



The development and preliminary validation of a new measure of adult attachment: the Adult Attachment Projective

CAROL GEORGE and MALCOLM WEST

ABSTRACT In this paper, we describe the development of and our preliminary work to empirically validate the Adult Attachment Projective (AAP), a new adult attachment classification system that is based on the analysis of individuals' responses to a set of seven attachment-related drawings. The AAP classification system uses evaluations of three dimensions (Discourse, Content and Defensive Processing) to designate four major adult classification groups: Secure, Dismissing, Preoccupied, and Unresolved. Preliminary validation of the AAP is based on 75 participants drawn from three separate samples. The results indicate strong interjudge reliability and convergent agreement between the AAP and Adult Attachment Interview (AAI) classifications. The AAP, thus, appears to be a promising developmental measure for assessing the representation of attachment in adults. Contributions of the AAP to attachment theory and research are discussed. The similarities and differences between AAP stories and other child and adult representational measures are also discussed.

KEYWORDS: attachment – mental representation – assessment – Adult Attachment Projective – defense

Beginning in infancy, individuals construct representational models of attachment derived from their real-life experiences with attachment figures. Bowlby (1969/1982, 1973) stressed that individuals use these models both to interpret attachment-related situations and to forecast future behavior or events. In essence, individuals use their mental representations to tell attachment stories. Accordingly, the story-lines constructed have implications concerning how different situations activate attachment and how these guide

Correspondence to: Carol George, Department of Psychology, Mills College, 5000 MacArthur Blvd., Oakland, CA 94613, USA. E-mail: george@mills.edu

individuals' beliefs about their worthiness to receive care and the availability and accessibility of attachment figures when needed (Bowlby, 1969/1982; George & Solomon, 1996; Solomon, George, & De Jong, 1995; Sroufe & Fleeson, 1986). If care has been compromised, as is the case when attachment is insecure, the personal and affectively charged elements in these stories are distorted in attempts to keep certain aspects of attachment-related distress carefully 'locked away', that is, excluded from attention and memory. Developmental attachment researchers have sought ways to unlock these elements in order to see through individuals' carefully constructed defensive maneuvers and, thereby, render the themes contained within their stories amenable to interpretation.

Historically, although attachment theory is grounded in naturalistic observation (Ainsworth, 1964; Bowlby, 1951), some of the earliest assessments of attachment were representational in nature. Klagsbrun and Bowlby (1976) modified the Separation Anxiety Test (SAT: Hansburg, 1972), a projective originally developed to assess representational responses to separation and loss in adolescents and older children, for use with 5-year-old children. Interest in projective measures has re-emerged more recently as researchers have refined projective pictures (Kaplan, 1987; Jacobsen, Edelstein, & Hoffmann, 1994; McCarthy, 1998; Slough & Greenberg, 1990; Shouldice & Stevenson-Hinde, 1992) and doll play story-stem methodologies (Bretherton, Ridgeway, & Cassidy, 1990; Green, Stanley, Smith, & Goldwyn, 2000; Solomon et al., 1995) as tools to assess individual differences in attachment security in children.

The predominant method of assessing attachment used by researchers in adult attachment is autobiographical narrative, as revealed through the Adult Attachment Interview (AAI: George, Kaplan, & Main, 1984/1985/1996). The AAI is a quasi-clinical interview in which individuals' mental representations concerning early attachment relationships are explored through a series of questions and probes designed to elicit an account of such experiences as separation, physical and psychological hurt, rejection, and trauma. In their accounts, individuals vary in their ability to describe freely their attachment stories, and in the extent to which their stories reveal unity or coherence among the network of attachment memories (Main, 1995). Accordingly, Holmes (1997) cogently argues that variations in attachment status (i.e. secure vs. insecure) reflect the ease with which and the extent to which individuals can tell a meaningful attachment story.

Narratives or 'stories', therefore, are at the core of the representational methodologies of attachment. In the present paper, we describe a new methodology that continues this narrative tradition and extends the projective methodology used in child attachment research to the study of adults. We present our work to date on the first projective measure of adult attachment, the Adult Attachment Projective (AAP: George, West, & Pettem, 1997). Following Bowlby, we demonstrate that the shifting balance of adaptive and defensive processes, guided by mental representations of attachment,

can be evidenced in adults' story responses to pictures of hypothetical attachment situations.

THE ADULT ATTACHMENT PROJECTIVE

The measure

The AAP is comprised of a set of eight drawings, one neutral scene and seven scenes of attachment situations. These drawings were carefully selected from a large pool of pictures drawn from such diverse sources as children's literature, psychology textbooks, and photography anthologies. (See West & Sheldon-Keller, 1994, for a complete discussion of the picture selection process.) The AAP drawings depict events that, according to theory, activate attachment; for example, illness, solitude, separation, and abuse. The drawings contain only sufficient detail to identify an event; strong facial expressions and other potentially biasing details are absent. The characters depicted in the drawings are culturally and gender representative.

Beginning with a neutral, warm-up picture of two children playing ball, the AAP is comprised of the following seven attachment pictures: *Child at Window* – a child looks out a window; *Departure* – an adult man and woman stand facing each other with suitcases positioned nearby; *Bench* – a youth sits alone on a bench; *Bed* – a child and woman sit facing each other at opposite ends of the child's bed; *Ambulance* – a woman and a child watch someone being put on an ambulance stretcher; *Cemetery* – a man stands by a gravesite headstone; and *Child in Corner* – a child stands askance in a corner with hand and arm extended outward.

Development and validation of the AAP classification scheme

The AAP classification scheme was developed based on a community sample of 13 men and women who were recruited through newspaper advertisement. All individuals were administered the AAP; nine participants were also administered the AAI. Working from verbatim transcripts of both measures and the AAI classifications of these individuals, we developed a preliminary classification scheme that discriminated among the secure, dismissing, pre-occupied, and unresolved adult attachment groups (the scheme itself is described in a later section).

Empirical validation of the AAP to date is based on 75 individuals drawn from three separate samples. The first is a subsample of 25 women selected randomly from an ongoing study of infant risk conducted by Dr Diane Benoit at the University of Toronto. This sample consisted both of mothers whose infants were at risk and of mothers in a low-risk control group. These women were predominantly white, with a mean age of 26 years ($SD = 6.3$). AAIs were classified by Dr Benoit, a trained AAI judge; Dr Benoit was blind

to all information about the mother, including infant risk status, and her AAP stories. AAPs were classified by three judges, the authors and our colleague, Dr Odette Pettem. The second is a subsample of 20 women who participated in a large-scale study of depression (West, Rose, Spreng, Verhoef, & Bergman, 1999). The mean age of the women was 45.4 years (SD = 9.2). Blind AAI classifications on this sample were done by the first author. Blind AAP classifications were done by the second author and Dr Pettem. The third is a subsample drawn from an AAP study that is currently in progress. As with our other samples, participants are being recruited from both community and clinical populations. AAP and AAI classifications have been completed on 27 women and 3 men. Classifications were done blind to all information about the participants. AAI classifications were done by the first author; AAP classifications were done by the second author.

As the primary purpose of this study was to test *instrument* characteristics, not *people* characteristics, we combined the responses to the AAP from the clinical and non-clinical samples for the data analysis. This strategy was used because there is evidence that the pattern of responses obtained using general-population samples is similar to the pattern obtained using clinical samples, and that the variability of the responses is sufficient for psychometric purposes (Jackson & Messick, 1962).

