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Attachment disorders: Assessment strategies and treatment approaches

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ABSTRACT The aim of this special issue is to examine methods for assessing and treating attachment disorders. This target article outlines existing strategies for assessment and considers which aspects of severe attachment disturbances and disorders may be core features of the disturbance(s). The usefulness of alternative methodologies for assessment are discussed, with particular emphasis on the need for the development of clinical protocol. The applications and implications for treatment are then discussed, with particular emphasis on the nature of the underlying disturbances that should be a focus for intervention. An absence of established treatment guidelines or consensus regarding the mechanisms of change are highlighted as barriers to further progress.

KEYWORDS: attachment disorder – assessment – intervention

Interest in the conceptual foundations and clinical implications of attachment disorders has increased substantially in recent years. This is attributable to a greater understanding of the particular needs of children who experienced very adverse early care, especially those children in the foster care system and children who were adopted following institutional deprivation from abroad. Unfortunately, the growing appreciation of the high level of needs of these children and families has not been matched by an accumulation of knowledge about the nature of the attachment-related disturbances they exhibit or strategies for intervention. Thus, there are, for example, more review papers and chapters on the topic of attachment disorders than there are empirical papers. Moreover, extant clinical investigations of attachment disorders expose substantial differences among professionals in how the phenomena are defined and what clinical interventions might be useful. This state of affairs is confusing to parents and professionals and has severely hampered progress in understanding attachment disorders.

Although many features of attachment disorders remain unresolved, it is in the area of assessment and intervention that there is the greatest uncertainty and controversy. Accordingly, these areas are the focus of this special issue. The aims of this target article are to review the current state of knowledge in the areas of assessment and intervention and to propose recommendations to guide further work. Several general reviews of attachment disorder are available elsewhere (O'Connor, 2002; Zeanah, Boris, & Lieberman, 2000).

Given the inconsistencies in terminology used to date, some clarifications are needed at the outset of this paper. We use 'attachment disorder' when referring to a

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diagnosis according to DSM-IV (American Psychiatric Association, 1994) or ICD-10 (World Health Organization, 1992) criteria; we use the more specific terms 'disinhibited' and 'inhibited' when referring to the two subtypes of disorder defined in DSM-IV or ICD-10. However, many clinical reports and virtually all of the research on 'attachment disorders' do not use DSM-IV or ICD-10 criteria; therefore, we need a more generic term that does not necessarily invoke a diagnosis but instead refers to a parallel set of behaviors implied by the diagnosis and is consistent with the broader class of disturbances considered in previous reports. No very adequate term exists, so we use the term 'attachment disorder behavior.' Finally, the terms 'Secure', 'Insecure', and 'Disorganization/Disorganized' are used strictly in relation to the research on individual differences that have been the focus of attachment research with children who have had a history of selective attachment relationships.

GENERAL AND HISTORICAL OVERVIEW

What is impressive about the reports of attachment disorder-related behavior is how consistent authors from diverse backgrounds describe the phenomena from the early writings. To be sure, different terms have been used, including 'superficially affectionate' (Levy, 1937), 'indiscriminate exhibition' (Freud & Burlingham, 1973), 'excessive need for adult attention' (Goldfarb, 1943, 1945), 'indiscriminately friendly' (Provence & Lipton, 1962; Tizard & Rees, 1975), and 'affectionless psychopathy' (Wolkind, 1974). Nevertheless, these descriptors all convey a similar quality to the child's disturbed manner of social behavior and, more specifically, the child's approach toward and interactions with strangers.

Several similarities in these early accounts deserve particular mention. The first is that these reports derive from studies of children who experienced institutional care. More recent studies of children who experienced institutional care identify similarly disturbed patterns of behavior toward strangers through a combination of assessment methods, providing an important source of replication (Chisholm, 1998; O'Connor, Rutter, & the English and Romanian Adoptees Study Team, 2000; Smyke, Dumitrescu, & Zeanah, 2002). Interestingly, these similarities exist despite wide variation in the institutional rearing conditions experienced by the children. For example, whereas the children in institutions in Romania experienced global severe deprivation, the children in the reports from Tizard and colleagues experienced adequate nutrition, and social and play opportunities – that is, generally adequate care except for the absence of a consistent caregiver. The implication is that the absence of a consistent caregiver and selective attachment may play a central etiological role in the development of attachment disorders. A substantial research base on non-human primates supports this general impression, and offers some insight into the neurobiological bases of social attachments (for detailed discussions of this line of research on animals, see, Carter, 1998; Harlow & Suomi, 1970; Insel, 1997; Kraemer, 1992; Suomi, 1999).

