2000).

We conceive of attachment in middle childhood as an emerging property of the individual child accessible via a structured interview, informed by but distinct from the Adult Attachment Interview (Main, Kaplan & Cassidy, 1985). Since Main et al. first advocated the 'move to the level of representation' beyond the attachment behaviours readily observed in the Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978), numerous narrative tasks, particularly attachment story completion task, have been proposed or re-visited as potential indicators of attachment security in children. Validity of these approaches has depended on the one hand on making comparisons to earlier infant-parent or parent measures of attachment security (Gloger-Tippelt, Gomille, Koenig, & Vetter, 2002; Steele, et al., 2003), or to concurrent measures of children's well-being (Easterbrooks & Abeles, 2000; Oppenheim, Emde, & Warren, 1997). Suggestive findings have been arrived at by both these approaches,

underlining the value of relying on the child's view of self and family relationships as a meaningful indicator of attachment security. Notably, the doll play literature tends to rely on scoring of the manifest content (e.g. antisocial or prosocial themes) in the child's story completion as opposed to overall narrative coherence of their speech according to the maxims of 'good conversation' embraced as central in the most widely used and accepted scoring system applied to the Adult Attachment Interviews (see Hesse, 1999). This suggests that doll play tasks are a useful means for demonstrating how interactions with parents are represented in young children's minds, but it is unclear as to whether doll play tasks can elicit higher-order abstract and organized concepts of the positive and negative aspects of 'relationships' with parents, as these are likely to depend on metacognitive abilities and memory skills not evident until the end of the primary or elementary school years. The very question, posed early in the Adult Attachment Interview, "tell me about your early relationship with your parents from as far back as you can remember" simply does not seem appropriate until a child is firmly established in, or at the end, of middle childhood. Not surprisingly, then some researchers have sought to extend forward the possible usefulness of doll play for assessing attachment from not only early school-aged children to the final years of elementary school (i.e. 9-11 year olds) and this strategy no doubt has many applications (See the doll play task and scoring system suggested by Granot & Mayseless discussed in Kerns chapter ???, this vol). Our strategy has been to *extend backward* the possible usefulness of questions and scoring criteria -- especially that of coherence -- from the Adult Attachment Interview literature.

The criterion of coherence is easily applied to speaker's responses to the AAI, where global evaluations of a relationship are first elicited (e.g. "give me 5 adjectives that describe you

relationships with your mother during early childhood through the age of about 12...I'll give you a moment to think about it and then I'll ask you about each adjective in turn") and then specific memories that might illustrate the evaluation is demanded (e.g. "you said...loving... now, when you think about your relationship during early childhood with your mother as 'loving,' what comes to mind?"). AAI raters or judges pay close attention to the extent to which recalled memories support or fill out the picture suggested by the adjectives provided. High levels of coherence may be demonstrated regardless of the adjective's positive or negative connotations – what is crucial is correspondence, consistency and ultimately credibility. This is a central, though not the only, consideration when rating coherence in Adult Attachment Interviews. The AAI scoring system (see Hesse, 1999), as concerns coherence, leans heavily on Grice's (1975) maxims of 'good conversation', i.e., being truthful, relevant, economical and conventionally polite. Adherence to these maxims has been shown to be fundamental to an attachment interview deemed autonomous-secure and likely to reflect an adult speaker capable of being a good-enough (sensitive and responsive) parent (van IJzendoorn, 1995). Given the developmental evidence that metacognitive abilities and memory skills are vastly improved by 11-12 years of age, as compared to the early school-aged years, we anticipated that this age group would be well able to engage with the challenge of providing a coherent narrative about self, family and friends.

Almost as soon as coherence was identified as a central marker of attachment security in adulthood, appropriate psychometric queries were raised as to whether coherence in an adult attachment interview was distinct from verbal IQ. A number of reports have confirmed that coherence when describing and evaluating attachment relationships (in the context of the AAI) is

largely orthogonal to verbal IQ (Bakermans-Kranenburg & van IJzendoorn, 1993; Steele, 1991; Crowell, Waters, Treboux, et al., 1996). In other words, a lawyer or doctor may be low on coherence in the AAI, while an unskilled worker lacking a high school diploma may be high on coherence. This evidence of discriminant validity pertaining to the Adult Attachment Interview sets the goalpost for any proposed interview-based measure of attachment security in middle childhood. In other words, to be persuaded that our Friends and Family Interview was indeed assessing attachment processes we proposed to show that a rating of coherence applied to the interview could be reliably achieved without being wholly subsumed by an independent measure of verbal IQ. What we hypothesized was that the overlap between verbal IQ and coherence in the FFI would be limited and no greater in magnitude than the overlap between verbal IQ and coherence in the AAIs obtained many years before from their parents.

One further psychometric issue concerns our claim that coherence at age 11 in an attachment narrative is similar to coherence in an AAI. One way of investigating whether coherence at age 11 is a meta-representational capacity, rooted in but not defined by experience, would be to rate both coherence and evidence of secure base availability of each parent in the interviews from the 11-year olds. If these ratings were then found to be completely overlapping, we would be hard pressed to claim that coherence at age 11 is anything like coherence when rated in the context of an AAI. This being so because in the AAI literature coherence has been widely shown to be largely independent from probable past experiences with caregivers *and* a superior predictor of infant-parent attachment quality (Main et al., 1985; Fonagy, Steele & Steele, 1991; Van IJzendoorn, 1995).

