Invited paper

Assessing attachment for family court decision making

Patricia McKinsey Crittenden, Steve Farnfield, Andrea Landini and Ben Grey

Patricia McKinsey Crittenden is a Director at Family Relations Institute, Miami, Florida, USA and Adjunct Associate Professor at Department of Psychiatry, Dalhousie University, Halifax, Canada. Dr Steve Farnfield is based at Roehampton University, London, UK.

Andrea Landini is a Child and Adolescent Psychiatrist at Private Practice, Reggio Emilia,

Ben Grey is a Consultant Family and Risk Assessor at Family Assessment Partnership, Alton, UK.

Abstract

Purpose - Attachment has long been considered relevant to child care proceedings. However, compared to other forms of evidence, it has been limited by the lack of consistent methods of assessment, training of experts, and empirical evidence. To reduce these limitations, The International Association for the Study of Attachment (IASA) has developed a Family Attachment Court Protocol for assessment and formulation of attachment issues. The purpose of the Protocol is to act as a guide to good practice and to begin a process of improving the application of attachment to family court proceedings.

Design/methodology/approach - The Dynamic-Maturational Model of Attachment and Adaptation (DMM) and its associated assessments were adapted for forensic use. The resulting Family Attachment Court Protocol was trialed in cases before 15 judges in five countries and modified based on feedback.

Findings - The judges and most of the professionals working for the court expressed approval of the new Protocol.

Research limitations/implications - Implementation of the Protocol will require additional authorised experts.

Practical implications - The primary practical implication is that the courts will receive verifiable evidence on attachment can be tested and, thus, validated or disproven.

Social implications - If accepted, the IASA Protocol will reduce the idiosyncratic nature of child care proceedings and increase the rigour of professional qualification to address attachment.

Originality/value - The IASA Protocol is new and valuable because its theoretical underpinnings in the DMM are based on both clinical and also neurological evidence about protection from danger, and it can replace untestable expert opinion about attachment with evidence-based assessment and transparent formulation of recommendations.

Keywords Family court, Child care proceedings, Evaluating attachment, Forensic experts, Child care, Decision making

Paper type Conceptual paper

The authors appreciate the assistance of Attorney Thomas Spencer and Retired Judge Peter de Mille regarding legal issues in the USA and UK, respectively. The authors also want to thank the other members of the IASA Family Court Protocol Committee (Australia: Mark Allerton; Italy: Giuliana Florit: Northern Ireland: Stewart Whyte; Norway: Bente Nilsen; Scotland: Graeme Rizza; Switzerland: Michael Watson; UK: Jayne Allam, Louise Atkin, Julet Butler, Rebecca Carr-Hopkins, Victoria Lidchi, Angela de Mille, Shirley Gracias; Canada: Tammy Fraser) for their hard work in developing and trialing the Protocol.

Attachment has long been considered relevant to child care proceedings. However, compared to other forms of evidence, it has been limited by the lack of coherent theory for defining attachment, validated methods of assessment, and standards for accrediting experts. To reduce these limitations, The International Association for the Study of Attachment (IASA) has developed a Family Attachment Court Protocol for assessment and formulation of issues related to attachment in child care proceedings.

IASA chose to focus solely on attachment because attachment is highly relevant to family court decision making, it is not covered adequately in any academic training or professional licensure programme, and the necessary theory, assessments, and expertise now exist. In addition, modern attachment theory ties differences in attachment to differences in self-protection and child-protection and to the psychological processes underlying protective or endangering behaviour. This is new and relevant to both deciding whether children's placements are safe and also selecting services for risk families. That is, IASA hopes to both improve the evidentiary quality of information about attachment and also to expand its scope of application to treatment and rehabilitation.

The theory selected for the Protocol is the Dynamic-Maturational Model of Attachment and Adaptation (DMM, Crittenden, 1995, 2008). The DMM was selected because it is more precise regarding risk than other approaches to attachment and has a life-span array of interlocking assessments (Farnfield et al., 2010). Crucially, the assessments are tied to how the brain processes information to yield safe or dangerous behaviour (Strathearn et al., 2009). All of the assessments have published validating studies, many of which include families with child abuse and neglect. Furthermore, there are training programmes for professionals who wish to be accredited as reliable and authorised for forensic work using DMM assessments. Such authorisation indicates to the courts that these professionals use the assessments reliably. These improvements in how attachment is assessed and presented to courts can bring work in attachment to the standard used for psychological, psychiatric, and medical evidence.

The IASA Family Attachment Court Protocol was developed by a multi-national committee of professionals from social work, forensic, clinical, and developmental psychology, child, adolescent, and adult psychiatry, and the judiciary. IASA sought to tie theory about selfprotection to valid assessment of attachment and to define a way to present the evidence so that the process of generating recommendations could be viewed, step-by-step, by the parties to court proceedings. That is, validity, reliability, transparency, and utility were the goals. The committee met for four years to develop, trial, and refine the Protocol. During this period, court reports that had been submitted to 15 different judges in five countries were reviewed. The primary objection was from full-time forensic experts who preferred to continue to assess attachment informally. Based on feedback from the courts, social services, attorneys, and committee members, the protocol was progressively modified and ultimately presented to and accepted by the board of IASA.