Second, consistency among existing reports pertains to what DSM-IV refers to as the 'disinhibited' form of attachment disorder and not to what is referred to as the 'inhibited' form. Reports of inhibited behavior are far more diverse, although they do exist (Spitz, 1946; Smyke et al., 2002). Nonetheless, descriptions of a set of coherent 'inhibited' behaviors are much more difficult to find, even among the same studies that report the disinhibited pattern described above. Third, it was clear that the kinds

of attachment-related disturbances widely described above did not match existing models or characterizations of childhood psychopathology available at the time, such as they were. This continues to be the case today. That is, recent evidence indicates that attachment disorder behavior is unassociated or only moderately associated with traditional forms of behavioral/emotional problems in young children (O'Connor et al., 2000; Smyke et al., 2002).

Fourth, systematic follow-up of children who exhibited severe attachment disturbances of the kind implied by an attachment disorder are rare, but available evidence suggests that the problems are comparatively stable. For example, two studies of children adopted from Romanian institutions (Chisholm, 1998; O'Connor et al., 2000) found no change in the mean level of the disinhibited form of attachment disorder behavior over a comparatively short period in early-middle childhood. Tizard and colleagues reported that disinhibited or 'over-friendly' behavior towards strangers diminished over time, but it did not disappear by adolescence and even into adulthood disturbances in social behavior and relationships were evident (Jewitt, 1998; Tizard & Hodges, 1978; Tizard & Rees, 1975). Reports of children who were placed following early maltreatment (especially those children who experienced multiple placements), have similarly pointed to marginal improvement in the attachment relationships formed with adoptive/foster parents despite many years in the foster/adoptive home (e.g., Howe, 1995; Rushton, Treseder, & Quinton, 1995). If the above conclusion concerning the stable longitudinal course of attachment disorder/disturbances is confirmed in subsequent studies, then there may be important implications for treatment outcomes because there is no intervention more radical than adoption.

In summary, the current state of affairs concerning attachment disorders is something of a paradox. On one hand, there is sufficient evidence that the attachment disorder concept describes 'real' and distinct clinical entities severe enough to warrant clinical attention, and we even know something about the conditions that cause these disturbances, the associated conditions, and the longitudinal course. On the other hand, we still have no consensus or protocol for assessing attachment disorder and related behaviors. Indeed, given this state of affairs, it is perhaps surprising how much progress has been made so far in understanding attachment disorders/disturbances.

ASSESSMENT

In our discussion of assessment we focus on two somewhat related issues. First, we review what features of attachment disorder and disturbances need to be assessed, distinguishing, where possible, the core features of the disturbance from associated features. Second, we then go on to discuss methods for assessment, and consider the role of observations, clinical interview, and questionnaire methodologies.

What is assessed

One starting point for a discussion of what an assessment of attachment disorders should include is the definition provided by psychiatric nosologies. Several points of agreement between DSM-IV and ICD-10 are generally unchallenged. For example, both nosologies suggest that two types of attachment disorder can be distinguished, what was described above as 'disinhibited' and 'inhibited.' As noted, the collection of

studies and clinical reports tend to focus on the former. Nevertheless, the hypothesis that there are these two forms of attachment disorder has not been widely challenged, and there are supporting findings emerging from studies of institutionally reared children (O'Connor et al., 2000; Smyke et al., 2002). The implication is that clinical assessment should cover both sets of attachment disorder symptoms. DSM-IV and ICD-10 are also similar in specifying an onset before age 5 years. The basis for this claim is not obvious and there is no evidence to reify a cut-off of 5 years, but it is noteworthy that all existing reports of attachment disturbance/disorder have described an 'early onset.' The requirement that the attachment disorder behavior is not solely accounted for by developmental delay or pervasive developmental disorder also has been adopted by DSM-IV and ICD-10. This criterion may pose a problem insofar as PDD or 'quasi-autistic' behavior may be induced from institutional rearing and be evident shortly after placement into the adoptive home but may subside thereafter (e.g., Rutter et al., 1999). The implication is that it may not be necessary to exclude a diagnosis of attachment disorder among children who exhibit PDD-like behavior immediately following institutional deprivation.