We anticipated that coherence in discussing relationships with friends and family at 11

years of age would be significantly related to prior assessments of attachment obtained from the children and their parents. To test for this possibility, we compared ratings of coherence in the interviews provided by the 11-year olds with their earlier observed attachments to mother (at 12 months), to father (at 18 months) and to the Adult Attachment Interviews obtained from their parents in the prenatal period (Steele et al., 1996). In this way, we hoped to explore the extent to which early relationship-specific attachments may be represented and integrated in the mind of the 11-year old child on the cusp of adolescence. Several questions arise from the fact that our longitudinal design did not include concurrent observations of parent-child interaction at age 11. If coherence at age 11 was related to our previously assessed early attachment variables, what evidence would we have that it was these early patterns of attachment, as opposed to the continuous and stable nature of parent-child interactions, that have influenced the 11-year outcome? And, if coherence at age 11 was not associated with our early attachment assessments, should this be taken as evidence that parent-child relations have changed significantly since early childhood? In only one sense could our longitudinal research design explore the possibility that later, as opposed to very early, parent-child interactions were influencing coherence at age 11. This becomes evident when we consider the four sources of information we have about 'early' attachments within the family. Two of these are the AAI's provided by each parent before the child was born. The two other of these are the infant-mother attachment at 12 months and the infant-father attachment at 18 months. If we observed that only the AAI's and not the infancy assessments were predicting coherence at age 11, this may suggest that later and not early parent-child interactions were influencing the 11-year outcome. To the extent that the infancy Strange Situation assessment(s) could be shown to independently predict coherence at age 11, even after



taking account of the parents' AAIs, then we would be on more solid ground in assuming a long-term influence of early experience with mother, father or both attachment figures.

In thinking about what to expect from interviews about self, family and friends at age 11, we could not ignore the literature on gender differences. As gender-segregated peer behaviour becomes normative in middle childhood, with all range of activities and judgements being increasingly made in accord with gender stereotypes (see Ruble & Martin, 1998), we entertained the possibility that girls would be more advanced than boys in talking about diverse emotions, relationships and showing a meta-representational understanding of attachment. Thus, in the results reported in this paper, we explore whether meta-representations of attachment would be more evident in girls than boys, and whether the influence of attachment upon the narratives provided by 11-year olds in our sample would be similarly evident in boys as opposed to girls.

## METHOD

### Sample

Fifty-seven children were visited in their homes, in the year or so following their 11<sup>th</sup> birthday. The mean age of child in the follow-up was 11 years, 6 months; range = 11 years, 1 month through 12 years, 7 months; sd = 3.8 months. In other words, approximately 70% of the young people seen at follow-up were between 11 years 2 months and 11 years 10 months. In terms of gender, there was an even split with 28 boys and 29 girls. Adult Attachment Interviews

from the parents (obtained during the pregnancy phase of the study) and infant-parent Strange Situation assessments were available for all the participants at 11-year follow-up, with the exception of one girl who was not observed with father in the Strange Situation at 18 months. Thus, analyses including infant-father attachment data are based on 56 cases.

#### Early attachment measures

The Adult Attachment Interview. The interview administered to all parents during the pregnancy expecting their first child closely followed the schedule outlined by George, Kaplan & Main (1985). The Adult Attachment Interview is structured entirely around the topic of attachment, principally the individual's relationship to mother and to father (and/or to alternative caregivers) during childhood. Subjects are asked both to describe their relationship with their parents during childhood and to provide specific memories to support global evaluations. The interviewer asks directly about childhood experiences of rejection, being upset, ill and hurt as well as loss, abuse and separations. In addition, the subject is asked to offer explanations for the parents' behaviour and to describe the current relationship with their parents and the influence they consider their childhood experiences to have had upon their adult personality. Ultimate classification of the interview into the secure or one of the insecure (dismissing or preoccupied) groups depends largely on the extent to which the narrative is judged to satisfy four criteria of coherence. These four criteria comprise: (i) a good fit between memories and evaluations concerning attachment; (ii) a succinct yet complete picture; (iii) the provision of relevant details; (iv) clarity and orderliness (see Hesse, 1999). An insecure-dismissing narrative is brief but

incomplete, marked by a lack of fit between memories and evaluations, often punctuated or sustained by an unrealistically positive evaluation of parents and/or self. An insecure-preoccupied narrative is neither succinct nor complete and contains many irrelevant details, together with much passive (weak, non-specific) speech or highly involving anger toward one or both parents. By contrast, the autonomous-secure narrative robustly fulfils all or most of the criteria of coherence, *whether or not* the speaker was well-cared for during childhood. Ratings and classifications of the interviews were carried out independently by four trained raters, with highly reliable results (see Steele et al., 1996).

The results section below also refers to ‘probable past experiences’ of the parents with their mothers and fathers (how well cared for they were) in terms of the extent of supportive, loving experiences they had, which can be readily identified in an AAI. Here 9-point rating scales were applied to the AAIs by the trained raters who achieved high levels of inter-rater agreement, median  $r$  = .76, range = .73 - .91 (Steele, 1991).

The Strange Situation. The Strange Situation is widely regarded for its reliability and validity, and extensively employed, as an assessment of the quality of child-parent attachments (Ainsworth et al., 1978). This 20-minute laboratory-based assessment involves two brief separations and two three-minute reunions with the parent. Focus is upon the infant's behaviour, especially during the reunions, where individual differences are measured in terms of the strategies employed to cope with this stressful situation well within the range of normal infant experience (i.e. introduction to an unfamiliar place and person, and two brief separations from the parent).

Of the three originally identified major patterns of response, two reflect an insecure

attachment to the parent (either avoidant or resistant) and one indicates a secure attachment to the parent (Ainsworth et al., 1978). Infants whose attachment is classified insecure-avoidant tend to appear un-distressed during separation and to avoid proximity to the parent upon reunion. Infants whose attachment is classified secure may or may not be distressed by separation, but upon reunion are pleased to see the parent and, if distressed, are easily comforted. Infants whose attachment is classified insecure-resistant tend to be distressed by separation and to seek contact during reunion but rather than being settled by the parent's return, appear inconsolable. Some children do not fit easily into one of the traditional three patterns because of their atypical 'disorganized' response to the situation, assumed to reflect fear of the attachment figure. When this judgement is made, a best-fitting alternate (avoidant, secure or resistant) assignment is made. This applied to less than 5 of the cases in the current sample. The video-films of the Strange Situations were classified by a team of raters who were blind both to the parents' interview data and also to the child's attachment status with the other parent. Two coders independently classified each infant-parent tape. There was 90% agreement on the four-way classifications of infant-parent attachment, with conferencing involving a third trained rater being relied on to settle the disagreements.

