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Using Parental Attachment in Family Court Proceedings: An Empirical Study of the DMM-AAI

Two methods for classifying Adult Attachment Interviews (AAI) for family court decision-making, Berkeley and DMM, differ in their usefulness for family court. Both expand Ainsworth's three ABC infant categories. The Berkeley method adds a fourth Disorganised/Unresolved category in adulthood, but has low specificity and validity for risk parents. The DMM method identifies an expanding array of strategies across the lifespan, as neurological development makes more complex strategies possible. This study examined DMM-AAI classifications in a sample of 332 British AAIs and compared the results to published meta-analyses of the Berkeley AAI. Six a priori hypotheses addressed the central question raised: which classificatory method for the AAI is more useful for child protection? DMM-AAI classifications differentiated between (i) normative adults, (ii) parents with mental health problems, (iii) parents in family court proceedings and (iv) incarcerated violent criminals on attachment, psychological trauma and pervasively high or low arousal. We assert that the DMM-AAI is sufficiently valid and discriminating for court use and that it can contribute to court decision-making when integrated with other assessments and clinical reports. © 2021 The Authors. Child Abuse Review published by Association of Child Protection Professionals and John Wiley & Sons Ltd.

KEY PRACTITIONER MESSAGES:

- DMM-AAIs, classified by authorised experts, meet forensic criteria.
- DMM-AAIs differentiate maltreating parents from other parents in attachment strategy, trauma and parental reasoning.
- DMM-AAI classifications indicate the type of services parents are ready for. Parents with particular classifications might need their own safety addressed before they can benefit from parent training.
- Customised service plans can help maltreating parents to meet their basic needs so as to better meet their children's needs.

KEY WORDS: child protection; adult attachment interview; DMM; child law/legal processes; assessment

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'Which classificatory method for the AAI is more useful for child protection?'

‘The Adult Attachment Interview... is the gold standard for assessing and classifying adults' attachment’

‘We have asserted that the AAI does have sufficient validity for clinical and forensic use... when it is classified using the DMM method’

Introduction

Parental attachment provides essential information for family court decision-making regarding service plans and child placement. Specifically, parental attachment can help professionals to estimate parents' child-protective behaviour and readiness to change their behaviour; for an explanation of these ideas, see the accompanying paper by Crittenden *et al.* (2021c).

The Adult Attachment Interview (AAI; George *et al.*, 1984/1996), developed by Mary Main and colleagues at the University of California Berkeley, is the gold standard for assessing and classifying adults' attachment (Main *et al.*, 2011). Classification of AAIs according to the four-category Berkeley method (Main & Goldwyn, 1984/1989; Main *et al.*, 2003) has predominated in developmental, clinical and child protection literature for decades (Duschinsky *et al.*, 2021). Another approach to attachment theory was developed by Patricia Crittenden and her colleagues. The Dynamic-Maturational Model of Attachment and Adaptation (DMM; Crittenden *et al.*, 2021b) led to the DMM classificatory method for the AAI (Crittenden & Landini, 2011).

Recently, developmental and clinical psychologists have identified crucial clinical and forensic misunderstandings about the Berkeley attachment classifications, particularly the infant ‘D’ category (Forslund *et al.*, 2021; Granqvist *et al.*, 2017). Some of these authors have posited that Berkeley attachment assessments should not be admitted to court, while others have proposed that attachment assessments should only be part of a validated set of assessments and conducted by trained and reliable coders, used together with other information. Given the latter are the same recommendations that we have made (Crittenden *et al.*, 2013; Spieker & Crittenden, 2018), the question to be resolved is which classificatory method for the AAI, Berkeley or DMM, is more useful for family forensic cases.

We have asserted that the AAI does have sufficient validity for clinical and forensic use (Spieker & Crittenden, 2018) when it is classified using the DMM method. Like the Berkeley AAI, the DMM-AAI is based on Ainsworth's three-category ABC model of attachment in infancy. Unlike the Berkeley model, the DMM does not use the problematic disorganised (‘D’) category, nor its adult counterpart Unresolved/Cannot Classify (‘U/CC’). Instead the DMM uses a developmental set of strategies that expand as neurological development makes more complex self-protective strategies possible and more complex environments (for example, school, work, marriage) make complex strategies necessary for endangered people. See Figure 1 for a comparison of the Berkeley and DMM models. Table 1 in the accompanying paper (Crittenden *et al.*, 2021a) gives a description of each DMM strategy.