In this paper, we discuss new aspects of theory encompassed by the DMM, what the DMM can offer that other approaches to attachment theory cannot, and how the DMM can be utilised by family courts. We then describe the assessments that operationalise DMM theory and the training, accrediting, and authorizing of experts in attachment. We close by describing a protocol for producing court reports that meets high standards for valid, reliable, and transparent evidence.

A modern theory of attachment with forensic utility

Current practice regarding assessment of attachment for family courts lacks a clear definition of attachment and a set of outcome categories suitable for children and parents in care proceedings. Early attachment theory contrasted secure attachment (called Type B) with anxious attachment (Bowlby, 1969/1983, 1973, 1980) whereas later theory elaborated and expanded the anxious category (cf., Ainsworth, 1979). Anxious attachment consists of affectinhibiting processes (called Type A), affect-exaggerating processes (called Type C), and, in one model, "disorganised" processing (called Type D). In all versions of attachment theory, anxious attachment includes a large segment of the population (one- to two-thirds of the population), most of whom have neither psychiatric problems, nor child maltreatment of any sort (Greenberg, 1999; Sroufe, 1988; van IJzendoorn, 1995). Thus, although essentially all families coming to court attention are characterized by insecure attachment, the overwhelming majority of insecurely attached people do not need intervention at all.

The issue is how to identify those families with serious dysfunction (Crittenden et al., 2007). The problem is that most approaches to attachment theory offer only two to four categories into which to group all humans, do not adequately address psychological trauma, and are not theoretically coherent, particularly with regard to "disorganisation" (George and West, 2012; Friedman and Boyle, 2008; Rutter et al., 2009; Slade, 2007).

Defining attachment

The construct of attachment has undergone considerable refinement since its inception in postwar England (Bowlby, 1951), then expansion to a focus on individual differences in middle class infants' pattern of attachment (Ainsworth, 1979), and now adaptation to risk populations and ages beyond infancy. The DMM reflects three decades of research on child protection populations (Crittenden, 1981, 1998, 1999, 2008). It defines attachment in a way that is relevant to families who harm their children: Attachment refers to the self-protective and progenyprotective strategies used when there is actual or perceived danger or threat of danger (Crittenden and Ainsworth, 1989).

Individual differences in attachment

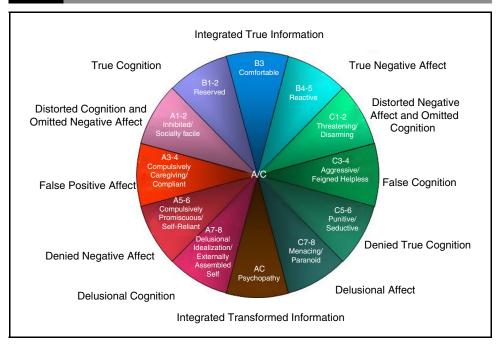
Family courts need distinctions within anxious attachment that are tied to risk and potential to respond positively to treatment. Of the several variants of attachment theory, the DMM best meets this need (McMahon and Ward, 2001; Stokowy and Sahhar, 2012; Thompson and Raikes, 2003). Only DMM theory was developed based on observations of maltreating samples (see citations in Table I). Further, the DMM offers the widest array of categories within anxious attachment that differ in degree of risk, type of risk, and underlying psychological processes (see Figure 1, the "pie slices"). In this model, lower categories in the diagram carry greater risk for harm to oneself, one's partner, and one's children, albeit each in a different way and to a different extent.

Each of the behavioural strategies in the DMM (the "pie slices") is tied to mental processes that describe how the mind has learned to use information to predict danger and organise selfand child-protective behaviour (see Figure 1, cognition and affect). Knowing the underlying psychological processes that produce child-endangering behaviour is important for selecting suitable interventions. Although theory always runs ahead of data, empirical studies of information processing that used functional magnetic resonance imaging have begun to validate the mental processes and states underlying different attachment strategies. Some show the psychological processes tied to "forgetting", an outcome seen often in the AAIs of parents using Type A strategies (Benoit and Anderson, 2012). Others demonstrate that the patterns of affect regulation seen in DMM assessments have neural correlates (Hopper et al., 2007). Neurological differences in autobiographical recall and type of recall (such as used in the AAI) have been demonstrated (Storm and Jobe, 2012). Finally, differences between Type A and B on the AAI have been demonstrated neurally (Strathearn et al., 2009). These studies support the neurological relevance of the DMM assessments.

Based on research in maltreating populations (see citations in Table I), maltreated children are likely to display a compulsive caregiving strategy to depressed or neglectful parents, compulsive compliance to overly authoritarian parents, and coercively oppositional behaviour to inconsistent