#### Attrition from earlier phases of the study

We examined attrition by computing cross-tabulations of Adult Attachment Interview profiles (insecure vs autonomous-secure) of each parent with children's observed attachment status (insecure vs secure) with mother (at 12 months) and with father (at 18 months). These

cross-tabulations revealed highly similar levels of intergenerational concordance in attachment patterns (75% for mothers and 66% for fathers) to that observed in the larger sample of 90 families from which these 57 come (Steele et al., 1996). In another important respect the 11-year follow-up sample also resembled the earlier, larger, cohort insofar as the proportions of security and insecurity in mothers, fathers, and children were similar at the two time periods, despite the absence of 33 families from the 11-year follow-up. Attrition, it was clear, was not unduly influenced by attachment variables. We were thus persuaded that the sample recruited for the 11-year follow-up was, in terms of attachment security, were very much like the original cohort. Attrition appears to have been much more strongly influenced by migration factors with a third of the original sample having moved far from their original contact address, and most of these we unable to locate at the time of the 11-year follow-up.

Verbal intelligence. *WISC-III<sup>UK</sup>*. The ‘Vocabulary’ and ‘Similarities’ sub-scales of this widely used and UK-standardised "intelligence" test were administered to control for those aspects of verbal intelligence most likely to be related to the capacity for coherence in discussing relationships (Wechsler, 1992). In the Similarities subtest, the child is asked how stimulus words are similar. The words represent concepts or objects and are presented orally to the child. The child must respond verbally. A maximum raw score of 33 is possible on the Similarities sub-test. For the present sample, the mean Similarities score achieved was 23 (sd = 4), range = 14 – 31. In the Vocabulary subtest, the examiner reads a word and the child is required to give a spoken definition. A maximum score of 60 is possible. For the present sample, the mean Vocabulary score achieved was 37 (sd = 6), range = 23 – 49. Remarkably, the mean Similarities score achieved is suggestive of a test-age of 15 years, 10 months. The Vocabulary score achieved is suggestive of a test-age of 13 years, 2 months. In other words, the sample would appear to be highly verbally intelligent.

Verbal intelligence of the parents had been assessed at the initial pregnancy phase of the study with the Short Form of the Mill Hill Vocabulary Scales (Raven, Court & Raven, 1986). The parents were presented with a series of target words, of increasing difficulty, and they were asked to define each and use it in a sentence. There are 17 words on the Short Form. For the parents of the children participating in the 11-year follow-up, the mothers' mean score was 11.1 (sd = 2.3); range = 6 – 16; the fathers' mean score was 12.3 (sd = 2.6); range = 5 – 17. These average scores of the parents reflect a level of verbal intelligence which is among the upper third of the British adult population, as Raven et al (1986) report that the 11<sup>th</sup> word in list of 17 presents difficulty to approximately 65% of the population.

The Friends and Family Interview. Our search for an interview protocol appropriate to our aim of assessing coherence concerning attachment relationships, and also able to elicit the interest of 11-year old children, led us in two directions. First, the mainstream developmental literature and classic theorising on psychosocial relationships (Erikson, 1951/1963; Sullivan, 1953), led us to consider the domain of friendship as a topic we must inquire about. Children's social health depends very much by the late middle childhood on forming and maintaining friendships outside the family, beyond longstanding relations to siblings and parents. Thus, to assess coherence concerning relationships we would have to ask about best friendships and how they are going. At the same time, we were driven by our ongoing interest in close family relationships as discussed by Bowlby in the 1956 lecture he delivered on the centenary of Sigmund Freud's birth: "In our early years it is the rule and not the exception that towards both our siblings and our parents we are impelled by feelings of anger and hatred as well as those of concern and love" (published in Bowlby, 1979, p. 4). Bowlby elaborates in this lecture on the need for children to develop a well-functioning capacity for regulating this conflict of love and hate and, "through this, [a] capacity to experience in a healthy way [both] anxiety and guilt" (Bowlby, 1979, p. 3). Thus, normal

development is depicted in terms of having just the right amount, neither too much nor too little, anxiety and guilt. How else could we ever seek to change or repair an aspect of our self or an important relationship if we did not feel some sense of anxiety or guilt over things not having proceeded as well as they might? This view of the negative emotions owes much to Freud's (1926) account of anxiety being a danger signal calling the ego (or self) into action aimed at minimizing the threat to internal and social cohesion. Against this background, then, we designed the Friends and Family Interview as a way of systematically inquiring about the young person's view of the complex and often conflicting emotions arising in one's closest relationships.

We not only drew upon developmental research and psychoanalytic theories in conceiving of the interview protocol we would assemble, but also, we were strongly influenced by our own previous findings concerning young children's understanding of emotion. In particular, we recalled how at age 6 years, the longitudinal sample we would again be visiting, had impressed us with their advanced and precocious skills at understanding mixed emotions, but only if their mothers had provided autonomous-secure and coherent attachment interviews or if they had been securely attached to mother at one-year (Steele et al., 1999).

We knew that it was perhaps too much to expect 11-year old children to show themselves to have a coherent developmental perspective on their childhood when they were still in the middle of it! Thus, we aimed to prime the 11-year olds we interviewed to think about diverse aspects of their feelings concerning self, parents, siblings and friends. We did this by beginning the interview we would come to call the Friends and Family Interview, with the following invitation:

I want to get an idea about you, what sort of person you are, what you like to do, and most of all how you think and feel about your relationships with friends and family. One

thing we sort of take to be true about all people and relationships is that there are things we like best in ourselves and in other people (things we might like to keep the same), and other things that we like least (or not very much at all) in ourselves and other people (things we might like to change). So this might be something we talk about as I ask you the following questions.