Notably, the DMM is based on the current understanding of the neurological and cognitive processes that underlie behaviour. These are shown in the adult DMM model in Figure 1 and enlarged in Figure 2 as ‘transformations of information.’ Transformations use information from past experience to predict future outcomes. For example, a child might have experienced the mother smiling just before she exploded with rage; that child might learn that smiling was a false predictor of safety and, in the future, treat smiling as ‘false positive affect.’ Another child might have denied that he stole an object; that child was

Validating the DMM-AAI

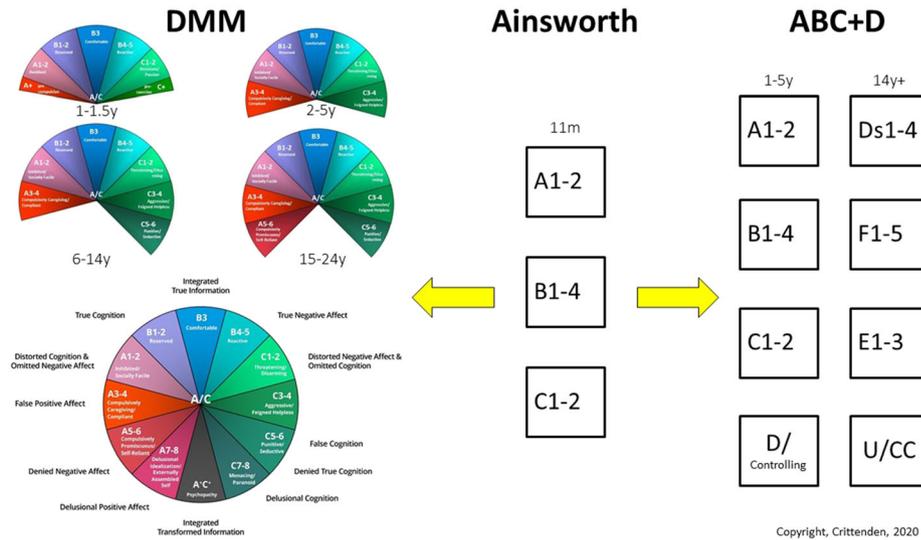


Figure 1. Comparison of the development of the categories of adult attachment in the DMM and Berkeley (ABC + D, 14y+) methods, used with permission. [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.com)]

transforming true information into denied information – in the hopes of being safe from punishment. On Figures 1 and 2, the transformations are listed vertically based on the order in which they become developmentally possible; in addition, they are placed next to the strategies that use them. Almost all people transform information when they feel endangered by revealing the truth, but endangered children need to do so more often than safe children. In addition, endangerment that involves deception can elicit deceptive transformations. When no transformation yields protective behaviour, denial and delusion are often used. Thus the transformations are relevant to the full gradient of adaptation: safe, uncomfortable, psychiatrically ill, maltreated and criminal, in roughly that sequence based on the cases that underlie the development of the DMM coding system.

The transformations are shown outside the circle, adjacent to the strategies that use them; they include omitting, distorting, falsifying, denying and delusionally creating information. The most concerning transformations are the false, denied and delusional reversals of safety and danger. Transformations are used to organise strategies for self-protection in childhood and *self*-, *partner*- and *child*-protection in adulthood. A particular concern in cases of child maltreatment is parents' conflict between protecting themselves and protecting their children (with child abuse and neglect resulting from incompatible self- and child-protective strategies) and in protecting their partner (with intimate partner violence resulting from incompatible self- and partner-protective strategies). For a gradient of parents' transformations of information about protecting their children, see the parenting clusters in Crittenden (2016, pp. 133–221).