Our work to date demonstrates strong interjudge reliability and convergent agreement between AAI and AAP classifications. Interjudge reliability was calculated based on the first two subsamples (n = 48), as reliability classifications have not been completed for the third subsample. Convergent agreement between AAP and AAI classifications was examined for the entire data set (n = 75). Interjudge reliability and convergent agreement were calculated using percentage agreement and Cohen’s kappa. AAP interjudge reliability for secure vs. insecure classifications was .93 (kappa = .73, $p < .000$); interjudge reliability for the four major attachment groups was .86 (kappa = .79, $p < .000$). AAP–AAI convergence for secure vs. insecure classifications was .92 (kappa = .75, $p = .000$); convergence for the four major attachment groups was .85 (kappa = .84, $p = .000$). The AAP–AAI classification convergence for the four classification groups is shown in Table 1.

Table 1 Convergence between AAP and AAI classifications for four classification groups

AAP	AAI			
	Secure	Dismissing	Preoccupied	Unresolved
Secure	6	0	0	2
Dismissing	2	7	1	0
Preoccupied	0	0	34	3
Unresolved	2	0	1	17

Kappa = .84, $p < .000$

Before discussing the AAP classification system, we believe that it is helpful to introduce the measure by providing examples of the style and range of stories elicited by the AAP. The sampling we present here was selected to illustrate the essential features of narratives that differentiate the secure, dismissing, preoccupied, and unresolved classification groups. We have chosen story responses to a dyadic picture (Bed scene) and to two alone pictures (Bench and Child in Corner scenes). Space limitations dictate that we cannot provide stories to each picture for the full AAP picture set. We stress that attachment status *cannot* be validly determined on the basis of stories to only these three pictures; in practice, classification is based on an examination of the patterning of an individual's narrative in response to all of the pictures. The AAP picture projective stimuli for the stories we present below are provided in Figures 1, 2 and 3.

Secure attachment

Bed scene

... well this looks like bedtime and mum has just sat down to – say goodnight and – this young fellow feels he needs a hug before he goes to sleep – so she slides up a little closer to him and gives him a big hug – and ahh strokes his head, his back and then tells him to roll over onto

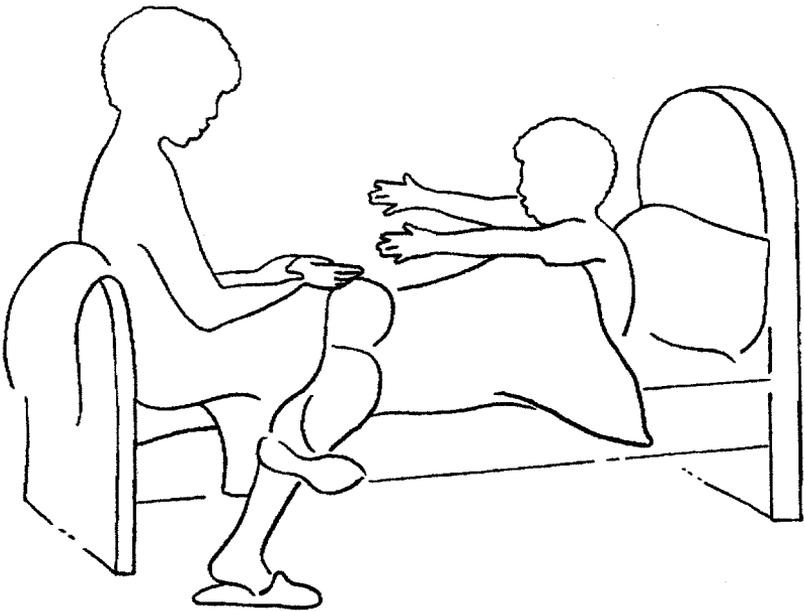


Figure 1 AAP projective picture: Bed

his tummy and she'll give him a bit of a massage – and that calms him down an' – gets him ready for sleep and she kisses him good-night – and leaves the room.

Bench scene

. . . well this looks like a gal who's been in a volleyball tournament – and ahh she's just played many games and she's very tired – and the last game was a close one and they lost – so she's sitting on a bench to – sit and regroup, think about the game an' – and ahh– try and reorganize her thoughts and get her body and her mind pumped up again to – go off and play again. *What do you think might happen next?* Uhmm . . . well I think then she'll go and ahh have a bite to eat? Present herself at the the appropriate time an' – and ahh have the energy she needs to play the next game – and play it well.

Child in corner scene

. . . uhm – I think this little fellow and his brother, were playing – house and ahh – this guy had been doing something wrong, so the brother who was pretending to be the dad, sent him to the corner and ahh – the

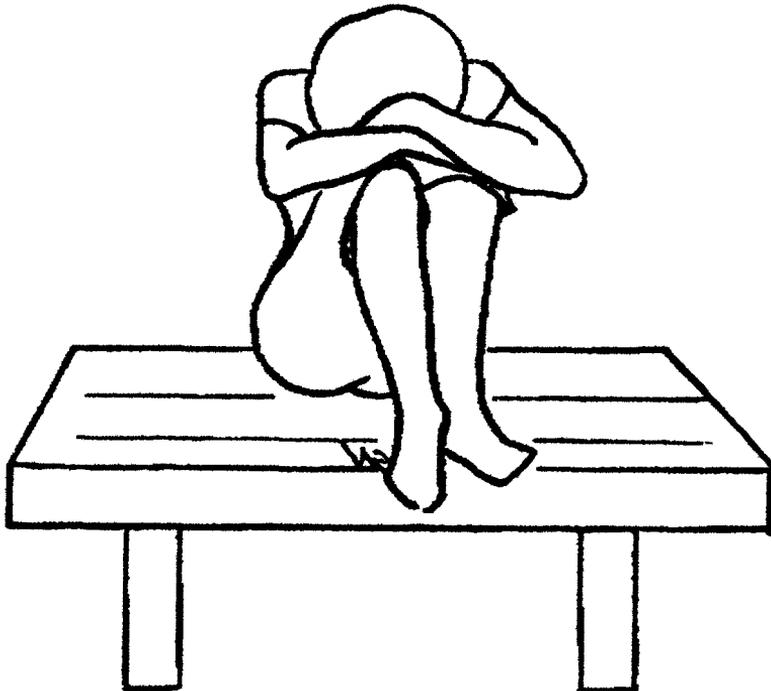


Figure 2 AAP projective picture: Bench



Figure 3 AAP projective picture: Child in Corner

father was trying to explain, he shouldn't be doing this and he shouldn't be doing that an' the little boy put up his hand said, uh! I don't wanna hear this any more go away, leave me alone, and ahh – so the pretend father goes away an' – does whatever he's he was doing before, an' the little boy in the corner puts his hands in his pockets and leans back and watches his pretend father with resentful eyes . . . and then pretty soon he starts ta daydream and he's thinking about something else – an he starts to whistle, hum a little bit, an' pretend father sees what he's doing an' tells him, well ya might as well come out'a the

corner I see it's not doing ya any good any more – an' then they go off, go outside an' play in the backyard for a while.

Dismissing attachment

Bed scene

Um, for some reason I think these two people are black because they have frizzy hair. This is a mom and her son on a bed. The son is reaching for the mom and the mom is not really reaching back for some reason. And I'm not sure if it's a cultural or just if it's personal but she's wearing slippers. I'm not, not a slipper person but some people are. Um, so maybe just the floor is cold. And there's a blanket over the end of the bed and the bed has a nice headboard . . . and, and a fluffy-looking pillow. So I would say that this is just before bedtime is what I would say. Well the child is uh needy, is looking needy and the mom is sort of half there, half not there. She's probably giving as much as she can give these days just doesn't know what to do. Um, but she seems relaxed, the way her hands are folded and her knees are crossed. So perhaps she'll lean forward. Sleep will happen after this. Then awakening later. But mostly sleep. We need that, we need a good night's rest and then tomorrow we can be better.