The subsequent questions of the interview took as their focus, in turn, self, peers (best friend), siblings and parents. With regard to each of these domains, the respondents were asked to describe the best and worst bits, most liked and least liked aspects, of how things are. Specific probes included queries about disagreements that arise, and how they are negotiated, with requests for supporting memories that could fill out the picture. Indeed, throughout the respondents were asked to illustrate their stories with examples from daily life. Coming from the attachment tradition, we asked early on under the heading of questions about the self, ‘what do you do when you are upset?’. We saved for the end of the interview protocol, those questions that we imagined to be most taxing upon these young people’s capacity for coherent speech. These were questions about ‘what kind of person mother (or father) thinks you are,’ ‘how would you describe their relationship to one another (i.e. the marital relationship), ‘has your relationship to your parents changed since you were younger’ and ‘what do you think the relationship will be like in 5 years?’. The full Friends and Family Interview protocol is shown in Appendix 1. The interviews collected were tape-recorded (for later transcription) and video-filmed.

For the purposes of the present report, we rely on four-point ratings of coherence, and secure-base availability of each parent. These rating scales were applied to the interview transcripts by graduate students working independently, and without access to prior attachment-



related information of the 11-year old speakers whose narratives they were rating. Coherence was rated on 4 subscales, stemming from the AAI literature, i.e. truth or quality (a good fit between specific memories and general evaluations), economy or quantity (a succinct but complete picture), relation (the provision of relevant detail), and manner (being conventionally polite, clear and orderly in presentation). As well, each interview was assigned a 4-point rating for global or overall coherence. Further, each interview was assigned a 4-point rating for evidence of secure-base availability of (i) mother and (ii) father. The 4 points for these scales were defined as 0=no evidence, 1=a little evidence, 2=moderate evidence, and 3=robust marked evidence. The four sets of ratings for coherence were examined for reliability by considering the Chronbach alpha coefficients when each person's rating was treated as an item. For the alphas computed, each of them was greater than .74 (range = .74 - .88). A single score for truth, economy, relation, manner and overall coherence was computed for each interview, based on summing up and averaging the individual four ratings that were assigned.

Importantly, the narratives provided by the 11-year olds could be scored for evidence of social competence or 'quality of best friendship,' and 'quality of sibling relationship' – but in this report we focus on the global construct of overall coherence in order to consider our hypothesis related to the young person's capacity for providing a cohesive and credible account of their attachment experiences, self-construct, and peer-relationships. This approach is in line with the widely accepted attachment theory construct of an internal working model of self and others becoming established early in life (a reflection of which is observable upon reunion with the caregiver in the Ainsworth Strange Situation). And, further, the internal working model of one's relationship with mother and (often independent) model of one's relationship with father,

influences one's experiences with peers, and eventually becomes integrated into a higher-order representational model informing one's thoughts and feelings about being or becoming a parent (a reflection of which is evident in the speech provided in response to the Adult Attachment Interview).

## RESULTS

To test the hypotheses under consideration, results fall into two sections. First, we report on bivariate correlations concerning coherence in the narratives from the 11-year olds and their verbal intelligence, as well as parallel results for the parents; and also, correlations between the early attachment assessments and coherence at 11-year age. Second, we report on regression results examining the extent of independent and overlapping predictor variables from the range of demographic, verbal and earlier attachment measures obtained, upon the outcome of coherence and meta-representational processes observed in the 11-year olds' responses to the Friends and Family Interview.

### Bivariate comparisons

First, we examined the correlations between verbal intelligence of the parents and children, and age of the children, in relation to their observed attachment-based coherence. All but one of these correlations yielded non-significant results. Children's age in months at the time of the 11-year follow-up was correlated positively and significantly with overall coherence ( $r =$

.26,  $p < .05$ , one-tailed), allowing for the likelihood that one would have predicted this outcome. This result suggests, as might well be expected, that maturation enhances the child's potential for demonstrating meta-representational capacities. These preliminary tests revealed one further finding of note, namely boys and girls did not differ in their scores they received for coherence and secure-base availability in the FFI.

Our next step was to compare ratings of the secure-base availability or loving supportive experiences with each parent, with the speaker's coherence or overall attachment security. For the parents, mothers' and fathers' AAI security correlated positively and highly significantly with the rating of how supportive/loving/available had been their mothers ( $r = .56$ ,  $n = 57$ ;  $r = .34$ ,  $n = 57$ ), and their fathers ( $r = .59$ ,  $n = 57$ ;  $r = .37$ ,  $n = 57$ ). When we made a similar comparison for the children, based on their FFIs, secure base availability of mother correlated positively and highly significantly with each of the 5 coherence ratings (median  $r = .46$ , range = .45 - .64); while secure base availability of father was similarly correlated with the 5 coherence ratings (median  $r = .53$ , range = .43 - .58). These consistent correlations in the .40 - .60 range are important because of their modest magnitude given they are based on comparisons between ratings derived from the same narrative. They highlight how 65-80% of the variance in parents' AAI classifications as insecure or secure, and in the children's levels of coherence cannot be attributed directly to their experiences of warmth and support from their parents.

We then proceeded to compare the coherence ratings of the FFIs with the binary measures of attachment security from the parents' AAIs (from the pregnancy phase of the study) and the Strange Situation observations made of the infant-mother relationship (at 12 months) and the infant-father relationship (at 18 months). Below in Tables 1 and 2, we show the pattern of

correlations that was observed for daughters and sons separately together with the observed results for the full sample. We followed this strategy in order to consider the question of whether the links with early attachment may depend on the gender of the child, as well as of the parent. Table 1 reveals that quality or truthfulness in the Friends and Family Interview responses of the 11-year olds was consistently and significantly higher, for both sons and daughters, if mother's Adult Attachment Interview had been classified autonomous-secure. Uniquely, this is the only coherence correlation in Table 1 that is significant for both sons and daughters. Mothers whose AAI's were classified autonomous-secure had sons who at age 11 were impressively well-mannered in the FFI context ( $r=.40$ ). The remaining significant correlations of coherence variables in Table 1 all point to influences of the fathers' AAI's upon their sons' FFI-responses in terms of every index of coherence, i.e. manner ( $r=.40$ ), truth ( $r=.42$ ), economy ( $r=.60$ ), relation ( $r=.39$ ), manner ( $r=.40$ ) and overall coherence ( $r=.47$ ).