This complex developmental model was developed initially on maltreating mothers and children (Crittenden, 1981, 1985a, 1985b; Crittenden, 1988a; Crittenden, 1988b; Crittenden, 1988c) and then expanded to adulthood and applied to the AAI. The application involved building on the Berkeley method by finding cases where that method yielded discrepancies (e.g. known abusing parents classified as secure) and examining the discourse to reveal

Table 1. The distribution of DMM A, B, C and A/C protective attachment strategies by participant group

Participant group	Type A strategies			Type B strategies	Reorganising to type B		Type C strategies			Type A/C-strategies	Type/C+ strategies	Participant group totals	
	A7-8	A5-6	A3-4	A1-2	B	R → B	C1-2	C3-4	C5-6	C7-8	A1-4/C1-4		A5-8/C5-8
Normative	1*	14	9	20	38	17	8	5	6	0	8	0	126
	.8**	11.1	7.1	15.9	30.2	13.5	6.3	4.0	4.8	0	6.3	0	
Mental health	18	11	6	0	3	11	0	3	20	6	3	24	105
	17.1	10.5	5.7	0	2.9	10.5	0	2.9	19.0	5.7	2.9	22.9	
Family forensic	20	7	4	0	1	12	0	0	6	4	4	23	81
	24.7	8.6	4.9	0	1.2	14.8	0	0	7.4	4.9	4.9	28.4	
Criminal forensic	5	2	1	0	0	2	0	0	1	1	0	8	20
	25.0	10.0	5.0	0	0	10.0	0	0	5.0	5.0	0	40.0	
Totals	44	34	20	20	42	42	8	8	33	11	15	55	332

Note:

*Number of participants;

**Percentage of participant group.

Validating the DMM-AAI

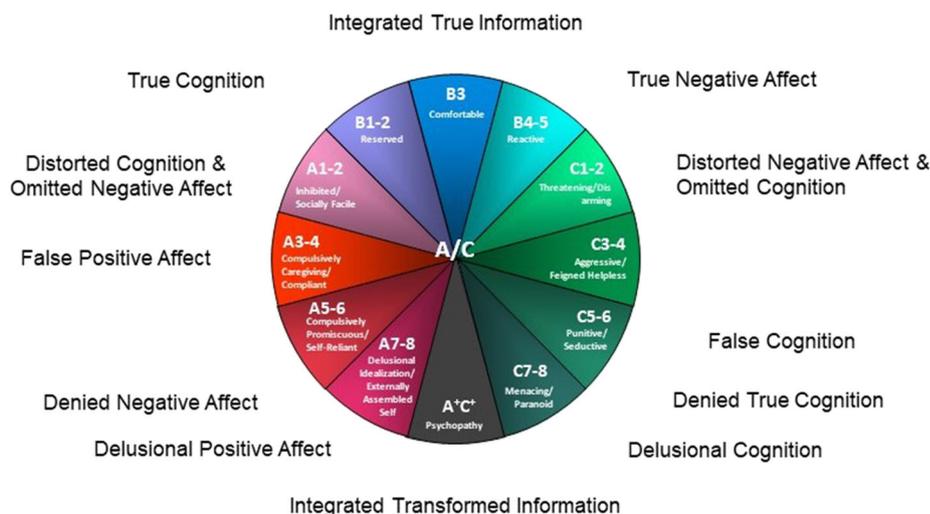


Figure 2. Cognitive and affective transformations of information associated with self-protective attachment strategies. Used with permission. [Colour figure can be viewed at wileyonlinelibrary.com] [Colour figure can be viewed at wileyonlinelibrary.com]

transformations not included in the Berkeley method. False positive affect accompanying negative information would be an example: ‘*Of course my mum used to whip me, but it never hurt (laughing).*’ Numerous studies validate the DMM assessments for maltreated infants, preschoolers and school-age children (see Crittenden *et al.* (2021c) for summaries of these studies) as well as the DMM discourse analysis for the Parents Interview used with a maltreating sample (Crittenden *et al.*, 1991). The DMM-AAI, on the other hand, has been well-validated only for normative adults and those with personal risk conditions such as mental illness (see Crittenden *et al.* (2021c) for a comprehensive summary of the studies that validate the DMM-AAI for various psychiatric diagnoses and other parental risk conditions). The goal of this paper is to provide evidence regarding the validity of the DMM-AAI for assessment of parents who harm their children.