Bench scene

Oh dear. Well I don't think you have to say 'Oh dear' to this one. I did, I thought 'Oh dear she's crying' but um she could also be just uh waiting and uh putting her head down, enjoying the sun. Depressed I would have said she's crying. Um, being left out of a group. Oh left out of the group that are playing. Um, or possibly detention – I remember getting detention from a teacher I really liked and I was I ended up crying in grade seven. Well she'll probably if she was crying she'll quit crying and uh look for somebody to play with and uh, if she's just taking a rest she's she could it looks like she could waiting for a bus or waiting for someone, um the result would be the person comes along and picks her up.

Corner scene

I don't know what to make out of this. I was never punished, so it's – first I would be um the boy is going to be punished in some way and is not wanting that. Oh it looks like up physical punishment, he's gone to get in the corner he seems to be afraid, he's up putting his hands up to resist. However, it could be um some siblings. Uh . . . no I think I'll just go with the discipline one, cause his head is down so it looks fairly um serious. Um the child has probably got into something he wasn't supposed to or stayed out, uh disobeyed. And what's gonna happen

next – ooh well, it's hard for me 'cause I was never disciplined never hit, so, uh I would say he's gonna get a talking to and sent to bed sent to his room.

Preoccupied attachment

Bed scene

Well this one it seems like it's sad. Um the child is sick or hurt or something and he's reaching out and I can't tell if the mother's got something in her hands wanting to – or you know she's giving it to him – about to give it to him or whether she's just reaching her hands out, but she looks reserved, kind-of held back – like she's not leaning forward to him. Um but at the same time there's nothing in her posture that she's really meaning that um. You know like if I was to draw a picture on her face you know I'd probably have a smile on it but the child I think would be – just the first reaction you know the child's upset for some reason – sick. Also reminds me of when my husband was sick too. Yeah. Um I'd definitely see that this is being my husband and you know this being me because that was really frustrating with him being unable to communicate – I didn't feel there was anything I could do – I couldn't understand what he wanted, there was no way to find out what he wanted. You know I was just – sit there and hold his hand. But . . . I don't know. I know if it's my husband you know – died. With the child – it just seems like the mother's going to leave and he's just going to be there by himself.

Bench scene

Um this one uh looks like a person on a park bench. You know just trying to resolve whatever the problems or just sort through things um – a quiet moment to themselves. Whether they're really upset about any particular thing that happened that day or whether it's just stuff in general you know – like just need a half-hour here to myself to just think or whether they're really upset about something is hard to say but um. And I think it's a good end result – you know you just walk away and uh you know something may or may not have been resolved but at least they had time to themselves and to focus. Peaceful you know – like it's a good feeling you know even though it's you know it could be I think the person's upset or in torment or whatever but it's still that they're resolving it.

Corner Scene

Um yes, the child in the corner trick um. See I – now there – when I see a picture of a child in the corner I always think that they're there because somebody put them there you know – they're not there

because they want to be there you know. Um they've done something you know they weren't supposed to do – they're being too rambunctious and so you know, go to the corner and be quiet. Um this child or person looks like they're you know sort-of thinking about how – OK if I'm this quiet now for a little while then I can go back out and play or rejoin the fun and everything but . . . You know just sad because they're not able to participate but um. You know and not wanting to be there for sure you know um.'

Unresolved attachment

Bed scene

Um, it looks like somebody needs a hug. I don't know, it looks like it may be bedtime. And somebody's getting a story read to them and . . . And it's just, just about time to tuck them in, I think the little guy's reaching, the little girl's reaching for a hug and is gonna get tucked and go to bed, sweet dreams. What are they thinking and feeling? Um, how much they love each other, love.

Bench scene

Well, hmm. Looks like despair, somebody's very lonely, upset, looks very lonely to me. Isolated, uh could be, I don't know, somebody could be in jail. I don't know, the bench doesn't look very comfortable. I don't know, I guess lonely, feeling alone, having to sit down and maybe contemplate a few things. *So what do you think led up to that?* An argument with somebody, I don't know, an argument with somebody, frustration, maybe she just saw somebody um, needs to be sad for a little while and cry, I don't . . . *What do you think will happen next?* Well, I think you get up and shake yourself off and, and uh you can't sit on that bench forever so.

Corner scene

Oh dear. They're upset, hurt feeling – alone. What led up to all those feelings? Um, I don't know, maybe mommy scolded the baby or, um, maybe there's something going on that's frightening or maybe they've been a bad boy or girl whatever. And I don't know whether, I don't know, I never had to sit in a corner so I don't know whether that works. Um it looks like sad, looks like somebody's hurt their feelings and they have to have a cry, good little cry. *So what happens after the cry?* Um, they just shake it off and get on with it, they can't sit in the corner forever so, they have to get up and get on with it.

Analyzing the AAP

We now illustrate the AAP classification scheme, noting as we begin that the system was designed to elucidate a set of essential elements of mental representational features that follow attachment theory and have been found in our work to differentiate among attachment groups. This scheme focuses on three aspects of the story narratives: discourse, story content and defensive processing. A summary of these dimensions is presented in Table 2.

Discourse Two general features of discourse are evaluated: personal experience and coherency. *Personal experience*, as the term denotes, signifies the degree to which the individual maintains a boundary between the self and the fictional character(s) in the telling of a story. Even though the AAP scenes represent situations that may be familiar, the individual has not been instructed to provide personal or autobiographical information. The invasion, so to speak, of self-references as part of the narrative suggests that the individual is being overwhelmed by his or her attachment stress; that is, they indicate that representational merging or self-absorption is overwhelming attention to the AAP picture as an external stimulus.

The second discourse feature, *coherency*, was included in the AAP coding system because in the AAI it is the single most important index of security (see Main, 1995). Each story's overall coherence is assessed by evaluating violations (i.e. errors in coherence) using the four maxims that comprise Main and Goldwyn's (1985/1991/1994) analysis of the AAI: quality, quantity, relation and manner. In a pragmatic sense, AAP narrative content and length are considerably different from AAI narratives. Consequently, we have established a specific set of criteria for how coherency violations are likely to be expressed in AAP narratives. Violations of quality include evidentiary vagueness in which, for example, the characters in the story are not identified or the individual presents two or more alternative story-lines. Quantity violations may be expressed either by the individual giving far more information than is necessary or by providing a response that fails to go beyond a 'bare bones' description of the drawing. Relation violations include the individual referring to his or her personal history (see *personal experience* above), critiquing the details of the drawing itself, or giving a response that is not relevant to the scene depicted in the drawing. Finally, manner violations include problems in assembling the narrative, such as the use of jargon, 'psychobabble' or nonsense words, and entangled, run-on sentences. The evaluation of these maxims yields a global coherency assessment for each story that ranges from high or moderate coherency to not coherent.

Content A central feature of attachment theory is individuals' behavior in relationships when their attachment systems are activated. This feature of attachment is evaluated by examining story content and action with respect to three variables: *Agency of self* and *connectedness* address the quality and

Table 2 Summary of AAP coding dimensions

<i>Dimensions</i>	<i>Pictures coded</i>	<i>Definition</i>
<i>Discourse dimensions</i>		
Personal experience	All	Story includes own life experience in response.
Coherency	All	Degree of organization and integration in the story as a whole
<i>Content variables</i>		
Agency of Self	Alone	Designates degree to which story character is portrayed as integrated and capable of action.
Connectedness	Alone	Expression of desire to interact with others
Synchrony	Dyadic	Characters' interactions are reciprocal and mutually engaging.
<i>Defense variables</i>		
Deactivation	All	Evidence of deactivation and demobilization

Continued.

Present; Absent
3-point rating scale combining quality, quantity, relation, manner

Internalized Secure Base, Haven of Safety;
Capacity to Act; No agency
Clear signs of a relationship in the story.
Relationship not possible (e.g. someone walks away, someone is dead); engaged in own activity

Mutual, reciprocal engagement; Failed reciprocity; No relationship is acknowledged in the story.