Table 1 also indicates that evidence in sons' FFIs of secure base availability of mother is significantly and positively correlated to both their mothers' AAI security ( $r=.39$ ) and their fathers' AAI security ( $r=.47$ ). Daughters, by contrast, are shown to have their availability of mother ratings uniquely and significantly related to mothers' AAI security ( $r=.38$ ). Table 1 also shows that secure base availability of father, as rated in the FFIs, is significantly correlated to fathers' AAI security, but only for sons.

Table 2 below looks at the correlations observed between the FFI and the early observations of infant-parent attachment security, with results for sons, daughters and the full sample presented separately.

Table 2 shows a consistent pattern of positive significant correlations between infant-

father attachment security and each observed index of coherence in the Friends and Family Interview at age 11, but for sons only. Daughters' speech about relationships, in terms of truthfulness and overall coherence, appears to also be positively influenced by having been securely attached to father at 18-months, but the magnitude of these correlations does not reach significance. Truthfulness of daughters is also correlated positively, but not significantly, with infant-mother attachment at 12-months. Also, with respect to secure base availability ratings of mother and father in the FFIs, it is for the sons that positive correlations are more evident, one of these highly significantly. This is the correlation in Table 2 between secure base availability of mother (in sons' FFIs) and infant-father attachment security at 18 months ( $r = .50$ ,  $p = .007$ , two-tailed). A parallel correlation, significant at the level of a trend, is observed between secure base availability of father (in daughters' FFIs) and infant-mother attachment security at 12 months ( $r = .34$ ,  $p = .08$ , two-tailed).

### Regression results

Having established that early attachment variables appear to predict various aspects of our coding of the Friends and Family Interview at 11-years of age, together with considering the influence of the child's age and verbal intelligence, we then set out to explore the extent to which these could be said to be overlapping or independent predictive influences.

With regard to the daughters, there was only one robust predictor (mothers' AAI security) of their coherence (the scale concerning truthfulness or credibility) in the Friends and Family Interview, about which we wondered if the daughter's age or verbal intelligence contributed any

independent predictive power. Thus, we computed a hierarchical linear regression analysis entering at the first step the daughter's age as predictor, then her Similarities subtest WISC score (as this was more suggestive of significance than the Vocabulary subtest score) and finally mother's AAI security in order to see what remaining predictive power Mothers' AAI security would have after taking into account these maturational and verbal IQ variables. This regression analysis revealed that age of daughter when entered made a limited ( $\text{Beta} = .17$ ) and non-significant ( $p = .35$ ) contribution to the model until, at step 3 (after the AAI of the mother was entered), age dropped out altogether ( $\text{Beta} = .03$ ,  $p = .88$ ). This hierarchical regression also revealed that a daughter's capacity for scoring highly on the verbal intelligence (WISC) subtest of Similarities, entered after age, increased  $R^2$  by 6% but this was not a significant increase,  $F_{\text{change}}(1,26)=1.62$ ,  $p = .21$ . By contrast, when maternal AAI autonomy/security was added to the model at step 3, there was a substantial and highly significant leap in  $R^2$  by 24%,  $F_{\text{change}}(1,25)=9.16$ ,  $p = .006$ . Overall 33% of the variance in daughters' coherence (truthfulness) in the FFI was accounted for by the model including Age of daughter, Wisc Score for Similarities subtest and maternal AAI security.

With respect to the sons, there were a range of attachment variables shown at the bivariate level to be linked with levels of coherence in the Friends and Family Interview. We therefore computed a hierarchical linear regression in order to examine the extent of overlapping as opposed to independent influences at work. We concentrated on the sons' speech in terms of truthfulness, both because this was the variable found to be most relevant in the daughter-based analyses, and because this variable was variously correlated at the bivariate level with each parent's AAI autonomy/security and infant-father attachment security. At the first step in the

regression analysis, age of son (months over 11 years) was entered as the predictor variable with sons' truthfulness or credibility in the FFI entered as the dependent variable. This yielded an impressive estimate of variance accounted for at 6% but, given the small sample size, not a significant effect. At the second step, the sons' verbal intelligence scores on the WISC subtest for Similarities was entered and this added a negligible and non-significant increase of 2% to the variance accounted for in the sons' FFI coherence. The contribution to the model at steps 3 and 4 made by sons' verbal intelligence remained trivial and non-significant. Statistical significance appears in the model at step 3, when Mothers' AAI security is added, increasing the variance accounted for by 20% to a cumulative total of 28%,  $F_{change}(1,23)=6.31, p < .05$ . Notably, when Fathers' AAI security is added at Step 4, the variance accounted increased by a further 12% to 40%,  $F_{change}(1,22)=4.38, p < .05$ , with mothers' AAI autonomy/security remaining as significant predictor, independent of the significance contributed by fathers' AAI autonomy/security, of their sons' coherence in the FFI at age 11. Note that infant-father attachment security does not figure in these results, although it did figure in the bivariate correlations. Including this variable in the regression model did not enhance the predictive power of the model, on account of overlapping variance with fathers' AAI security, the more powerful predictor well able to carry the weight of prediction on its own.

## DISCUSSION

The results reported above provide compelling reasons to believe that by 11-years of age boys and girls are capable of telling a coherent and integrated story about their thoughts, feelings

and experiences concerning self, friends, parents and siblings. The Friends and Family Interview (FFI) was the method used to elicit these stories, and the discussion accordingly focuses on why this interview method may be particularly useful for studying attachment processes in middle childhood. Observed links between young peoples' coherence in the FFI and their parents' responses to the Adult Attachment Interview (AAI) collected more than 11 years previously merits careful consideration. In particular, we provide an account of the somewhat surprising gender-specific findings that emerged, highlighting the significance for sons' coherence at age 11 of both maternal and paternal AAI security, while for daughters the significant influence upon her coherence at age 11 appeared to be much more exclusively tied to their mothers' (not their fathers') AAI security.