Comparative Study of Berkeley and DMM Classifications of Maltreating Parents

We found only one study of maltreating mothers that compared the ABC + D/ Berkeley classifications with classifications derived from the DMM method (Seefeldt, 1997). Although the sample was small, the study can suggest hypotheses for future research. The sample consisted of 31 low-income American mothers who completed the AAI; two-thirds abused or neglected their children ($n = 21$), and one-third were non-maltreating ($n = 10$). All 31 AAIs were classified twice, once with the Berkeley method (Main & Goldwyn, 1989) and once with an early version of the DMM method that did not yet include A7–8 nor C7–8 (Crittenden, 1997). The Berkeley method had four categories (Ds, F, E, U) plus ‘Cannot Classify’ (meaning the AAI could not be assigned to any of the four Berkeley categories). Researchers began to combine ‘Cannot Classify’ with ‘U’ classifications only some years after a report by Hesse (1996).

‘The DMM-AAI... has been well-validated only for normative adults and those with personal risk conditions such as mental illness’

Using the Berkeley method, one (4.8%) AAI in the maltreating group was classified secure. This classification was likely a 'false secure,' meaning that it is unlikely that a secure classification for a parent with substantiated maltreatment of a child is accurate. A higher rate of likely 'false secure' AAI classifications (19%) for perpetrators ($n = 53$) of violence in the family is documented in a meta-analysis (Bakermans-Kranenburg & van IJzendoorn, 2009). More than half ($n = 17$) of the AAIs could not be classified at all with the Berkeley method; these included six non-maltreating mothers' AAIs, resulting in equivalent risk between the two groups, i.e. a non-significant statistical test.

In contrast, using the DMM method, non-maltreating mothers' AAIs showed significantly more indicators of integration (i.e. access to relevant information about the past), fewer dismissing markers, and fewer psychological traumas than maltreating mothers' AAIs. No AAIs of maltreating mothers classified with the DMM method were 'false secure.' These results have significant implications for child protection and family court decision-making, as described below.

To explore the comparability of the maltreating and non-maltreating groups further, we counted the number of childhood dangers reported in these AAIs and evaluated their severity. At a trend level, non-maltreating mothers reported experiencing a *greater number* of dangerous childhood events ($M = 11.4$, $SD = 4.6$) than maltreating mothers ($M = 8.3$, $SD = 4.1$, $t(29) = -1.9$, $p = .07$). There was also a trend difference in average danger severity ratings for non-maltreating mothers ($M = 4.5$, $SD = 1.1$) versus maltreating mothers ($M = 5.2$, $SD = .84$, $t(29) = 1.8$, $p = .08$), with maltreating mothers experiencing *greater severity*. A larger sample is needed to determine if non-maltreating mothers had greater access to, that is, more integration of, memories of threatening events than maltreating mothers; this would be consistent with the result that adults with dismissed trauma were at greater risk of post-traumatic stress disorder (PTSD) than adults with preoccupied trauma or without trauma (Crittenden & Heller, 2017).

A strength of the Seefeldt study was that all the mothers were from low socioeconomic backgrounds (with incomes below the American poverty line). The primary limitations were the small sample size, the preliminary form of the DMM-AAI method at that time, and it being an unpublished dissertation; as a consequence, replication is necessary.

Empirical DMM-AAI Results from a UK Family Forensic Sample

We sought to replicate Seefeldt's central finding of differences between maltreating and non-maltreating parents' AAI classifications (and corresponding transformations of information) using a larger sample. We compared four groups who differed in dangerous behaviour: *normative* parents (who protected themselves and their children), adults in *mental health treatment* (who were a danger to themselves), *family forensic* parents in family court proceedings (who had endangered their children) and incarcerated violent adult *criminals* (who had harmed other people). Based on Seefeldt's findings, DMM studies of maltreated children's attachment, and studies of the AAIs of incarcerated violent offenders (Nørbech, 2020, 2021; Nørbech et al. 2013) and sexual offenders (O'Reilly, 2015), we tested six hypotheses:

'We sought to replicate Seefeldt's central finding of differences between maltreating and non-maltreating parents' AAI classifications... using a larger sample'

- 1 The rate of ‘false secures’ in the family forensic group would approach zero.
- 2 Adults in mental health treatment would more often use Type C strategies; those in the two forensic groups would more often use Type A and A/C strategies.
- 3 Parents in the family forensic group would show more psychological trauma than other adults whereas adults in mental health treatment would have more unresolved losses.
- 4 Parents in the family forensic group would have pervasively low or high arousal (depression (referring to discourse evidence of pervasive low arousal and statements of fate or futility, rather than a psychiatric diagnosis of depression), agitation, and sudden spikes of forbidden negative affect) more often than parents in the normative group.
- 5 Parents in the family forensic group would have strategies in the moderate risk category.
- 6 There would be a linear trend in overall attachment risk from the normative group to mental health treatment, family forensic and criminal groups.