| Age of assessed person(s) | Name of assessment | Studies relevant to child care proceedings ^a |
|--|---|---|
| Birth – 15 months Adult interactant | CARE-Index for infants | Cassidy et al. (1996), Ciotti et al. (1998), Crittenden (1981, 1985a, b, 1988a, b), Crittenden and Bonvillian (1984), Crittenden and DiLalla (1988), DiLalla and Crittender (1990), Hughes (1993), Jacobsen and Miller (1998), Leadbeater et al. (1996), Mullick et al. (2001), Ostler (2010), Ward et al. (1993) |
| 16-72 months Adult interactant | CARE-Index for toddlers | Crittenden (1985a, b, 1988a, b, 1992), Künster et al. (2010) |
| 11-18 months Adult attachment figure | Strange situation procedure (SSP) | Crittenden (1985a, b, 1988a, b), Jean-Gilles and Crittenden (1990), Kwako et al. (2010), Pleshkova and Muhamedrahimov (2010), Radke-Yarrow et al. (1985), Strathearn et al. (2009), Svanberg et al. (2010) |
| 21-66 months Adult attachment figure | Preschool assessment of attachment (PAA) | Chisholm (1998), Crittenden et al. (2007), Jean-Gilles and Crittenden (1990), DeVito and Hopkins (2001), Fagot and Pears (1996), Rauh et al. (2000), Spieker and Crittenden (2010) |
| 72 months – puberty | School-age assessment of attachment (SAA) | Crittenden et al. (2010), Crittenden and Kulbotton (2007), Kozlowska and Williams (2009), Kwako et al. (2010) |
| 16-25 years (or 1st pregnancy) | Transition to Adulthood Attachment Interview (TAAI) | Crittenden et al. (1994) |
| Adulthood | Adult Attachment Interview (DMM-AAI) | Crittenden et al. (2000), Crittenden and Newman (2010), Gogarty (2002), Haapasalo et al. (1999), Seefeldt (1997), Worley et al. (2004) |
| Adulthood, plus all children in the family | Parents Interview | Crittenden et al. (1991, 2000) |





parents. Their parents often show inhibitory and compulsive self-protective strategies. The striking feature of all the compulsive strategies is that they are often misperceived as secure because people who use these strategies match our notion of what people should do and say. Nevertheless, in crucial moments of stress, individuals using compulsive strategies may suddenly display endangering behaviour that is usually inhibited. DMM theory and assessments can help to identify these "pseudo-secure" children and adults who present risk of interpersonal harm. This is important because these parents and children are often overlooked by child protection services because their strategy enables them to present themselves in socially approved ways.

The DMM attachment strategies form a logical gradient that can indicate not only how one type of attachment is related to the others, but also how to conceptualise individual differences within a category. The studies of information processing indicate that opposite neuro-psychological processes, i.e. cognition and affect, may be used by individuals using opposite self-protective strategies (Type A vs Type C). This suggests that different interventions may be needed for people using different strategies. Furthermore, inappropriate interventions may amplify maladaptive behaviour producing iatrogenic harm. This suggests a need to look below the surface of behaviour to identify non-obvious aspects of each person's strategy and corresponding information processing.

Assessing attachment and training experts in assessment of attachment Assessing attachment

Attachment has been assessed in three ways: by self-report, in naturalistic settings, and by standardised observational procedures. Self-reported attachment is unlikely to meet the needs of family courts because the family members being evaluated rarely have the self-awareness and trust of authorities needed to report accurately on themselves. Further, self-reported attachment has not been shown to correlate with other assessments of attachment or risk status (Crowell et al., 2008).

Currently, most information about attachment that is presented to courts is generated in informal and unique ways, e.g., through home or contact observation by many types of professionals. The observers are not trained to evaluate attachment and do not provide evidence that other professionals can view and evaluate. That is, these professionals provide expert opinion without being experts in attachment and without offering verifiable evidence for their opinion.

When standardised observational procedures are used, trained, and reliable coders view the assessment and, using defined methodologies, generate the evaluation of attachment. There are many standardised assessments of attachment for use with people of different ages (see Table I).

Most of these assessments can be used with any of the major variants of attachment theory. Because the observation procedure is standardised, videotaped individuals can be compared and other court experts can view the permanent record of the procedure.

When classified using DMM methods, these assessments differentiate among insecurely attached children and adults, creating a gradient of specified risks. Moreover, the DMM categories identify strengths upon which intervention can build. In addition, the DMM assessments are developmentally attuned, constituting an interlocking set of assessments across the life span. These permit all members of a family to be assessed with tools that use the same theory, compatible procedures, and age-salient outcome classifications. Furthermore, the recorded assessments can be examined several times to identify subtleties associated with pseudo-security that would be missed in the complexity of a live observation. These advantages facilitate formulation of family problems in ways that promote sound decision making and effective intervention.

Four examples from DMM reports are offered. In case 1, a mother who spoke in her Adult Attachment Interview about the importance of education and "quality time" with children was observed in the preschool assessment of attachment to subtly withdraw (e.g. by covering her face while brushing her hair away or lifting her foot in a block) every time her child approached during the assessment. Still photos taken from the video and inserted in the report enabled the court to see such fleeting rejection and the child's response of turning away. Although the services were hesitant to return the child to the parents, without the discourse analysis they had no objective evidence relevant to their concerns. This example demonstrates the importance of videotaped evidence of behaviour to support or refute the more accessible evidence of what parents say they do.

In case 2, a toddler was observed to try to escape from the demandingly insistent grandmother with whom he had been placed and, in a separate CARE-Index interaction, to physically relax when with his mother who did not have care of him. This case demonstrates that kin placements may not function as intended and should be formally assessed. Importantly, neither the professionals working with the family, nor the person who took the video had identified the problem.

In case 3, parents who seemed positive and caring were observed to ignore their child's signals during a CARE-Index interaction and to carry on as if with some child in their imagination. In their Adult Attachment Interviews, these parents made positive statements with great disfluence and then lacked evidence for what they said; this cast doubt on the veracity of their words. Again, the point is that what parents say and what they do are not always consistent, nor are the inconsistencies easily discerned during live observation. Video-recorded DMM assessments offer an opportunity to examine parents' actual behaviour in an empirically valid and transparent manner.