Negative evaluation, Rejection, Social roles, Power, Stereotyped scripts, Achievement, Minimization, Nullification, Shutting down narrative, Distancing, Neutralizing, Demotion, Deactivating language

Table 2 Continued

<i>Dimensions</i>	<i>Pictures coded</i>	<i>Definition</i>
Cognitive disconnection	All	Evidence of uncertainty, ambivalence, and preoccupation Uncertainty, Withdrawal or Withhold, Anger, Busy or /Distracted, Feisty, Entangled, Disconnection, Glossing over, Unfinished thoughts, Stumbling, Literal descriptions, Passive language
Segregated systems	All	Evidence of being overwhelmed by attachment trauma Danger or Failed protection, Helplessness or Out of control, Emptiness or Isolation, Odd or Disturbing themes, Dissociation, Intrusion, Constriction

presence of relationships in pictures in which characters are depicted as alone; *synchrony* addresses the reciprocal nature of relationships in dyadic pictures.

Agency of self assesses the degree to which the self is moving psychologically or behaviorally in the direction of integration or understanding. We have identified an internal and an external manifestation of agency of self that captures this movement. We call the internal form *internalized secure base* to connote an individual's ability to draw upon internal resources and be content (in contrast to being lonely, bored or restless) with solitude as well as the willingness to engage in self-reflection occasioned by solitude. Sometimes, but not always, solitude results in a personal or situational transformation. As this is a new concept, we pause briefly to clarify how internalized secure base fits within the framework of attachment theory.

In infancy, a child's sense of secure base is very dependent on the physical proximity of the attachment figure. Indeed, Bowlby (1969/1982) proposed that because exploratory behavior leads the child away from his or her secure base (the attachment figure), it is 'antithetical to' attachment behavior. In the goal-corrected partnership phase of early childhood, the emerging ability of the child to form enduring models of the relationship with the caregiver especially takes hold. Increasingly, representations have the capacity to supplement actual interactions with the caregiver; separations are less likely to be threatening because representations of the attachment figure allow the child to maintain secure models of attachment figure even during their physical absence. Over time, then, a more highly differentiated internal representational capacity emerges such that the older child's sense of security is maintained not by seeking physical proximity to the attachment figure (except in times of high activation of the attachment system) but by reference to the working model of the attachment figure.

In an essential way, the secure base effect in adults is demonstrated when the attachment figure is absent; that is, maintenance of proximity to the attachment figure becomes almost exclusively an internalized representational process. We, thus, apply the concept of *internalized secure base* to refer specifically to that state in which the sense of security is derived largely from the individual's internal relationship to the attachment figure. This concept is of considerable importance when we examine the degree to which the story character is portrayed as having the capacity to be content with solitude in those pictures that depict a child or an adult alone.

There is one further elaboration with regard to the effect of internalized secure base. This effect is reflective self-capacity, a feature of security that has been particularly emphasized by Fonagy and Target (1997). Because adults predominantly maintain proximity to their attachment figure by reference to an internal working model of this person, it becomes possible to use solitude for self-exploration. Just as the young child uses the caregiver as a secure base from which to initiate exploration, so too should the presence of an internalized secure base increase the possibility for self-reflection. On the basis of these considerations, internalized secure base is expressed in story content in

which the character(s) are depicted as having entered and actively explored their internal working model of attachment.

Drawing upon Bretherton's (1985) term, we conceptualize the external form of agency of self as *haven of safety*. The idea of an attachment figure providing protection and safety upon activation of the child's attachment system is central to attachment theory (Bowlby, 1969/1982). Safe haven has been conceived as a retreat to the attachment figure to re-establish threatened or lost security and the way in which the child re-establishes attachment equilibrium. Haven of safety is evidenced, for example, when the individual tells a story in which a loved one provides support or, if the relationship has been threatened, describes one member of the relationship as actively seeking reparation. It is most often seen in AAP stories in which the character portrayed is a child, although adult characters are also sometimes described as reaching out for the comfort of an attachment figure.

We have identified another level of agency of self that we have termed *capacity to act*. Although the character is not described as having achieved full attachment equilibrium, he or she does engage in behavior that produces change. We see action as an effective strategy that prevents immobilization or disintegration of the self when the attachment system is activated. It may be helpful to think of the 'capacity to act' as a kind of secondary attachment strategy. Main (1990) defined secondary attachment strategies as behavior that allowed the child to access the attachment figure indirectly and, thus, diminish attachment distress without directly appealing to or approaching the attachment figure. In an AAP story, secondary strategies bypass direct appeals to internal working models of attachment (as expressed through *internalized secure base* and *haven of safety*) but allow the character to engage in a specific behavior or activity that removes them from the distressing situation. Characters are described, for example, as going to a particular place or becoming involved in a specific activity.

We also examine the Child at Window and Bench pictures to evaluate the character's desire to be connected to or wanting to be with others, a dimension we call *connectedness*. According to ethology, individuals over the course of development form other relationships such as friendships (affiliative behavioral system) and intimate adult relationships (sexual behavioral system) that are not direct manifestations of their attachment systems (Bowlby, 1969/1982; Hinde, 1982; George & Solomon, 1999). *Connectedness* is used to differentiate, then, between characters that are capable of or desire to be in relationships, and characters that remain alone. We note that the concept of *connectedness* that we have developed here is general. Some individuals' stories reveal the desire to be connected in specific forms of relationships. Others reveal the desire to be around others. What appears to be useful in the AAP, however, is not the form or degree of intimacy but rather statements about the desire to be near others. The reader will also recall that features important to attachment relationships are coded specifically in *agency of self*. (Note: we do not apply this dimension to the Cemetery or Corner

pictures because the concept of connectedness as we define it here is not inherent in these scenes.)

Finally, we use the dimension called *synchrony* to evaluate the portrayal of relationships in which characters are depicted in dyads. The emphasis here is on the narrative construction of interactive behavior. Attachment research has demonstrated that reciprocal, sensitive responsiveness lies at the foundation of attachment security (Ainsworth, Blehar, Waters, & Wall, 1978; van IJzendoorn & de Wolff, 1997). Our *synchrony* dimension was developed to capture responsive and reciprocal interaction in the dyadic stories. It may be helpful to view *synchrony*, as expressed in AAP stories, as an evaluation of relationship attunement, that is, the degree to which the interactive partners are 'in sync' and engaged in a goal-directed partnership (Bowlby, 1969/1982). Dyadic pictures typically evoke stories of attachment distress, such as relationship break-up, sickness, or injury. When the story content describes characters as distressed, *synchrony* is used to assess the extent to which one member of the relationship is contingently responsive and successful in providing comfort and care to the other member. Dyadic stories are not always stressful; some individuals create stories that portray the events of a morning greeting or a vacation trip. *Synchrony* in these non-stressful stories evaluates whether or not the dyad is engaged in a fulfilling, intimate interaction based on mutual affection.

Defensive processes Among attachment concepts, the concept of defensive exclusion has proved invaluable in comprehending individual differences in mental representations of attachment and in assigning attachment status. Like repression in psychoanalytic theory, defensive exclusion holds a special place in Bowlby's (1980) theory. In brief, the process of defensive exclusion transforms experiences or feelings that should be attended to as signal into unintegrated or unintelligible noise. Bowlby's concept of defensive exclusion pays attention to three forms of defensive processing – deactivation, cognitive disconnection and segregated systems. Although these three forms often accompany each other, each of them is sufficiently unique to serve as basic points of reference for understanding attachment organization in general and classifying patterns of attachment status in particular.