Method

Sample and Ethical Considerations

This study analysed archival data from 332 British DMM-AAIs drawn from an international archive of attachment assessments held by the Family Relations Institute, Inc. (FRI), a private teaching institute that prepares mental health professionals to evaluate attachment and develop treatment plans, with representatives in many countries and headquarters in Italy, the USA and China (see <https://familyrelationsinstitute.org>). The DMM-AAI classifications in the archive came from course assignments completed by professionals taking FRI courses; each course participant was required to present three correctly administered AAIs to receive a certificate for administering (but not evaluating) the AAI. Each anonymised classification was accompanied by consent for its use signed by the course participant stating that the interviewee had signed the consent required by each Local Authority. A universal informed consent document was not used because institutions and nations differ regarding the details of consent. The consent included mental health and child protection status (none, past, current). Although consents were signed before the AAIs were administered, each interviewer was required to confirm the consent once the individuals knew what they had said; no AAIs were withdrawn after being administered. The archive contains no information that could identify the assessed person. Research based on such archives does not fall within the scope of Research Ethics Committees in the UK (UK Health Research Authority, 2021, pp. 6–11) because it creates ‘minimal risk’ of harm to the participants. Such minimal risk, according to the British Psychological Society's (2021) code for research ethics, ‘may be considered not to require a formal ethics review’ (p. 28). This study included every British DMM-AAI classification in the archive that fitted into one of these four groups:

- i **Normative Group**: 126 parents drawn from the normative population. This group excluded individuals with known mental health problems, child protection supervision or criminal convictions. Nevertheless, it is probable that some parents had unrevealed mental health problems and possible that a few had unrevealed child protection involvement. The normative sample was mostly middle-class and educated.

‘This study analysed archival data from 332 British DMM-AAIs drawn from an international archive of attachment assessments’

- ii ***Mental Health Treatment Group***: 105 adults in psychotherapy. This group was mixed regarding diagnosis and type and duration of treatment. They varied widely on education and socioeconomic status.
- iii ***Family Forensic Group***: 81 parents in child care proceedings. At the time of the interview, the outcomes of the court proceedings were not known. This group was characterised by low socioeconomic status.
- iv ***Criminal Group***: 20 incarcerated adult violent offenders with a wide range of offences. This group was characterised by low socioeconomic status.

Procedures

Each participant was seen twice by a DMM-AAI course trainee, once to explain the purpose of the interview and obtain written consent meeting their local requirements, and once to administer and record the interview. FRI requires that a learner's first or second AAI be with a low-income, normative adult, and the third with an adult from a risk group. This means that the third AAIs were more expertly delivered. Lack of appropriate follow-up questions by less experienced interviewers could affect coders' ability to identify the specific psychological process used in traumas or losses (e.g. preoccupied, dismissed, displaced, etc.), but not identification of there being a trauma or unresolved loss.

The interviews were transcribed verbatim, including all speech errors.

Classifying the DMM-AAIs

The AAIs were classified using the DMM method (Crittenden & Landini, 2011) and classificatory model (see Figure 2). The discourse analysis involved coding aspects of sentence structure, omissions, incoherencies, expressed affect, the relation between generalised semantic statements and the episodic evidence, use of professional jargon, the relevance of answers to the questions asked, and the enacted relationship between the speaker and interviewer. Although the parents almost certainly represented a range of intellectual ability, all were able to understand and respond to the questions.