In the fourth case, a boy assessed with the school-aged assessment of attachment picture cards told make-believe stories that used vivid images of an adult dying in a way similar to the child that had actually died in the boy's home whereas his recalled episodes in response to the same cards were dull and stereotyped. The imaged information in the make-believe stories cast doubt on the innocuous recalled episodes. This example highlights the potential of the DMM assessments to reveal case relevant information that could not be queried directly.

In each of these cases, comparisons among and within the assessments of attachment changed the way the family's functioning was understood; inclusion of quotes and still frame photos from video allowed other professionals to see the evidence that underlay the new formulation. That is, the formulation could be evaluated with evidence, not unverifiable opinion. Strikingly, neither the professionals working with the families, nor those who carried out the assessment procedures had noticed the crucial evidence or drawn conclusions from it. Highly trained coders were needed for that. It should be noted that findings like these can be verified on a case-by-case basis (which is how information is presented in courts), but are too unique to be validated in group designs.

Training and authorising experts in assessment of attachment

Currently, there is no uniform means of assessing the expertise of those who report on or assess attachment. IASA's Family Attachment Court Protocol offers guidelines to assist courts to identify competent and authorized experts in attachment. IASA recommends a formal course of study to train and certify personnel to a high standard of expertise. This allows instructing parties to know that they are asking the most appropriate person to report to the court.

Three tasks are involved in reporting on attachment to family courts: coding of assessments, interpreting the results in light of the family history, and formulating the family situation, together with recommendations. Professionals are authorised in each of these tasks. Coders are accredited on each specific assessment of attachment based on test results. IASA recommends that courts use personnel with no less than "coder" reliability (20 per cent error rate in classifications). Coders who present "forensic/clinical" accreditation (15 per cent error rate) and have completed additional work on case material are authorised to interpret results of the assessment(s) for which they are qualified. Separate authorisation is offered for family formulation and making recommendations. Accreditation is time limited and given in a form that can be shown to the court.

Because the assessments of attachment are videotaped, experts can view the assessments from distant locations. This can enable courts in jurisdictions without local experts in attachment to obtain the needed expertise.

Courses and texts to qualify mental health professionals to assess attachment are available in 16 countries and several languages. Specific forensic courses are offered on integrating the assessment outcomes with other historical and evaluative material to yield functional formulations. In addition, there is a DMM master's programme at Roehampton University in the UK. Authorisations are issued by the Family Relations Institute in Miami, USA and Reggio Emilia, Italy. The test results that underlay the authorisations are sent for evaluation to the Family Relations Institute; no fee, beyond that for the training, is required for obtaining authorisation. After authorisation, there are no fees for using the assessments. Two of the authors of this paper work for the Family Relations Institute; another heads the programme at Roehampton University. All were on the IASA committee that developed the Protocol.

Presenting evidence to family courts in written reports The problem

Most court reports on attachment lack evidence regarding how experts' conclusions were derived. Unlike medical evidence or photographic evidence of home conditions, conclusions regarding attachment have usually been drawn from live observation of family members in unconstrained settings. Because no one else can see the observed behaviour, the accuracy of observation and validity of the experts' conclusions cannot be challenged or verified. Standardised assessments that generate a permanent record which others can view and which have peer-reviewed, published studies render the evaluation transparent and open to scrutiny.

Admissible evidence

A crucial question is what constitutes evidence. In the USA, criteria for scientific evidence are based on Daubert v. Merrell Dow Pharmaceuticals (1993). The central criteria are differentiating fact from opinion, providing sources for facts, and having a clear theoretical process for deriving opinions and recommendations. The DMM assessments have validating publications (see list in Table I). Further, the IASA Protocol moves in a systematic manner from factual description of the outcome of the assessment, to interpretations of meaning (including published sources for the interpretation), to conclusions, including alternate explanations when these are appropriate.

In a significant number of cases from our trial protocols, other professionals have reported that children were securely attached, even in the context of severe injuries, whereas the formal DMM assessments led to the opposite conclusion. In the four examples given above, the court record contained assurances that the children were secure with the withdrawn mother, the demanding grandmother, and so forth. A carefully trained eye and materials that can be reviewed are needed to differentiate secure from "pseudo-secure" attachment and to show the court the relevant evidence.

Who should be assessed?

The IASA Protocol calls for assessment of all children and all possible caregivers (kin carers and foster parents as well as biological parents). This means a more extensive and possibly more expensive assessment than is currently typical. On the other hand, troubled kin placements and failed foster placements could potentially be avoided if information about attachment and self-protective strategies were known. This would both yield long-term financial savings and also reduce the risk to children from failed placements.

The components of a family attachment report

IASA recommends reports with four parts, each written in everyday language that can be understood by other professionals and by family members. Part 1 of a report provides general information on attachment and DMM theory including descriptions of the specific assessments used in the report. These are available online (at www.iasa-dmm.org) as "plug-in" texts that describe the assessments, indicating how they are carried out, what information they yield, and the published research relevant to their validity.

Part 2 of a report provides detailed information on the results of each assessment for each person who was assessed. This section is written uniquely for each person. The expert is expected to provide thorough descriptive evidence from the assessments as well as sufficient quotes from transcripts or still images from videos to support the interpretation. Part 2 concludes with the formal result, together with a discussion of the strengths and limitations of the individual and a statement of questions that remain unanswered. Part 2 is completed before the expert knows the details of the case. That is, it is done "blindly" (in research terms) and without prejudice (in legal terminology). This is crucial because viewers tend to see what they expect to see (Gregory, 1998).