George and Solomon (1996, 1999; Solomon et al., 1995) have made extensive use of Bowlby's forms of defensive processing in distinguishing child attachment groups and their corresponding maternal caregiving representations. Indeed, their research has demonstrated that the main underlying representational feature that differentiates the secure, avoidant, ambivalent, or disorganized attachment groups is the patterning of defensive exclusion. We have defined the general goals of these forms of defense following their work and tailored the specific indicators of these defensive processes to the AAP narrative. Defensive processes are complex and, as such, a complete description of the identification of defensive exclusion and transformations in AAP stories is beyond the scope of the present discussion. We do, however,

provide an overview of the indices of each of the three forms of defense to enable the reader to get a sense of the different manifestations of thought processes that emerge as the product of defensive exclusion during the storytelling process.

Deactivation is a form of defensive exclusion that enables the individual to diminish, dismiss, devalue, or minimize the importance or influence of attachment stimuli that is characteristic of the dismissing attachment group. Deactivation shifts attention away from events or feelings that arouse the attachment system, and enables the individual to complete the task of telling a story without being distracted by attendant attachment distress. A common form of deactivation in the AAP is the development of story-lines that avoid themes of distress; instead, themes emphasize relationships and interactions that are guided by stereotypical social roles, materialism, authority, or personal achievement. Deactivation is also revealed in themes of distress that are accompanied by negative evaluations of characters or relationships (e.g. the character's distress is the product of his or her undesirable qualities, actions deserve punishment, or rejection by others). Deactivation is also expressed by the use of words that attempt to minimize difficulties (e.g. after describing a parent taken to the hospital, the individual states: 'Everyone acts like normal, as if nothing had happened').

Cognitive disconnection is a form of defensive exclusion that splits attachment information into opposing images or story-lines. Characteristic of the preoccupied attachment group, it is particularly evidenced when the story theme takes two opposing directions. For example, one situation is evaluated as good, the other as bad; characters are described in terms of positive and negative characteristics; the first story affect is happy, the second sad. George and Solomon (1996) proposed that the essence of cognitive disconnection is uncertainty such that attachment information is never integrated, leaving the individual unsettled and continually shifting cognitively back and forth. In the AAP, uncertainty is indicated when individuals are unable to make decisions about the story-line or events, when they second-guess their ability to tell the story, or when there is evidence that they are mentally preoccupied with attachment experiences and feelings.

Segregated systems follows Bowlby's (1980) notion that an extreme form of defensive exclusion prevails in circumstances when individuals are prone to be overwhelmed by attachment trauma. He defined segregated systems as the product of defensive exclusion processes that seek literally to cognitively segregate extremely painful emotions from consciousness occasioned by the loss of a loved one through death or experiences of trauma, such as abuse and abandonment (Ainsworth & Eichberg, 1991; Main, Kaplan, & Cassidy, 1985; Solomon & George, 1999; Solomon et al., 1995; West & George, 1999). Ultimately, segregated systems are prone to defensive breakdown resulting in a state of mental dysregulation and attachment disorganization (George & Solomon, 1999; Solomon & George, 1999). Further, segregated systems are evidenced by the products of their defensive breakdown. This evidence

includes, for example, forms of ill-organized behavior and frightening ideation (Bowlby, 1980).

Attachment research has established that loss and trauma are not linked in a linear fashion to mental states of unresolved attachment. Rather, the fact that these experiences usually remain unresolved over long periods of time is what constitutes the hallmark of unresolved attachment (Main et al., 1985; Main, 1995). We define the specific indication of unresolved attachment status in the AAP as an individual's failure to resolve the presence of segregated systems' material (i.e. attachment trauma that is disorganized and not integrated) that appears in their stories (George, West, & Pettem, 1999). Thus, we have developed criteria for both determining the presence of segregated systems material and establishing whether this material is resolved or unresolved.

Following Solomon et al.'s (1995) work in child attachment doll play narratives, we defined segregated systems evidence in AAP stories, or 'markers', as aspects of a story that connote helplessness, fear, failed protection or abandonment. The term 'marker' refers to the presence of material in any given story that indicates the 'leaking' of frightening or traumatic information and affect from segregated models of attachment. Markers of segregated systems in the AAP include themes of dangerous events (e.g. death, assault, crisis, catastrophe), characters described as helpless or out of control, or severe isolation (e.g. incarceration). In some stories, markers of segregated systems are evidenced by imagery that has a dissociated, eerie, or magical quality. In other cases, individuals' own traumatic experiences of loss, physical abuse, or molestation invade their stories.

Once identified, we determine whether or not segregated systems markers are resolved. Resolution is defined in the AAP in terms of the individual's ability to draw upon organized, internal working models of attachment to integrate or contain the material expressed in a given story. We stress that integration underlies resolution at the representational level and is the single indicator that differentiates organized from disorganized/unresolved attachment status in children and adults (Main, 1995; Solomon & George, 1999; Solomon et al., 1995). AAP stories are considered resolved only if they depict characters as capable of drawing on internal or behavioral resources to understand, resolve, or try to prevent a threatening situation. Thus, using the concepts we presented earlier, resolution of an AAP story is typically indicated by some form of agency of self. Specifically, the individual seeks protection from an attachment figure (*haven of safety*), draws upon internal resources (*internalized secure base*), or takes protective action (*capacity to act*). In the absence of these actions, the story character continues to be 'haunted' or threatened by feelings of abandonment, fear, helplessness, and vulnerability and the story is judged unresolved.

It is important to note that another form of unresolved segregated systems is seen when individuals are 'constricted' such that either they are unable or they refuse to engage with the picture to tell a story. In these situations, the

individual's response to the task indicates that he or she fears breakdown of the segregated system, a state that would result in the emergence and possible flooding of the individual by the pain, sadness, fear, or anger that has been segregated from consciousness (Solomon et al., 1995). The naïve judge might be tempted to interpret this behavior as a form of task avoidance. Solomon et al. (1995) demonstrated, however, that such a severe reaction to one or more attachment stimuli in the doll play situation is associated with disorganization, a form of attachment in children that has been linked to unresolved attachment in adults (George et al., 1999; Main, 1995). In the AAP, constriction occurs, for example, when the individual passes the picture back to the administrator, often recoiling from it as if the attachment stimulus is upsetting, dangerous, or personally threatening. In sum, the segregated systems 'marker' in these responses is the individual's constricted behavior rather than the frightening, unresolved themes of the stories themselves that we described as most common in individuals judged unresolved.

Individual differences in attachment status

How do patterns of discourse, story content, and defensive processing reveal differences in adult attachment status? We now discuss prototypical patterns of the four major adult attachment classification groups in the AAP. We draw upon the examples we provided earlier to demonstrate how these story features are expressed in the AAP narratives.

By way of introduction, the classification assignment process can be represented as a hierarchically integrated series of decision points (see Figure 4). Classification is assigned on the basis of analysis of the coding patterns for the entire set of seven attachment stories. A judge first notes if there is at least one unresolved segregated systems marker. If an unresolved segregation systems marker is present, the case is assigned the unresolved classification. If all segregated systems markers have been resolved, the judge then examines the pattern of codes that are used to differentiate secure from insecure cases (*coherency, agency of self, connectedness, synchrony*). If the case does not fit the secure pattern, the judge then proceeds to examine the specific patterns of defensive exclusion in order to differentiate dismissing and preoccupied attachment.