Ten trained and reliable coders classified the DMM-AAIs. All had passed the standardised reliability test with 80 per cent or higher agreement on strategy, psychological trauma, unresolved loss and markers of modified arousal. Two of the three primary coders had reliability of 90 per cent or higher. The coders were blind to all external information about the interviewees, but manner of speech, types of childhood events and statements of not wanting to be like one's parents provided some information about the parents' socioeconomic status and culture. On the other hand, very few maltreating parents referred to their children being in care or to the behaviour that resulted in child protection.

Statistical Methods

Analyses were conducted using IBM SPSS Statistics version 19.0. We calculated the chi-square statistic in analyses of cross-tabulated categorical data for Hypotheses 1, 2, 4 and 5. We calculated how much power we had to detect differences between the normative group and each risk group based on the smallest sample, the criminal forensic group, $n = 20$ (Rosner, 1990). When

'The AAIs were classified using the DMM method'

the difference in proportion between two groups was greater than .43, power was over .80 to detect differences with a significance of $p = .05$. We did not, however, have sufficient power to detect differences in dyadic proportions among the three risk groups.

We used analysis of variance (ANOVA) to compare continuous variables across the four groups for Hypothesis 3, and t -test to compare two groups in Hypothesis 4. ANOVA was also used to test the linear trend in overall attachment risk for Hypothesis 6. We tested for homogeneity of variances with Levene's statistic. When the variances were not homogeneous, we report SPSS's *Welch* test for ANOVA instead of the F statistic.

Results

For each hypothesis, we provide both the results and implications for service. Results are summarised in Table 1.

Lack of 'False Secures' in the Family Forensic Group (Hypothesis 1)

Of the *normative* parents, two-thirds (65.9%) were classified as using the Ainsworth strategies (Types B, A1–2, and C1–2, including reorganising toward Type B); the remaining third (34.1%) used DMM strategies (Types A3–8, C3–8, and A/C). The *mental health treatment* group had 13.3 per cent Ainsworth strategies (predominantly reorganising) and 86.7 per cent DMM strategies. The *family forensic* group had one AAI, (1.2%) classified as B (a probable false secure), with 14.8 per cent reorganising and 83.9 per cent with DMM strategies. In the *criminal* group, two (10%) were reorganising and 90.0 per cent used DMM strategies. We compared the distribution of four groups of AAI classifications (B, other Ainsworth, moderate, and high risk) for the normative and combined mental health, family forensic, and criminal forensic groups. The group difference was significant, $\chi^2(3) = 120.2, p < .001$. The rate of Type B across the 206 AAIs in the three risk groups was 1.9 per cent, indicating a low rate of false secures in the combined risk group. This was very different from the 30 per cent secure rate for combined risk samples ($n = 1368$) in a Berkeley-based meta-analysis (Bakermans-Kranenburg & van IJzendoorn, 2009). We argue that security is incompatible with the level of risk described in these risk samples, and that many of these classifications are likely 'false secure.' We conclude that the DMM method has a smaller 'false secure' problem than the Berkeley method. Notably, all AAIs were classifiable with the DMM method.

Type a Versus Type C Strategies (Hypothesis 2)

The classifications were clustered into four groups: Ainsworth strategies, A3–8, C3–8, and A/C to compare Types A and C strategies. The overall chi-square was significant, $\chi^2(9) = 108.1, p < .001$. Follow-up analyses indicated that the three risk groups had significantly fewer Ainsworth classifications (14.1%) than the normative group (65.9%). The *mental health treatment* group had more C3–8 classifications (55.8%) whereas the *family forensic* and *criminal* groups had significantly more A/C classifications (50.0%) than the normative group (6.3%). Finally, the *family forensic* group had more A3–8 compulsive

'The DMM method has a smaller 'false secure' problem than the Berkeley method'

caregiving, compliant, promiscuous, self-reliant, delusionally idealising and externally assembled strategies (31.6%) than the normative group (19.0%). This finding suggests that (i) family forensic parents' treatment plans might best focus on revealing and regulating inhibited negative feelings, rather than on inhibiting these feelings further (Baim & Morrison, 2011; Wilcox & Baim, 2016) and (ii) some maltreating parents used transformations that confused self- and child-protection.