Part 3 provides a brief summation of the background material provided by other professionals (history and reports of other experts) in terms of factual contributions, recommendations, and opinions. The attachment expert attempts to reconcile any differences in these reports with the assessments of attachment. The family situation is then formulated, taking everything that is known into account. Part 3 concludes with recommendations for services that are tied to the strengths, limitations, and needs of family members. When the formulation is developed carefully, with consideration of each person's experience, perspective, intentions, and actions, it is often accepted by both professionals and family members.

Part 4 provides succinct answers to the specific questions posed in the letter of instruction. It is followed by appendices as needed.

Varied approaches to generating DMM attachment reports

Because these procedures and accompanying skills are new, the IASA protocol allows for three levels of expertise.

DMM-informed reports. Coders with "coder" level accreditation may function as coders only, working with court-appointed forensic experts. These coders submit their classification to the forensic expert who received the letter of instruction. The expert then integrates the attachment results into the expert's full report and responds to the questions in the letter of instruction. In these cases, different coders may be used for different assessments. The important limitations are the coders' lack of opportunity to find congruencies among the assessments, the higher error rate for "coder" data than for "forensic/clinical" data, and the sometimes limited understanding of attachment by the forensic expert. In a DMM-informed report, the accredited attachment coder writes Part 2 of the report for a specific assessment. The forensic expert then uses the various attachment reports as fits his or her understanding of the case.

DMM-formulated reports. Alternatively, the authorised attachment expert may classify all the assessments, read the history and write a functional formulation, but do so for inclusion with

another expert's report. For example, the expert assigned to evaluate parenting capacity may include the attachment report within his or her report. In this case, the recommendations are made by the professional who received both the letter of instruction and the attachment report. "Forensic/clinical" accreditation is required. The limitations are the limited awareness by the coder of the findings of other experts and the error rate for classification of the coder. In DMM-formulated reports, Parts 1, 2, and 3 for an IASA family attachment report are written by the expert on attachment.

IASA family attachment reports. In the fullest report, the "forensic-clinical" attachment expert with additional authorisation to formulate cases receives the letter of instruction, codes the assessments, writes the report and recommendations, and answers the questions in the letter of instruction independently. The expert must indicate the order in which the assessments were coded because this indicates what the coder knew about family members in each subsequent assessment. The report should have all four parts listed above and provides the highest level of integration around DMM ideas. Its limitations are the coder's error rate and his or her experience, insight, and wisdom in recommending services or procedures to address the problems of maltreating families.

Conclusions

IASA's Family Attachment Court Protocol offers two primary advantages. One is that verifiable evidence, rather than unsubstantiated opinion, regarding attachment is used. The other reflects new theory and corresponding life-span assessments of attachment that are better suited to court decision making about risk families than are traditional attachment theory and assessment.

There are several reasons why an evidence-based protocol with authorised attachment experts is needed and can be implemented. For the first time, evidence-based assessments of attachment are available. These cover the life-span, interlock making family formulation possible, identify a wide-range of variation in functioning, and have many published studies that offer validating evidence, including evidence on at risk and maltreating families. Furthermore, there are an increasing number of trained, authorised and reliable coders with known error rates. In 2012 there were more coders authorised at Level 1 or 2 than previously; that number is expected to double in 2013. Unlike other approaches to assessing attachment, the DMM assessments have utility in the context of court decision making. The Protocol report differentiates facts from conclusions and offers systematic presentation and analysis of evidence. Finally, the information provided in an IASA Family Attachment Court Protocol is transparent; not only the information, but also the process of drawing conclusions is visible to all.

We recommend the use of DMM theory and assessments because DMM theory addresses endangerment of self, partner, and children; this is central in child care proceedings (whereas security is usually an impossible short-term goal.). More than dichotomous secure-insecure assessment or even four-group ABCD assessment, the DMM assessments differentiate risk groups within insecure attachment in ways that are relevant to differentiating troubled families from those in which the children face real and immediate danger. The DMM has a life-span set of theoretically related assessments; this promotes understanding of how family members interact. Compared to other approaches to assessing attachment, only DMM theory, and assessments address misleading appearances and deception; deception is integral to most child care proceedings. Finally the DMM ties attachment to information processing so as to promote personalised treatment plans. Once placement, custody, and contact decisions are made, information is needed to improve individual and family functioning. The DMM assessments provide such information.

Limitations

The IASA protocol is ambitious. It will require more authorised experts, more expectations on families to participate in formal assessment, and more expense in the short term. In addition there is a need for continuing published research on the validity of the assessments, particularly the newer assessments, and the effects of the protocol on court decisions, family stability, and children's development. Acceptance of the protocol can be expected to lead to more professionals seeking and earning authorisation and to more research.

Although a full DMM assessment is expensive, thorough assessment with recommendations for personalised intervention can reduce overall costs in a number of ways. Court proceedings may be avoided altogether if families are offered support attuned to their needs. Court testimony can be avoided when reports are well documented, thus leading to pre-court agreements that reduce costs. Finally, children in unsuitable placements may be moved to better matched carers or their carers may be assisted to resolve the children's problems. In summary, experience with the IASA Family Attachment Court Protocol is that the Protocol can yield novel solutions, achieves agreement among disputing parties without court proceedings, and reduces total financial costs. Most importantly it can lead to better outcomes for children.