It is not new to suggest, as we have here, that eleven-year-old children can speak about their views of themselves, their relationships with their parents, siblings and friends in a thoughtful, reflective, and credibly insightful way – others have documented this developmental step characteristic of advancing social cognition in the middle childhood and adolescent years (Broughton, 1978; Damon & Hart, 1988; Harter, 1998; Selman, 1980). Nor is it new to suggest that a differentiated self-understanding, including the ability to express positive and negative beliefs about the self, is concurrently linked to attachment security in middle childhood (Easterbrooks & Abeles, 2000). The arguably unique contribution made by the current results stems from the longitudinal research design employed. This allowed us to highlight how individual differences in the capacity to provide a coherent and credible evaluation of the self and important relationships (to parents, siblings and peers) at age 11 is a reflection of



longstanding individual differences in attachment security within the family.

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With respect to our approach to scoring the Friends and Family Interviews (FFIs) we collected, reliance on the construct of coherence (Grice, 1975), as it has been applied to the scoring and classification of Adult Attachment Interviews or AAI (Hesse, 1999), proved a rewarding investment. Coherence at age 11 in the narratives about self, friends and family was not shown to be any more influenced by verbal intelligence than is the case when adults or parents provide their narratives about attachment experiences in the AAI. Further, when we considered if coherence in the FFI was a dimension distinct from estimates of secure base availability (supportive parenting), the findings were highly suggestive. The majority of variance in coherence scores in the FFI could not be accounted for in terms of supportive parenting received. Indeed the proportion of overlap between ratings of coherence and secure base availability in the FFI was broadly similar to the observed overlap between ratings of coherence and supportive parenting received in their parents' AAIs. Thus, it would seem that coherence is operating in the FFI much like coherence is presumed to operate in the AAI, i.e. as an organizer of experience, including reflections, evaluations, and re-descriptions of experience at a meta-representational level within the mind.

Clues as to the only moderate (and not major) influence of early attachment experiences upon coherence at age 11 comes from the observed correlations between previously observed infant-parent patterns of attachment and coherence ratings derived from the FFIs. Infant-mother attachment security at 12 months, though positively related with some of the FFI ratings, was not significantly related to any of them. And, with respect to infant-father attachment security

observed at 18-months, this variable did relate positively and significantly to every index of coherence in the FFI and also to secure base availability of mother, but for sons only. Notably, in the regression analysis predicting boys' coherence (truthfulness), the infant-father attachment variable was occluded by the overlapping and more powerful influences of fathers' and mothers' Adult Attachment Interview (AAI) security/coherence. So early experience, while undeniably contributing to coherence, is perhaps not as important as later attachment experiences, tapped (albeit indirectly by the AAIs collected from the parents in the pregnancy phase of our longitudinal research. A key assumption here, that remains to be tested, is the long-term stability of parental responses to the AAI. We would assume greater stability for responses to the AAI during adulthood in the parenthood phase than is the case for infant-parent attachment security across childhood. In other words, we understand the AAIs we collected from expectant parents to be a predictor not only of infant-parent attachment but of later parental availability. This is confirmed by the current results showing a strong and significant correlation between our ratings of secure base availability of the parent(s) and the 11-year olds' capacity for providing a credible and coherent attachment narrative or FFI.

In this respect, we regard the coherent responses we obtained to the FFI as evidence of the representational power of the developing human mind, including the capacity to store and recall details of past and current social interactions, examine these experiences and the emotional impact they carry. Both daughters and sons in the current study who showed this capacity in the FFI (i.e. to be truthful and coherent) were more likely to have had mothers'--and in the case of sons -- fathers too, who, prior to the child's birth, showed this same capacity in the AAI. The discriminant validity findings mentioned above, with respect to verbal intelligence (a well known

heritable characteristic), would seem to rule out a behaviour genetic account of these intergenerational findings. More probable, is a social transmission model, in which parents' understanding and communication of emotion is a central factor.

The strong influence of mothers' AAI's on both sons and daughters evokes consideration of mothers as primary attachment figures who for this sample, as in most, spend more time than fathers involved in caregiving to their children. That it was mothers' AAI's and not the early infant-mother relationship predicting FFI coherence speaks for the *ongoing* as opposed to early quality of mother-child interactions. Not having home observations to draw upon, we can only assume that those young people with highly coherent FFIs benefited from many experiences of having their mothers listen well, and respond appropriately, in the context of conversations about both positive and negative emotions, leading to and arising from social experiences. We expect this to have been the case given ample prior research highlighting a relative ease of emotional expression concerning positive and *negative* experiences to be a marker of attachment security (Easterbrooks & Abeles, 2000; Laible & Thompson, 1998; Main et al., 1985; Steele et al., 1999). Notably, our rating of coherence in the FFI depended upon the young person providing credible evidence to support their positive *and negative* appraisals of self, parents, siblings and peers.

That levels of coherence in the FFIs from the sons, as opposed to the daughters, should be more influenced by the early father-child relationship and by both parents' (as opposed to only the mothers') AAI's, is consistent with diverse developmental theories. Whether we think, for example, in terms of gender schema theory (Martin & Halverson, 1981) or classical psychoanalytic theory (Freud, 1905), there is little surprise in the observation that from earliest childhood forward sons -- as opposed to daughters -- would have been particularly attentive to

their fathers in defining their emerging sense of self. To the extent that mothers' AAIs influenced both sons' and daughters' levels of coherence in the FFI it is appealing to consider that mother is typically the first attachment relationship for both genders, and it is only sons who must later revoke in some measure this primary attachment in order to embrace an identification (or new attachment) with the father (Chodorow, 1978). Thus, the challenge of integrating representations of both parents into a singular coherent meta-representation of attachment may be less straightforward for sons. The attachment history of one 11-year old boy from our study seems to illustrate well this phenomenon. His responses to the FFI were scored very high for coherence. His parents had each provided AAIs that were judged autonomous-secure/coherent at the initial pregnancy phase of the study. At 12-months he was anxiously-resistant in his attachment to mother, and in a post-hoc analysis we identified this type of 'mismatch' as a statistically significant group of mothers with a "fragile" form of security (Fonagy, Steele, & Steele, 1991). These mothers' AAIs pointed to a more idealized childhood history (than other autonomous-secure mothers with securely attached infants), perhaps making these women especially vulnerable to stress and disappointment, such as can be occasioned by the birth of first child. At 18-month, the boy was observed to have a secure attachment to father. In the FFI at 11-years, he described his relationship to his mother as one in which they spent much time together, more than he spends with his father, as she collects him from school, is able to see his side of an argument (giving as an example a teacher who unfairly gave him a 'detention'), and is generally available. He was then prompted for something in the relationship to his mother that is perhaps not as he would like, something he might like to change or something that he perhaps likes least about his relationship with his mother but can't change? He then commented: "Umm, sometimes