Psychological Trauma and Unresolved Loss (Hypothesis 3)

A four-group ANOVA compared the number of identified psychological traumas. Psychological trauma was identified for 40 per cent of the *normative* group (mostly dismissed trauma or loss with a low-risk A1–3 strategy), 82.9 per cent of the *mental health treatment* group, 92.6 per cent of the *family forensic* group (with the remaining parents having modified arousal) and 90.0 per cent of the *criminal* group (with the remaining having A3–8/C3–8 strategies where A3–8 referred to compulsive caregiving, compliant, promiscuous, self-reliant, delusionally idealising and externally assembled; and C3–8 referred to aggressive, feigned helpless, seductive, punitive, menacing and paranoid strategies). We did not analyse for type of trauma or loss. Still, many of the family forensic and criminal groups' traumas were about being in foster or institutional care as children, suggesting the ineffectiveness for some children of placement in protective care. There were clear group differences in the presence of psychological traumas, *Welch* (3,74.9) = 65.51, $p < .001$, and unresolved losses, *Welch* (3,79.5) = 8.93, $p < .001$. This result suggests the need for service plans attuned to parents' childhood trauma. Notably, 40 per cent of the normative sample had psychological trauma; this might reflect mental health practitioners' networks or the prevalence of trauma in the population; these data cannot disentangle these explanations.

'This result suggests the need for service plans attuned to parents' childhood trauma'

Modified Arousal (Hypothesis 4)

Parents in the *family forensic* group ($M = .60$, $SD = .74$) had more modified arousal than parents in the *normative* group ($M = .04$, $SD = .20$, $t(87.3) = 6.76$, $p < .001$). All three risk groups had more indications of depression ($\chi^2(3) = 41.62$, $p < .001$) and intrusions of forbidden negative affect ($\chi^2(3) = 39.54$, $p < .001$), than did the normative group. Cases of pervasive agitation were in four per cent of the normative group, 46 per cent in the family forensic group and 61 per cent across all three risk groups, suggesting that treatment plans should address chronic depressed or elevated arousal before attempting to change behaviour.

Moderate Risk and Maltreatment (Hypothesis 5)

Only 20.9 per cent of the family forensic DMM-AAIs showed moderate risk for dangerous behaviour (that is, strategies at the 3–4 level), a rate comparable to 20.0 per cent in the criminal forensic group. Most (62.9%) of the family forensic AAIs showed high risk (strategies at the 5–8 level), as did most AAIs in the criminal forensic group (70.0%). Although the analysis revealed significant differences among the four groups ($\chi^2(9) = 108.06$, $p < .001$),

the differences were only between the distributions of the Ainsworth classifications and high-risk DMM-AAI classifications. These results did not support our hypothesis that parents in the family forensic group would have moderate risk strategies. Moderate risk probably better describes child protection families who were *not* in court proceedings, although of course some will be in proceedings later; we had no data on this group of parents. Notably, 10–15 per cent of the DMM-AAIs of risk adults indicated ongoing reorganisation. Although all risk adults had had some form of child protection intervention or treatment services, relatively few seemed to have benefitted enough to begin reorganising, suggesting a need for better service provision for risk adults. If replicated, the finding that both forensic groups had high frequencies of strategies at the 5–8 level would suggest that these people might need intervention to assist them to be and feel safe before they are expected to be able to prioritise their children's safety.

Overall Psychological Risk (Hypothesis 6)

The indicators of risk (high numbered strategies, psychological trauma/loss and modified arousal) were summed, without weighting, to create an eight-point risk score. There was a significant linear effect of increasing risk from *normative* ($M = 1.0$, $SD = 1.3$) to *mental health treatment*, $M = 3.5$, $SD = 2.1$) to *family forensic* ($M = 4.1$, $SD = 1.9$) to *criminal* ($M = 4.6$, $SD = 2.0$, $F(1, 328) = 170.0$, $p < .001$). This supports the distinctions among sample groupings although, of course, the distributions overlap.

Discussion

We undertook this study to identify information that could help family courts make decisions about services to the parents of maltreated children and about children's placement. We focused on attachment because parents' primary function is protecting and comforting their children. That function has broken down in families in court proceedings, and previous services have failed to improve the families' functioning. Understanding parents' attempt to protect themselves and their children allows services to be tailored to parents' capabilities and needs. This, in turn, might permit more children to live safely with their parents. In our study, the DMM-AAI provided relevant parent-based information that met evidentiary guidelines and was independent of information generated by other professionals. We found that the DMM-AAI (i) differentiated family forensic parents from other adults and (ii) differentiated *among* family forensic parents, thus suggesting their need for individualised services. The detail of an AAI can contribute to personalised treatment plans (Crittenden, 2016; Crittenden *et al.*, 2021a; Crittenden *et al.*, 2021b; Dallos *et al.*, 2019).