Implications for practice

- Formal assessment: assessment of attachment should be carried out with formal assessment tools that have validating publications.
- Formal authorisation of experts: the professionals carrying out the assessments should be formally trained, tested, and authorised such that the court can know how much to rely upon their findings.
- Structured and transparent reports: Reports written to describe the outcome of the assessments should be "transparent" in the sense that all readers of the reports should be able to differentiate what the assessed person(s) did or said from what attributions were made about their behaviour by the expert. Further, the published basis for the attributions should be made clear.
- Availability of evidence: the actual video or audio recording and transcriptions should be available to court authorities such that expert "opinion" is not needed.
- Good assessments of attachment should also be useful for intervention planning.

References

Ainsworth, M. (1979), "Infant-mother attachment", American Psychologist, Vol. 34, pp. 932-7.

Benoit, R.G. and Anderson, M.C. (2012), "Opposing mechanisms support the voluntary forgetting of unwanted memories", Neuron, Vol. 76, pp. 450-60.

Bowlby, J. (1951), Maternal Care and Mental Health, World Health Organization, New York, NY.

Bowlby, J. (1969/1983), Attachment. Attachment and Loss, Vol. 1, 2nd ed., Basic Books, New York, NY.

Bowlby, J. (1973), Separation: Anxiety & Anger. Attachment and Loss, Vol. 2, Basic Books, New York, NY.

Bowlby, J. (1980), Loss, sadness and depression. Attachment and Loss, Vol. 3, Basic Books, New York, NY.

Cassidy, B., Zoccolillo, M. and Hughes, S. (1996), "Psychopathology in adolescent mothers and its effects on mother-infant interactions: a pilot study", Canadian Journal of Psychiatry, Vol. 41, pp. 379-84.

Chisholm, K. (1998), "A three year follow-up of attachment and indiscriminate friendliness in children adopted from Romanian orphanages", Child Development, Vol. 69, pp. 1092-106.

Ciotti, F., Lambruschi, F., Pittino, B. and Crittenden, P. (1998), "La valutazione della relazione precoce madrebambino in una popolazione di madri con una storia di tossicodipendenza attraverso l'uso del Care-Index", Psicoterapia Cognitiva e Comportamentale, Vol. 4, pp. 53-9.

Crittenden, P.M. (1981), "Abusing, neglecting, problematic, and adequate dyads: differentiating by patterns of interaction", Merrill Palmer Quarterly, Vol. 27, p. 118.

Crittenden, P.M. (1985a), "Maltreated infants: vulnerability and resilience", Journal of Child Psychology and Psychiatry, Vol. 26, pp. 85-96.

Crittenden, P.M. (1985b), "Social networks, quality of childrearing, and child development", Child Development, Vol. 56, pp. 1299-313.

Crittenden, P.M. (1988a), "Family and dyadic patterns of functioning in maltreating families", in Browne, K., Davies, C. and Stratton, P. (Eds), Early Prediction and Prevention of Child Abuse, Wiley, Chichester, pp. 161-89.

Crittenden, P.M. (1988b), "Relationships at risk", in Belsky, J. and Nezworski, T. (Eds), The Clinical Implications of Attachment, Lawrence Erlbaum, Hillsdale, NJ, pp. 136-74.

Crittenden, P.M. (1992), "Children's strategies for coping with adverse home environments", International Journal of Child Abuse and Neglect, Vol. 16, pp. 329-43.

Crittenden, P.M. (1995), "Attachment and psychopathology", in Goldberg, S., Muir, R. and Kerr, J. (Eds), John Bowlby's Attachment Theory: Historical, Clinical, and Social Significance, The Analytic Press, New York, NY, pp. 367-406.

Crittenden, P.M. (1998), "Dangerous behavior and dangerous contexts: a thirty-five year perspective on research on the developmental effects of child physical abuse", in Trickett, P. (Ed.), Violence to Children, American Psychological Association, Washington, DC, pp. 11-38.

Crittenden, P.M. (1999), "Danger and development: the organization of self-protective strategies", in Vondra, J.I. and Barnett, D. (Eds), Atypical Attachment in Infancy and Early Childhood Among Children at Developmental Risk. Monographs of the Society for Research on Child Development, Vol. 64, Serial No. 258, Wiley-Blackwell, Malden, MA, pp. 145-71.

Crittenden, P.M. (2008), Raising Parents: Attachment, Parenting, and Child Safety, Routledge, London.

Crittenden, P.M. and Ainsworth, M.D.S. (1989), "Child maltreatment and attachment theory", in Cicchetti, D. and Carlson, V. (Eds), Handbook of Child Maltreatment, Cambridge University Press, New York, NY, pp. 432-63.

Crittenden, P.M. and Bonvillian, J.D. (1984), "The effect of maternal risk status on maternal sensitivity to infant cues", American Journal of Orthopsychiatry, Vol. 54, pp. 250-62.

Crittenden, P.M. and DiLalla, D.L. (1988), "Compulsive compliance: the development of an inhibitory coping strategy in infancy", Journal of Abnormal Child Psychology, Vol. 16 No. 5, pp. 585-99.

Crittenden, P.M. and Kulbotton, G.R. (2007), "Familial contributions to ADHD: an attachment perspective", Tidsskrift for Norsk Psykologorening, Vol. 10, pp. 1220-9.