Secure attachment The hallmark of security in the AAP is the demonstration of the ability to draw upon attachment to remedy distress consequent to the activation of the attachment system by the picture scenes. As predicted by attachment theory, only secure individuals portray characters as drawing upon internal resources and attachment figures to address attachment stress. They also show the importance of relationships in their stories by expressing the desire to be connected to others (*connectedness*) and by descriptions of balanced, reciprocal interactions (*synchrony*). Due to their ability to acknowledge and cope with distress, secure individuals do not rely excessively on

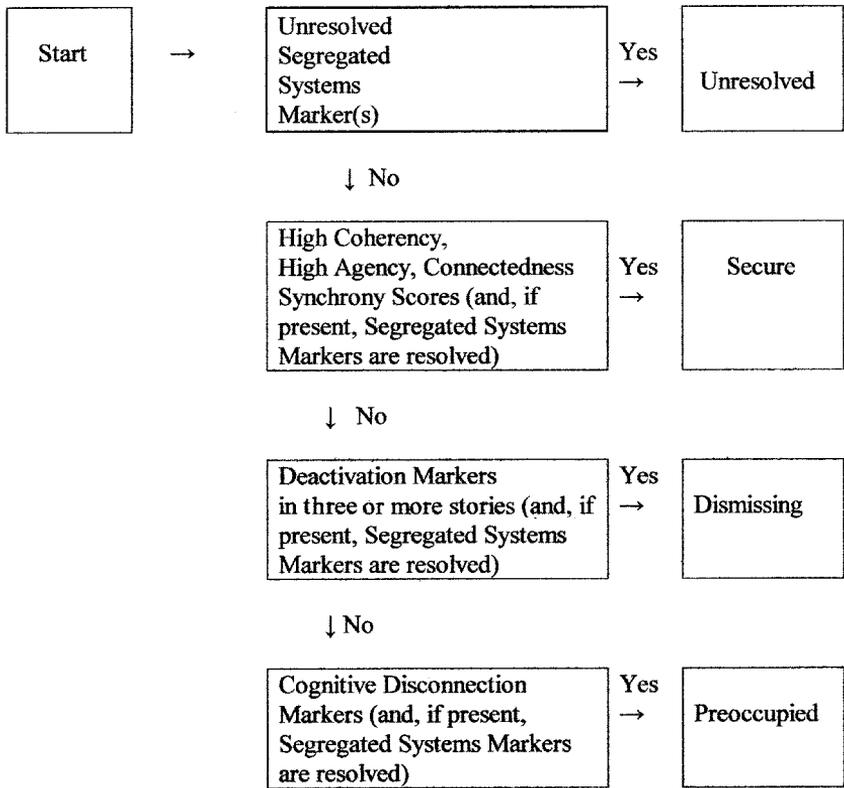


Figure 4 AAP decision rules

defensive processes to modulate attachment anxiety. If segregated systems markers are present, they are resolved. Finally, secure individuals demonstrate moderate to high discourse coherency and maintain clear self–other boundaries in the telling of their stories.

Overall, the secure individual’s stories reflect many of these aspects. First, the Bench story provides an excellent example of the use of internal resources (*internalized secure base*). The girl uses her solitude on the bench to think, regroup, and reorganize herself in response to her defeat. Note how this personal introspection results in a personal transformation as evidenced by the girl’s ability to play well in the future. The Corner story depicts a form of *haven of safety*. This story portrays an enactment (i.e. a story in which the children are engaged in pretend play) of a son who is distressed by his father’s admonishment and punishment. The pretend ‘father’ realizes that the punishment is not effective and, releasing the child from the corner, goes with his ‘son’ outdoors to play. In the ‘father’s’ behavior, we see repair and reintegration of the relationship in response to the ‘son’s’ distress. As exemplified in this story, our use of the concept of *haven of safety* extends not only to a

caregiver providing care but also to other forms of interaction that demonstrate reintegration of relationships.

The importance of relationships is particularly evident in the Bed story. Going to bed at night is viewed as a form of separation and considered to be a strong activator of attachment distress in children (Bowlby, 1973). In this story, the mother is described as responding quickly and affectionately to her son's need for comfort before going to sleep. Her response calms him and readies him for sleep.

Also noteworthy in the stories is their high coherency. We get a sense in each story who the actors are and a sense of plot (quality) unclouded by vague images or truncated speech (quantity), personal experience (relation) or entangled discourse (manner).

Although some forms of defensive exclusion are revealed during the telling of this story (e.g. deactivation as evidenced by themes of personal achievement in the Bench story and negative evaluation and punishment in the Corner story; cognitive disconnection as evidenced in the girl's withdrawal due to tiredness in the Bench story), the individual does not rely on defensive processing to complete the scenario. This relative absence of defense is in direct contrast to the stories of dismissing and preoccupied individuals to be considered next.

Dismissing attachment What is most striking with regard to the AAP stories of dismissing individuals is how these individuals avoid or ignore direct expressions of attachment in their story-lines. Perhaps because of their beliefs about the unproductiveness of attachment, they are forced to fall back on taking action themselves. For example, the Bench story demonstrates that the girl's *capacity to act* is used to resolve the situation, but she does not draw upon relationships or an internalized secure base. The girl, initially upset, just quits crying and looks for someone with whom she can play. Similarly, in the Corner story, the boy puts his hands up as an act of resistance, again demonstrating the capacity to act in the attempt to ward off punishment. What is notably absent from these stories, however, is evidence of the internal or external resources (*internalized secure base*, or *haven of safety*) that are optimal in re-establishing attachment equilibrium.

The ineffectiveness of relationships for dismissing individuals is perhaps more obvious in evaluations of *synchrony*. Descriptions of sensitive, reciprocal interaction are typically absent in their story content. Instead, dyadic interaction may appear to follow a social script or cultural rule that dictates how people should behave in a particular context. In other instances, the failure to achieve *synchrony* is evidenced by rejection. In the Bed story, the individual suggests the possibility of a cultural script that explains the mother's lack of responsiveness to her child. We note also the quality of failed reciprocity in this story. The mother's response to her son's signal is a non-response, 'So perhaps she'll lean forward.'

Despite the de-emphasis on attachment relationships in the dismissing

individual's stories, we often see evidence of connection to others in this group. We have noted too that *connectedness* is typically directed toward non-attachment figures. Characters are described as going off with friends or becoming involved in a sexual relationship instead of appealing to attachment figures. In the Bench story, the girl desires to be connected to others as it is suggested that she might be picked up by someone after her wait. At the extreme, dismissing individuals' stories may be devoid of relationships entirely; characters are then described as involved in their own activities.

The influence of dismissing mental representations of attachment is also evident in the heavy reliance on defensive exclusion and coherence problems. Dismissing individuals prototypically exclude attachment from their stories through defensive deactivation. In these examples of dismissing stories, we see several forms of this defense. In the Bench and Corner stories deactivation of attachment is indicated by rejection (being left out of the group) and negative evaluations of the child (detention, punishment, child has disobeyed). In the Bed story, the reference to a cultural is a further expression of deactivation.

It should be noted that dismissing individuals also use defensive cognitive disconnection. Indeed, George and Solomon (1996; Solomon et al., 1995) demonstrated that, although avoidant/dismissing and ambivalent/preoccupied individuals are very similar in their extensive use of cognitive disconnection, the distinguishing quality of the dismissing group is the ability also to deactivate attachment. We, too, have found that dismissing individuals show multiple forms of cognitive disconnection in their stories. There are several examples of cognitive disconnection in the dismissing stories. For example, in the Bench story cognitive disconnection is evidenced by the development of two story-lines that are qualitatively opposite in emotional tone – the women could either be crying or enjoying the sun. Cognitive disconnection is also seen in expressions of uncertainty, specifically in the Corner story by the statement 'I don't know.' In the Bed story, cognitive disconnection is evidenced when the mother is described as half there and half not there, thus literally disconnected.

Although space constrains our ability to delineate each evidentiary aspect of defense in these stories, we see the heavy reliance on defensive exclusion in the stories of dismissing individuals as compared with the stories of secure individuals. As a result, dismissing stories are *incoherent*. The reader can see from the examples we have provided how defensive exclusion leads to violations of quality, quantity and manner. Interestingly, though, dismissing individuals rarely wander off track (relation violation); they do not blur self–other boundaries during the story-telling process and, thus, *personal experience* references are absent.