Summary of Findings

The DMM-AAIs showed that family forensic parents used attachment strategies that were characterised by falsified, denied and delusional information, together with psychological trauma, depression and intrusions of intense negative feelings. Within the family forensic group, about one-third

‘Understanding parents' attempt to protect themselves and their children allows services to be tailored to parents' capabilities and needs’

‘This study’s findings align with a similar archival DMM-AAI study of 237 Italian parents’

‘The AAI must be administered properly and classified by certified coders according to the DMM guidelines’

used A5–8 strategies (i.e. compulsive caregiving, compliance, promiscuous, self-reliant, delusionally idealising and externally assembled strategies) and another one-third used A/C strategies (i.e. compulsive strategies combined with aggressive, feigned helpless, punitive, seductive, menacing and paranoid strategies), suggesting the need for treatment approaches for this group that addressed parental self-protection as well as child protection. The DMM method identified less than two per cent of the AAIs from adults in the three risk groups as possible ‘false secure.’ This finding contrasts with a meta-analysis of Berkeley classifications (Bakermans-Kranenburg & van IJzendoorn, 2009) that found that 30 per cent of at-risk adults’ AAIs (combined $n = 1368$) were classified as secure; we propose that these are false secure cases based on the Berkeley method not having constructs to identify false positive affect, denied negative affect, delusional idealisation and other extensive transformations of information. Professionals who accept false security as actual security might confuse parents who can protect their children with those who can be dangerous to their children, with adverse consequences for service plans and child placement.

This study’s findings align with a similar archival DMM-AAI study of 237 Italian parents of normally developing children, parents of children in psychiatric treatment and parents in psychiatric treatment (Landini *et al.*, 2016). There were no ‘false secure’ classifications and no adult in either psychiatric group used a normative Ainsworth strategy. This finding contrasts with the previously discussed meta-analysis of Berkeley classifications, as well the finding that 22 per cent of parents of psychologically disturbed children were classified as secure (Bakermans-Kranenburg & van IJzendoorn, 2009). These findings, plus the Seefeldt (1997) Berkeley results, support Forslund *et al.*’s (2021) cautions against using Berkeley-classified assessments of attachment in clinical and forensic cases.

Guidelines and Limitations

A few caveats and limitations should be kept in mind. The AAI must be administered properly and classified by certified coders according to the DMM guidelines (Crittenden & Landini, 2011). Further, the DMM-AAI is not a stand-alone tool; it should be used as part of a set of specialised assessments and clinical reports (Crittenden *et al.*, 2021b; Spieker & Crittenden, 2018).

The study has several limitations as well. The sample was drawn from the UK; adults’ AAIs in other cultures might show different distributions. The archival data did not include specific demographic information such as age, sex, marital status, education and income and, thus, we could not generate complete multivariate models. We included only child maltreatment cases that were in court proceedings. The sample was not large enough to apply statistics to the varied forms of psychological trauma and modified states of arousal, nor to incorporate these variations in order to increase differentiation of the eight-point risk score. As a cross-sectional study, it could not elucidate the developmental processes leading to maltreatment or changed parenting. Finally, AAI information does not provide evidence of specific acts of child abuse or neglect.

This study's strengths include a large sample of troubled individuals and the specification of six *a priori* hypotheses selected for their relevance to identifying risk and treatment needs.

Conclusions

The study's results support the validity and utility of the DMM-AAI to provide important and unique information for family courts and professionals charged with decisions that affect the life course of children and families. In particular, our study highlights the importance of childhood endangerment potentially contributing to maltreating parents' psychological trauma and protective strategies that confuse self- and child-protection. Including these ideas in progressively organised and customised treatment plans that begin with parents' actual and perceived need for self-protection and, then, move to consider protection of children once parents feel safe might improve outcomes for maltreated children and their families.

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