Crittenden, P.M. and Newman, L. (2010), "Comparing models of borderline personality disorder: mothers' experience, self-protective strategies, and dispositional representations", Clinical Child Psychology and Psychiatry, Vol. 15 No. 3, pp. 433-52.

Crittenden, P.M., Claussen, A.H. and Kozlowska, K. (2007), "Choosing a valid assessment of attachment for clinical use: a comparative study", Australia New Zealand Journal of Family Therapy, Vol. 28 No. 2, pp. 78-87.

Crittenden, P.M., Claussen, A.H. and Sugarman, D.B. (1994), "Physical and psychological maltreatment in middle childhood and adolescence", Development and Psychopathology, Vol. 6 No. 1, pp. 145-64.

Crittenden, P.M., Kozlowska, K. and Landini, A. (2010), "Assessing attachment in school-age children", Child Clinical Psychology and Psychiatry, Vol. 14, pp. 185-208.

Crittenden, P.M., Partridge, M.F. and Claussen, A.H. (1991), "Family patterns of relationship in normative and dysfunctional families", Development and Psychopathology, Vol. 3 No. 4, pp. 491-512.

Crittenden, P.M., Lang, C., Claussen, A.H. and Partridge, M.F. (2000), "Relations among mothers' procedural, semantic, and episodic internal representational models of parenting", in Crittenden, P.M. and Claussen, A.H. (Eds), The Organization of Attachment Relationships: Maturation, Culture, and Context, Cambridge University Press, New York, NY, pp. 214-33.

Crowell, J.A., Fraley, R.C. and Shaver, P.R. (2008), "Measurement of individual differences in adolescent and adult attachment", in Cassidy, J. and Shaver, P.R. (Eds), Handbook of Attachment: Theory, Research and Clinical Applications, 2nd ed., The Guilford Press, New York, NY, pp. 599-634.

Daubert v. Merrell Dow Pharmaceuticals (1993), 509 US 579.

DeVito, C. and Hopkins, J. (2001), "Attachment, parenting, and marital dissatisfaction as predictors of disruptive behavior in preschoolers", Development and Psychopathology, Vol. 13 No. 2, pp. 215-31.

DiLalla, D.L. and Crittenden, P.M. (1990), "Dimensions in maltreated children's behavior: a factor analytic approach", Infant Behavior and Development, Vol. 13 No. 4, pp. 439-60.

Fagot, B.I. and Pears, K.C. (1996), "Changes in attachment during the third year: consequences and predictions", Development and Psychopathology, Vol. 8 No. 2, pp. 325-44.

Farnfield, S., Hautamäki, A., Nørbech, P. and Sahhar, N. (2010), "DMM Assessments of attachment and adaptation: procedures, validity and utility", *Journal of Clinical Child Psychology and Psychiatry*, Vol. 15 No. 3, pp. 313-28.

Friedman, S.L. and Boyle, D.E. (2008), "Attachment in US children experiencing nonmaternal care in the early 1990s", *Attachment & Human Development*, Vol. 10 No. 3, pp. 225-61.

George, C. and West, M. (2012), The Adult Attachment Picture Projective System: Attachment Theory and Assessment in Adults, Guilford, New York, NY.

Gogarty, H. (2002), "Attachment relationships in the triad of foster-care: a retrospective analysis", thesis submitted in partial fulfillment of the requirement for Doctor of Philosophy, University of Ulster, Coleraine.

Greenberg, M. (1999), "Attachment and psychopathology in childhood", in Cassidy, J. and Shaver, P.R. (Eds), *Handbook of Attachment: Theory, Research, and Clinical Applications*, Guilford Press, New York, NY, pp. 469-96.

Gregory, R. (1998), "Snapshots from the decade of the brain: brainy mind", *British Medical Journal*, Vol. 317 No. 7174, pp. 1693-5.

Haapasalo, J., Puupponen, M. and Crittenden, P.M. (1999), "Victim to victimizer: the psychology of isomorphism in a case of a recidivist pedophile", *Journal of Child Sexual Abuse*, Vol. 7 No. 3, pp. 97-115.

Hopper, J.W., Frewen, P.A., van der Kolk, B.A. and Lanius, R.A. (2007), "Neural correlates of reexperiencing, avoidance, and dissociation in PTSD: symptom dimensions and emotion dysregulation in responses to script-driven trauma imagery", *Journal of Traumatic Stress*, Vol. 20 No. 5, pp. 713-25.

Hughes, S. (1993), "The relationship between maternal psychiatric disorder and mother-child responsivity", dissertation presented to the Faculty of McGill University, Montreal.

Jacobsen, T. and Miller, L.J. (1998), "Compulsive compliance in a young maltreated child", *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol. 37 No. 5, pp. 462-3.

Jean-Gilles, M. and Crittenden, P.M. (1990), "Maltreating families: a look at siblings", Family Relations, Vol. 39 No. 3, pp. 323-9.

Kozlowska, K. and Williams, L.M. (2009), "Self-protective organization in children with conversion and somatoform disorders", *Journal of Psychosomatic Research*, Vol. 67 No. 3, pp. 223-33.

Künster, A.K., Fegert, J.M. and Ziegenhain, U. (2010), "Assessing parent-child interaction in the preschool years: a pilot study on the psychometric properties of the toddler CARE-Index", *Clinical Child Psychology and Psychiatry*, Vol. 15, pp. 379-90.