it's either she doesn't understand me, she doesn't, and sometimes when she doesn't she just physically can't see what I am on about. Umm, this is the least confusing way I can put it. But it's confusing anyway ... She either violently agrees with me or violently disagrees. And then she violently agrees. I don't get much in the way of a word, and if I do, then it's kind of discarded which, umm, I don't complain about because, umm, 99.9% of the time everything is fine and she just agrees with me. The thing I don't like that much is, umm, it's either or.” When asked about his relationship with his father, the tone and content became lighter as he alluded to the positive friendly exchanges they have: “Yap. Umm, umm, he always tells rather marvellous stories. They are ones from the paper or ones from his childhood. And, umm, we always laugh about those. And, umm, discuss them. Have a bit of a joke. Umm, most of them involve, umm, doing something he shouldn't have done. And it's quite hard to imagine because I admire him as a grown-up, and I can't imagine him doing all these naughty things he tells me does, he did, rather. And so we have a bit of a laugh about that.” He went on to elaborate in detail on one of the benign stunts his father engaged in with friends as a child, and overall provided a credible, coherent account of his relationships with each parent, siblings, and friends.

FFIs rated low on coherence often failed to provide experiential details of the ‘best liked’ or especially ‘least liked’ aspects of self, parents, siblings or friends and thus ‘truthfulness’ (having evidence for what you say) emerged as the most significant subscale of coherence. This is perhaps typical of the late middle childhood/early adolescent age-group where dismissal/avoidance (as opposed to preoccupation/rumination) is the more characteristic form of insecurity to manifest in a low-risk sample (Ammaniti, van Ijzendoorn, Speranza & Tabmelli, 2000).

With respect to the developmental course to be negotiated between infancy, early childhood, through middle childhood and beyond, we wish to underscore how the Friends and Family Interview is not the Adult Attachment Interview, which no doubt provides a more demanding test of meta-representational capacities and some colleagues have demonstrated the appropriateness of this instrument for young people aged 12 or older (See Ammaniti et al., 2000). Given the evidence we have shown here that a difference of even a few months between ages 11 and 12 can contribute to enhanced coherence, it may be that the Friends and Family Interview is most useful for beginning to engage young people in the task of providing an autobiographical attachment narrative. An AAI may be the next step, appropriate from 12-years when middle childhood is widely agreed to have drawn to a close. It may be that what the middle childhood years provide, in attachment terms, is a set of experiences with parents, siblings, and peers that may optimally cohere in such a way as to facilitate the initial integration of diverse mental representations of one's ongoing interactions (and relationship histories) with mother, father and others.

REFERENCES

- Ainsworth, M. D. S., Blehar, M. C., Waters, E. & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, New Jersey: Earlbaum.
- Ammaniti, M., van IJzendoorn, M. J., Speranza, A. M., & Tambelli, R. (2000). Internal working models of attachment during late childhood and early adolescence: an exploration of stability and change. *Attachment and Human Development*, 2, 328-346.
- Bakermans-Kranenburg, M. J. & van IJzendoorn, M. H. (1993). A Psychometric Study of the Adult Attachment Interview: Reliability and Discriminant Validity. *Developmental Psychology*, 29, 870-879.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Routledge.
- Broughton, J. (1978). Development of concepts of self, mind, reality, and knowledge. In W. Daman (Ed.), *New directions for child development: No.1. Social Cognition* (pp. 75-100). San Francisco: Jossey-Bass.
- Chodorow, N. (1978). *The reproduction of motherhood*. Berkeley and Los Angeles: University of California Press.
- Crowell, J., Waters, E., Treboux, D. *et al.* (1996). Discriminant validity of the Adult Attachment Interview. *Child Development*, 67, 2584-2590.
- Damon, W. & Hart, D. (1988). *Self-understanding in childhood and adolescence*. Cambridge, England: Cambridge University Press.
- Dehart, G., Sroufe, A., & Cooper, R. (1999). *Child development: Its nature and course* (4<sup>th</sup> Ed). Boston: McGraw Hill.

- Easterbrooks, M. A., & Abeles, R. (2000). Windows to the self in 8-year-olds: Bridges to attachment representation and behavioral adjustment. *Attachment & Human Development, 2*, 85-106.
- Erikson, E. H. (1951/63). *Childhood and society*. New York: Norton
- Etzion-Carraso, A. & Oppenheim, D. (2000). Open mother-pre-schooler communication: Relations with early secure attachment. *Attachment & Human Development, 2*, 347-370.
- Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organisation of infant-mother attachment at one year of age. *Child Development, 62*, 891-905.
- Freud, S. (1905). Three essays on the theory of sexuality. In J. Strachey (Ed.), *The standard edition of the complete works of Sigmund Freud* (Vol. 7). London: Hogarth Press.
- Freud, S. (1926). Inhibitions, symptoms and anxiety. In J. Strachey (Ed.), *The standard edition of the complete works of Sigmund Freud* (Vol. 20). London: Hogarth Press.
- George, C., Kaplan, N. & Main, M. (1985). *The Adult Attachment Interview*. Department of Psychology, University of California, Berkeley.
- Gloger-Tippelt, Gomille, B., Koenig L., & Vetter, J. (2002). Attachment representations in 6-year-olds: Related longitudinally to the quality of attachment in infancy and other's attachment representations. *Attachment & Human development, 4, 3*, 318-335.
- Grice, H. (1975). Logic and conversation. In Cole, P. & Moran, J. (Eds.) *Syntax and semantics*, Vol. 3. New York: Academic Press, 41-58.
- Grossmann, K. E., Grossmann, K., & Schwan, A. (1986). Capturing the wider view of attachment: A reanalysis of Ainsworth's Strange Situation. In C.E. Izard and P. Read