Preoccupied attachment Similar to individuals judged dismissing, preoccupied individuals also do not use attachment to resolve distress. However, unlike the *capacity to act* commonly seen in the stories of dismissing

individuals, preoccupied individuals frequently describe characters as not taking any action at all, leaving them alone and often passive and immobilized. We have found it especially interesting that preoccupied individuals are able to identify what needs to be done to re-establish attachment equilibrium; they just do not take steps to accomplish it. This suggests to us that these individuals often seem preoccupied with the processes that contribute to resolution but not the productive outcome. For example, the Bench and Corner stories contain images of internalization and acknowledgement of the potential importance of solitude. The child in the corner is supposed to quiet down (i.e. use solitude to produce a calm emotional state). In neither story, however, do we see the constructive use of internalization for personal reflection or transformation (i.e. no *internalized secure base*). In the Bench story, the girl's problems are not clearly identified and, when she walks away resolution is uncertain. Similarly, we see no evidence of transformation in the Corner story. Instead, the child simply goes back to the way things were before ('goes back', 'rejoins'). The absence of transformation is also evident in the notion that the child will end up back in the corner until he or she grows out of it. As well, the characters are basically alone in these stories – there is no expression of *connectedness*. The ineffectiveness of relationships is seen in the 'alone' quality of the child in the Bed story. Here, the mother is initially reserved in response to her child's distress and finally she leaves the child by himself.

As we stated above, the hallmark of defensive processing in preoccupied individuals is cognitive disconnection. Cognitive disconnection is most typically revealed through split story-lines or the juxtaposition of opposing themes. The Bench story contains three such examples of opposing themes: The girl is described as having a good feeling and also being upset; she thinks about the problem at hand or stuff in general; the situation may or may not be resolved. Cognitive disconnection is also seen in attempts to skip over the problem and move to a good or happy ending (e.g. 'good end result', 'just walk away'). In the Corner story, defensive disconnection results in silly or flip language ('the child in the corner trick') and describing the child as feisty (rambunctious). Finally, in the Bed story we once again see images of literal disconnection; the mother is described as reaching and giving concurrently with being reserved and held back.

In terms of *coherence*, preoccupied stories are typically incoherent as they are encumbered by contradicting story-lines (quality), a plethora of detail (quantity), and run-on or unfinished sentences, jargon, stumbling, passivity, and vague or meaningless words (manner). As well, it is often difficult for preoccupied individuals to maintain self–other boundaries, resulting in frequent and often lengthy descriptions of *personal experiences* in their stories.

Unresolved attachment As we discussed earlier, unresolved attachment is judged by the individual's failure to 'resolve' or reorganize segregated systems' material when it emerges in their stories. We note that individuals

who are unresolved rarely have segregated systems markers in all of their stories and frequently these markers are seen in only one story. In general, unresolved individuals display similar patterns of defensive processing seen in the secure, dismissing, or preoccupied groups. In contrast to secure stories, however, unresolved stories are typically incoherent.

In the examples of unresolved stories, segregated systems markers are present in the Bench and Corner stories. In the Bench story, the imagery describing the person on the bench emphasizes her isolation (the individual is 'isolated', 'in jail'). In the Corner story, we see evidence of segregated systems by the suggestion that something is frightening. In both stories, there is a weak but unsuccessful attempt at resolution. Statements such as 'shake yourself off', 'you can't sit on that bench forever' and 'they have to get up and get on with it' are oblique attempts at resolution; they suggest that these characters are not immobilized by their attachment fears. Actually, careful analysis of these statements reveals that they involve no *capacity to act*, *internalized secure base*, or *haven of safety* – the only forms of response that count as a resolution. Instead, such statements belie the unresolved individual's attempt to 'gloss' over the problem as a way to conceal his or her unresolved attachment.

DISCUSSION

To date, the AAP has demonstrated impressive agreement with the AAI, a striking result that urgently awaits further investigation from replication studies of other laboratories. We can specify several reasons for the attainment of this strong convergent validity. First and foremost, it must be emphasized that we did not 'start from scratch' in the articulation of the AAP coding system. We drew heavily on three basic contributions that have already been made to the classification of attachment status. First, there is Main and Goldwyn's (1985/1991/1994) thorough analysis of discourse processing underlying content. As with the AAI, individuals judged secure on the AAP show higher coherence patterns in response to the seven attachment scenes as compared with individuals judged insecure. Second, there are the expected content and process indications of defensive exclusion that are based on coding systems already established in the attachment doll play procedure in young school-age children (Solomon et al., 1995) and an interview that examines parents' caregiving experiences (George & Solomon, 1996). As we have demonstrated here, individual differences in defensive exclusion patterns are of considerable importance for the differentiation of dismissing from preoccupied attachment organizations.

The classification agreement between the AAP and the AAI is also likely to be due to the fact that our approach restricts classificatory attention to the major attachment categories (F, Ds, E and U); we do not attempt to capture different forms of appearance of the same category (i.e. subgroup

classifications). The high correspondence rate is also likely to be due to the fact that we combine different dimensions of analysis in order to derive a classification. In particular, we have found that content codes must be evaluated in combination with evidence of defensive processes. Of particular importance in this regard is the *internalized secure base* concept. Internalized secure base is similar in some ways to the concept of 'reflective capacity', a narrative dimension that Fonagy, Steele, Moran, Steele and Higgitt (1991) found to be highly related to AAI coherence. Finally, as we discussed earlier and as illustrated in Figure 4, we explicitly schematized rules to guide the judge's final classification decision.

How do our findings using the AAP fit into the broader scope of developmental research on mental representations of attachment?¹ What do we learn when we examine the AAP in relation to the findings of other studies that use a variety of assessment methodologies (most notably, infant and child behavior in the Strange Situation, child representations of attachment as revealed through doll play and SAT stories, AAI autobiographies, and mothers' descriptions of caregiving)?

We find the greatest similarities among these methodologies for individuals judged secure. Security, whether expressed in observed behavior, story narrative, autobiography, or descriptions of parenting a particular child, allows both children and adults to acknowledge freely and openly events and emotions that are associated with present and past attachment-related experiences. In Main's (1990) behavioral terms, secure individuals are able to express their primary attachment strategies directly. In terms of defense, secure individuals do not rely on defensive exclusion in order to tell an attachment story. The patterns of defense that do sometimes emerge in secure AAP stories parallel the secure patterns described in child doll play (Solomon et al., 1995), the AAI (Main, 1995) and maternal caregiving (George & Solomon, 1996, 1999). Mental representations of security afford individuals tremendous behavioral and mental flexibility under conditions of attachment stress. Secure relationships function in the spirit of Bowlby's goal-corrected partnership; attachment figures are indeed a haven of safety, and the secure base phenomenon affords exploration of the environment and the self (*internalized secure base*).

The insecure attachment groups do not demonstrate the same degree of consistency across assessment methodologies as found in the secure group. First of all, it has been well established that there are transformations and changes in behavior from infancy to childhood as observed in the context of laboratory reunion (for reviews see, for example, Marvin & Britner, 1999 and Solomon & George, 1999). We see more obvious consistency between the AAP and representational measures for individuals in the insecure groups.