Kwako, L.E., Noll, J.G., Putnam, F.W. and Trickett, P.K. (2010), "Childhood sexual abuse and attachment: an intergenerational perspective", *Journal of Clinical Child Psychology and Psychiatry*, Vol. 15 No. 3, pp. 407-22.

Leadbeater, B.J., Bishop, S.J. and Raver, C.C. (1996), "Quality of mother-toddler interaction, maternal depressive symptoms, and behavior problems of adolescent mothers", *Developmental Psychology*, Vol. 32 No. 2, pp. 280-8.

McMahon, L. and Ward, A. (2001), Helping Families in Family Centres, Jessica Kingsley, London.

Mullick, M., Miller, L.J. and Jacobsen, T. (2001), "Insight into mental illness and child maltreatment risk in mothers with major psychiatric disorders", *Psychiatric Services*, Vol. 52 No. 4, pp. 488-92.

Ostler, T. (2010), "Assessing parenting risk within the context of severe and persistent mental illness: validating an observational measure for families with child protective service involvement", *Infant Mental Health Journal*, Vol. 51, pp. 467-85.

Pleshkova, N.L. and Muhamedrahimov, R.J. (2010), "Quality of attachment in St Petersburg (Russian Federation): a sample of family-reared infants", *Clinical Child Psychology and Psychiatry*, Vol. 15 No. 3, pp. 355-62.

Radke-Yarrow, M., Cummings, E.M., Kuczynski, L. and Chapman, M. (1985), "Patterns of attachment in two- and three-year-olds in normal families and families with parental depression", *Child Development*, Vol. 56 No. 4, pp. 884-93.

Rauh, H., Ziegenhain, U., Müller, B. and Wijnroks, L. (2000), "Stability and change in infant-mother attachment in the second year of life: relations to parenting quality and varying degrees of daycare

experience", in Crittenden, P.M. and Claussen, A.H. (Eds), The Organization of Attachment Relationships: Maturation, Culture, and Context, Cambridge University Press, New York, NY, pp. 251-76.

Rutter, M., Kreppner, J. and Sonuga-Barke, E. (2009), "Emanuel Miller Lecture: attachment insecurity, disinhibited attachment, and attachment disorders: where do research findings leave the concepts?", Journal of Child Psychology and Psychiatry, Vol. 50 No. 5, pp. 529-43.

Seefeldt, L. (1997), "Models of parenting in maltreating and non-maltreating mothers", dissertation presented to the Faculty of the School of Nursing, University of Wisconsin-Milwaukee, Milwaukee, Wl.

Slade, A. (2007), "Disorganized mother, disorganized child", in Oppenheim, D. and Goldsmith, D.F. (Eds), Attachment Theory in Clinical Work with Children: Bridging the Gap between Research and Practice, Guilford, New York, NY, pp. 226-50.

Spieker, S.J. and Crittenden, P.M. (2010), "Comparing the validity of two approaches to attachment theory: disorganization versus danger-informed organization in the preschool years", Clinical Child Psychology and Psychiatry, Vol. 15, pp. 97-120.

Sroufe, L.A. (1988), "The role of infant-caregiver attachment in development", in Belsky, J. and Nezworski, T. (Eds), Clinical Implications of Attachment, Erlbaum, Hillsdale, NJ, pp. 18-38.

Stokowy, M. and Sahhar, N. (Eds) (2012), Bindung und Gefahr. Das Dynamische Reifungsmodell von Bindung und Anpassung, Psychosozial-Verlag, Giessen.

Storm, B.C. and Jobe, T.A. (2012), "Retrieval-induced forgetting predicts failure to recall negative autobiographical memories", Psychological Science, doi 10.1177/0956797612443837.

Strathearn, L., Fonagy, P., Amico, J.A. and Montague, P.R. (2009), "Adult attachment predicts mother's brain and oxytocin response to infant cues", Neuropsychopharmacology, Vol. 34 No. 13, pp. 2655-66.

Svanberg, P.O.G., Mennet, L. and Spieker, S.J. (2010), "Promoting a secure attachment: a primary prevention practice model", Clinical Child Psychology and Psychiatry, Vol. 15 No. 3, pp. 363-78.

Thompson, R.A. and Raikes, H.A. (2003), "Toward the next quarter-century: conceptual and methodological challenges for attachment theory", Development and Psychopathology, Vol. 15 No. 3, pp. 691-718.

van IJzendoorn, M. (1995), "Adult attachment representations, parental responsiveness, and infant attachment: a meta-analysis on the predictability of the Adult Attachment Interview", Psychological Bulletin, Vol. 117 No. 3, pp. 387-403.

Ward, M.J., Kessler, D.B. and Altman, S.C. (1993), "Infant-mother attachment in children with failure to thrive", Infant Mental Health Journal, Vol. 14 No. 3, pp. 208-20.

Worley, K.O., Walsh, S. and Lewis, K. (2004), "An examination of parenting practices in male perpetrators of domestic violence: a qualitative study", Psychology and Psychotherapy: Theory, Research, and Practice, Vol. 77, pp. 35-54.

Further reading

Claussen, A.H. and Crittenden, P.M. (1991), "Physical and psychological maltreatment: relations among types of maltreatment", International Child Abuse and Neglect, Vol. 15, pp. 5-18.

Corresponding author

Patricia McKinsey Crittenden can be contacted at: pmcrittenden@gmail.com

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com Or visit our web site for further details: www.emeraldinsight.com/reprints