- (eds.) *Measuring emotions in infants and children*, vol. 2. (pp 124-171). Cambridge: Cambridge University Press.
- Harter, S. (1998). The development of self representations. In W. Damon (Series Ed.) and N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality Development* (5<sup>th</sup> ed., pp.553-617). New York: Wiley.
- Harter, S., & Buddin, B. J. (1987). Children's Understanding of the Simultaneity of Two Emotions: A five Stage-Developmental Acquisition Sequence. *Developmental Psychology*, 3, 388-399.
- Hesse, E. (1999). The Adult Attachment Interview: historical and current perspectives. In J. Cassidy & P. Shaver (Eds.) *Handbook of attachment: theory, research and clinical applications* (pp 395-432). New York & London: Guildford Press
- Hetherington, E. & Parke R. (1999). *Child Psychology: A contemporary viewpoint*. Boston: McGraw-Hill.
- Laible, D. J. & Thompson, R. A. (1998). Attachment and emotional understanding in preschool children. *Developmental Psychology*, 34, 1038-1045.
- Main, M., Kaplan, N. & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: a move to the level of representation. In I. Bretherton & E. Waters (Eds), Growing points of attachment theory and research (pp. 66-104). *Monographs of the Society for Research in Child Development*, 50 (1-2, Serial No. 209).
- Martin, C. L., & Halverson, C. F. (1981). A schematic-processing model of sex typing and stereotyping in children. *Child Development*, 52, 1119-1134.
- Oppenheim, D., Emde, R. N., & Warren, S. (1997). Children's narrative representations of

- mothers: their development and associations with child and mother adaptation. *Child Development*, 68, 127-138.
- Raven, J. C., Court, J. H. & Raven, J. (1986). *Manual for Raven's Progressive Matrices and Vocabulary Scales*. London: H.K. Lewis & Co. Ltd.
- Ruble, D. (1983). The development of social-comparison processes and their role in achievement-related self-socialization. In E. T. Higgins, D.N. Ruble, and W. W. Hartup (Eds.), *Social cognition and social development: A socio-cultural perspective* (pp. 134-157). Cambridge, England: Cambridge University Press.
- Ruble, D. & Martin, C. (1998). Gender development. IN W. Damon (Series Ed.) and N. Eisenberg (Vol. Ed.). *Handbook of child psychology: Vo. 3. Social, emotional, and personality development* (5<sup>th</sup> ed., pp. 933-1016). New York: Wiley.
- Selman, R. (1980). *The growth of interpersonal understanding: Developmental and clinical analyses*. New York: Academic Press.
- Sroufe, L. A. (1988). The role of infant-caregiver attachment in development. In J. Belsky & T. Nezworski (Eds.) *Clinical implications of attachment* (pp. 18-38). New Jersey: Lawrence Erlbaum Associates.
- Steele, H. (1991). *Adult personality characteristics and family functioning: The development and validation of an interview-based technique*. Unpublished doctoral dissertation. University of London.
- Steele, H., Steele, M., Croft, C., & Fonagy, P. (1999). Infant-Mother Attachment at One Year predicts Children's Understanding of Mixed Emotions at Six Years. *Social Development*, 8, 161-177.

- Steele, H., Steele, M., & Fonagy, P. (1996). Associations among Attachment Classifications of Mothers, Fathers, and Their Infants. *Child Development, 67*, 541-555.
- Steele, M., Steele, H., Woolgar, M., Yabsley, S., Johnson, D., Fonagy, P., & Croft, C. (2003). An attachment perspective on children's emotion narratives: Links across generations. In R. Emde, D. Wolf, & D. Oppenheim (Eds). *Revealing the Inner Worlds of Young Children* (pp. 163-181). Oxford University Press.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton
- van IJzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin, 117*, 387-403
- Wechsler, D. (1992). Wechsler Intelligence Scale for Children - 3rd (1) WISC-III UK. London: The Psychological Corporation Ltd.

Table 1: Ratings of Friends and Family Interview at 11-year follow-up correlated with binary measures of parents' security assessed during pregnancy with the Adult Attachment Interview

	Adult Attachment Interview (AAI) Autonomy/Security					
	<u>Mothers (n=57)</u>			<u>Fathers (n=57)</u>		
	<u>Daughters</u>	<u>Sons</u>	<u>Full sample</u>	<u>Daughters</u>	<u>Sons</u>	<u>Full sample</u>
11-year olds'						
Friends and						
<u>Family Interview (FFI)</u>						
Truth	.54**	.42*	.48**	-.09	.42*	.16
Economy	-.18	.25	.03	.03	.60**	.29*
Relation	.13	.22	.18	.06	.39*	.24
Manner	.14	.40*	.27*	-.17	.40*	.12
Overall						
Coherence	.29	.33	.31*	.00	.47*	.23
Secure base						
Availability of						
Mother	.38*	.39*	.39**	-.02	.47*	.20
Secure base						
Availability of						
Father	.17	.12	.15	-.02	.38*	.19

Note: \*\* =  $p < .01$ , 2-tailed; \* =  $p < .05$ , 2-tailed; 29 daughters and 28 sons

Table 2: Ratings of the Friends and Family Interview at 11-year follow-up correlated with binary measures of infant-parent attachment security

	Infant-parent attachment security					
	with mother at 12 months			with father at 18 months		
	Daughters	Sons	Full sample	Daughters	Sons	Full sample
11-year olds'						
Friends And						
Family Interview						
Truth	.25	.07	.16	.26	.40*	.31*
Economy	-.09	.13	.02	.02	.52**	.27*
Relation	.02	.01	.01	.19	.41*	.29*
Manner	.10	.06	.08	.06	.52*	.26
Overall						
Coherence	.09	-.06	.02	.20	.45*	.31*
Secure base						
Availability of						
Mother	.01	.02	.02	.23	.50**	.38**
Secure base						
Availability of						
Father	.34 <sup>+</sup>	.12	.22	.20	.17	.16

Note: \*\* =  $p < .01$ , 2-tailed; \* =  $p < .05$ , 2-tailed; + =  $p < .10$ , 2-tailed