The common overall consistencies across measures for individuals judged dismissing or avoidant are captured by the concepts of minimization (Main, 1990) and defensive deactivation (George & Solomon, 1996, 1999; Solomon et al., 1995). Avoidant children and dismissing adults attempt to inhibit direct

expressions of attachment distress by behavior that avoids the attachment figure and representations of self that emphasize personal strengths, thus allowing them to remain unperturbed when distressed. At the level of actual detail, however, we see striking differences between the stories of dismissing individuals in response to the AAP and the AAI. We suggest that these differences may stem from how minimization and deactivation are expressed when individuals are faced with the task of reflecting on childhood (past) attachment experiences in contrast to reflections on hypothetical situations or current relationships. In the AAI, dismissing individuals typically idealize attachment in childhood. Attachment figures are described as loving, caring and involved with their children's lives. There is neither acknowledgement of rejection by their parents nor reports of their own distress when attachment was compromised. In contrast, the portrayal of events and characters by dismissing individuals in response to the AAP is anything but ideal. Typically, characters are portrayed as distressed and lonely. Story events often emphasize negative evaluations of the self and others that result in punishment and rejection. We note that this AAP pattern (absence of idealization and acknowledgement of distress) has also been described as characteristic of the doll play stories of avoidant children and the caregiving narratives of mothers of these children as well. Most notable in child doll play is attachment distress as revealed by the child's reticence to allow the parent to leave without him or her (Solomon et al., 1995). Interviews of mothers of avoidant children frequently emphasized their children's negative behavior and often dwelled on descriptions of their children's transgressions, manipulations and punishments (George & Solomon, 1996).

The stories of preoccupied individuals provide additional supportive evidence that their mental representations are maximized (Main, 1990) and that their representations defensively filter attachment events through cognitive disconnection (George & Solomon, 1996; Solomon et al., 1995). The mental vacillation and uncertainty we saw in the AAP stories of individuals in this group parallel the behavioral resistance and dependence of ambivalent children seen in the laboratory upon reunion in the Strange Situation. Parallels at the semantic level are seen in AAI narratives, child doll play, and maternal interview. The responses of ambivalent and preoccupied individuals to these representational measures are characterized by mental confusion, oscillation, and the preoccupation with detail. Again, however, we find that there are qualitative differences between preoccupied individuals' AAIs and the narratives revealed in response to the AAP and the other representational measures. One predominant theme for one subgroup of individuals judged preoccupied on the AAI is the presence of strong preoccupying anger with attachment figures. Strong forms of anger are rarely expressed in response to the AAP pictures; in its strongest form, it might be stated that a character is angry or characters are described as acting in a manner that is best described as feisty. Rather, AAP characters are more likely to be portrayed as passive (the absence of *agency of self* or *capacity to act*). The relative absence or

muting of anger in response to the AAP is paralleled more closely in child doll play and maternal interview than the AAI. In doll play, ambivalent children often mask anger and other forms of attachment distress by creating stories that emphasize themes of fun, excitement, or special care (Solomon et al., 1995). Even more rare is the expression of anger during the caregiving interviews of mothers of ambivalent children. These mothers are more likely instead to claim that they never feel anger in relation to their child, as compared with mothers of children in the other attachment groups (George & Solomon, 1996).

Across methodological contexts, unresolved attachment has been linked to the expression of unintegrated attachment trauma that is ascribed to the underlying dynamic of segregated systems (George & Solomon, 1999; West & George, 1999) or multiple models of attachment (Main, 1991; Liotti, 1999). Unresolved attachment has been consistently associated with the sudden, 'unmetabolized' emergence of disorganized thought, although different levels of its expression exist in the AAP and the AAI (George et al., 1999; Main & Solomon, 1990; Solomon et al., 1995). In the AAI, individuals must demonstrate a moderate to high degree of unresolved thinking in order to be judged unresolved; minor lapses in monitoring traumatic material do not automatically yield an unresolved designation. In the AAP, on the other hand, unresolved attachment is often designated from what may seem to be small indications of segregated material. For example, the individual may fail to resolve attachment trauma that has been expressed in a single word or image in just one of the seven stories. Although AAP patterns of resolution or lack of resolution are similar to those observed in children's doll play narratives, attachment fears, dangers, and experiences of failed protection are likely to be unleashed to a greater degree in children's stories as compared with the AAP stories of adults (e.g. Jacobsen et al., 1994; Kaplan, 1987; Solomon et al., 1995). Potential parallels between the AAP and the maternal caregiving interview are difficult to establish. This is due to the fact that attachment disorganization related to maternal representations of caregiving is evaluated through the dimension of helplessness, a dimension of parenting that is thought to be grounded in segregated systems (George & Solomon, 1996) but that is not easily translated into a form that is comparable with the indices used to evaluate the AAP, doll play, or the AAI.

CONCLUSIONS

The Adult Attachment Projective extends the narrative tradition of using projective stimuli to study the mental representation of attachment in children to adults. In conception, the AAP has supported and broadened two fundamental attachment concepts. First, and in accordance with the Bowlby–Ainsworth model, we found *haven of safety* to be a defining feature of adult representations of security. Our work also uncovered a new

representational feature of attachment security, namely, *internalized secure base*. The AAP stories of secure adults in particular show that solitude can provide an individual with a 'safe place' for self-reflection and personal transformation. Second, although Bowlby's conception of defense has received little attention by most attachment researchers, our work with the AAP demonstrates that the analysis of defensive processing can significantly advance our comprehension of individual differences in attachment status. Overall, the interaction of theory and empirical application in developing the AAP has resulted in a measure that findings to date have demonstrated strong interjudge reliability and convergent validity with the AAI.

Given the high agreement between the AAP and the AAI and given that most researchers report only on major classification groups, the advantages of the AAP are considerable. Administration time for the AAP is approximately 30 minutes and requires one hour for verbatim transcription. Because the AAP coding system contains half the number of scales of the AAI coding system and less transcript material to analyze, coding time for the AAP by a trained and reliable judge typically takes one hour. Training for coding and classification takes place over the course of a two-week training seminar; reliability is established through classifying 25 interviews following training to 80% reliability. We note that although the AAP appears to have several administrative advantages over the AAI, individuals who consider using the AAP should consider whether or not this methodology is suitable in light of the kind of attachment classification information needed to address specific research or clinical questions. The AAP is useful in research or clinical settings where a quick, single classification group designation is desired. That is, the AAP may be a suitable substitute for the AAI when questions focus on analyses of secure vs. insecure adult attachment, or an examination of one of the four major adult attachment groups. Individuals who wish to examine subgroup differences (e.g. F1 vs. F4), who require biographical information that is not easily gained from a questionnaire or supplementary interview format, or who wish to examine particular kinds of experience (e.g. loving, rejecting) or states of mind (e.g. idealization, preoccupying anger) are best served by the AAI.

In summary, the AAP can be a cost-efficient and 'user-friendly' measure that may well serve the needs of clinicians and many researchers in evaluating an individual's attachment status. It is important, however, to end our presentation of this new measure with a survey of work yet to be done. Our work to date has centered on the task of developing an instrument that is concordant with the AAI, an existing validated developmental measure of adult attachment and considered the 'gold standard' of adult attachment measurement (George & West, 1999). Our work in validating this measure continues. We have begun a major validation study, which adds to the research reported here, the examination of the psychometric properties of the AAP. Upon completion, the participants in this study will include 200 men and women drawn from both clinical and community populations. In addition to continued

examination of AAP/AAI classification concordance (and refined articulation of the classification system), this validation study also examines the interjudge reliability, discriminant validity and test-retest reliability of the AAP. With regard to the future of the AAP, we hope that the measure will prove to be useful as we and others begin to examine questions regarding the relation between the AAP and child attachment, parenting, other aspects of adult relationships, and development during adulthood.

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NOTE

1 Although there is a wealth of social-personality research in adult attachment, we cannot include the results of those studies in our discussion here because there is a growing consensus that the measures used by the developmental and social-personality researchers are minimally overlapping and do not examine the same aspects of mental representation (Crowell & Treboux, 1995; George & West, 1999; Shaver, Belsky, & Brennan, 2000).

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