Both diagnostic systems also propose that pathogenic care can be ascribed a causal role in the child's disturbance and provide some guidance (although not likely adequate) for what is meant by pathogenic care. Including the existence of a putative cause in the list of diagnostic requirements is exceptional and has been challenged on scientific and logical grounds (Zeanah, 1996), but there is little doubt that children with attachment disorders experienced grossly pathogenic care. Finally, consistent with the notion of disorder, both DSM-IV and ICD-10 require that the disturbance be evident across situations and across relationships.

In summary, DSM-IV and ICD-10 provide a reasonable summary of some of the basic assumptions concerning attachment disorder and, as indicated above, provide a reasonable starting point for what should be part of a clinical or research assessment. To the extent that there are divergences in how attachment disorders have been conceptualized, they concern, perhaps not surprisingly, the actual set of defining behaviors or symptoms. This is the focus of the next section.

The disinhibited form of attachment disorder

Children's interactions with unfamiliar adults have been the focus of existing accounts of the disinhibited form of attachment disorder. Core behavioral features of disinhibited attachment disorder in young children include inappropriate approach of unfamiliar adults and lack of wariness of the stranger, and even a willingness to wander off with a stranger; there is also a lack of appropriate physical boundaries, and so children may interact with strangers at close distance (that is felt by the stranger as being intrusive) and may even seek out physical contact. These behaviors are reported in many studies and may constitute a coherent set of objectively defined 'symptoms.' The same kinds of behaviors are implied by DSM-IV/ICD-10, but the language used (e.g., in DSM-IV, 'indiscriminate sociability with marked inability to exhibit appropriate selective attachments') is less specific and somewhat vague. Thus, although the criteria established by diagnostic systems reflects the history of existing research and clinical reports, it is not readily interpretable and could easily lead to mis-application and unreliability (e.g., Boris, Zeanah, Larrieu, Scheering, & Heller, 1998). In other words, it is possible to be much more precise in defining the symptoms of the disorder than the current diagnostic systems. It may yet be

premature to define a particular symptom list and ascribe disorder if some number of symptoms is present, but the list of behaviors noted above could provide a starting point. Research to develop and refine a more specific set of 'symptoms' would facilitate greater consistency among studies in what behaviors are assessed and provide the kind of standardization that is now absent.

Basic questions about the phenomena of disinhibited attachment disorder have not been adequately addressed and require further clinical and research attention if further refinements of the diagnosis of attachment disorder are to be made. One questions concerns the use of the terms 'indiscriminately friendly' and 'indiscriminate sociability' and related terms. These terms imply more than is actually known about the nature of the child's behavior. Specifically, the implication is that the child is being 'friendly/sociable' when s/he approaches the stranger or seems willing to wander off with a stranger. The same intention might be attributed to older children in whom we have observed a tendency of excessive questioning of strangers, sometimes of a personal nature. Whether or not 'friendly' or 'sociable' is an apt description of the child's intent when s/he approaches unfamiliar adults or clamours for attention or seeks to be picked up is a matter of some debate, and likely incorrect. Indeed, this behavior is often not perceived as sociable/friendly by those on the receiving end, as is indicated by the frequent references to the 'superficial' nature of the children's 'social' behavior. Further research is also needed to examine the extent to which these behaviors are 'strategic' (e.g., that the behavior is willful and expressed because there are secondary gains of such behavior, for example, the formation of relationships with future caregivers) and, if such a determination is possible, whether or not this information would be useful for influencing diagnostic decisions.

A third question unaddressed by current definitions of attachment disorder is whether or not the behavior is truly 'indiscriminate.' We know little about the conditions and contexts that promote or inhibit the child's inappropriate social approach. If, for example, the disturbance is most evident with strangers and less apparent with more familiar adults, then both the indiscriminate and friendly terms would likely be rejected. Finally, there is some question about the degree of homogeneity of behaviors subsumed within the construct of disinhinbited. Some behaviors indicate over-familiarity with unfamiliar adults, e.g., sitting in the lap of an unfamiliar adult after just meeting him/her. Here, the deviance is not in the behavior *per se*, but rather in the context and to whom the behavior was directed. Other behaviors appear to be violations of conventional social boundaries, for example, making eye contact for too long. Here, the deviance is in the behavior *per se* which is problematic in almost any setting. Unprovoked physically aggressive behaviors may represent a third type of disinhibited behavior, and this behavior is deviant under most circumstances.

Thus, although there is a consensus concerning the basic disinhibited pattern, rudimentary questions remain about the meaning of this behavior pattern.

The inhibited form of attachment disorder

Unlike the definition of the disinhibited form of attachment disorder, which has fundamentally focused on the child's behavior with unfamiliar adults, the inhibited form of attachment disorder is defined more in relation to the child's behavior toward the caregiver. Two types of disturbances are suggested by DSM-IV, a generalized failure to approach the caregiver when distressed or an approach that is characterized

by a range of atypical patterns, including fearfulness or contradictory patterns (e.g., approach combined with avoidance). The former pattern of behavior has been noted in ex-institutionalized or severely neglected children (see, O'Connor, 2002; Zeanah et al., 2002), but we have far less evidence from either research studies or clinical reports. As a result, we are not in a strong position to critically evaluate the core 'symptom' of inhibited attachment disorder. Furthermore, there are difficulties in using the current definition for clinical research. For instance, there is a mixing of potentially very different behaviors. So, for example, a lack of *any* approach of secure base behavior is combined with behaviors that may be found in children with a Disorganized attachment (e.g., frozen watchfulness; see, Main & Solomon, 1990). Given the solid research base on Disorganized attachment (Cicchetti, Toth, & Lynch, 1995; Greenberg, 1999; Lyons-Ruth, 1996; Solomon & George, 1999), it may be better to consider separately the behaviors characteristic of this form of insecure attachment rather than combine them into a somewhat unspecified disorder with an uncertain validity. That is despite the likelihood that most children with an inhibited attachment disorder would likely be classified Disorganized in the Strange Situation procedure (although very few of children classified as Disorganized could be diagnosed as having an attachment disorder).

Several other grounds for distinguishing Disorganized and inhibited disturbance are evident. For example, whereas Disorganized attachment describes an insecure but selective attachment, attachment disorder describes the failure to show selective attachment – a much more severe disturbance with presumably a different etiology, course, and prognosis. Additionally, whereas attachment disorder implies a pervasive disturbance, a classification of Disorganization based on the Strange Situation procedure may imply a relatively brief and context-specific disturbance. Finally, similar to the definition of disinhibited attachment disorder, inhibited attachment disorder is described in terms of a single general behavioral pattern. A specific list of 'symptoms' of inhibited attachment disorder would make more explicit what is meant, and provide greater scope for assessing reliability and validity.

Alternative definitions

Given the general dissatisfaction with existing diagnostic criteria, it is not surprising that alternative operationalizations of attachment disorder have been suggested. None of the alternative definitions or 'symptom lists' have received necessary clinical or scientific support (and so they are not reviewed here), but some general lessons from these efforts are worth noting.

The first is that it is critical to distinguish between attachment disorder symptoms and other forms of behavioral/emotional problems, cognitive and neurological problems, and normal temperamental variation in sociability or shyness. Symptoms lists that include a range of 'institutional' behaviors or a wide range of sequelae associated with severe deprivation (e.g., cognitive impairment, language delay, stealing, and lying) under the attachment disorder heading (as is widely done on questionnaire assessments distributed in the internet, for example), are bound to confound clinical and research efforts. Second, alternative definitions have been based on attempts to synthesize an individual differences model of attachment quality among children who have had a selective attachment with the concept of attachment disorder. This is no easy task because of the diverse assumptions underlying the two approaches (O'Connor, 2002). Nevertheless, we do know a great deal about how the

risks for psychopathology are increased by virtue of an insecure attachment relationship, most especially for Disorganized attachment (and in preschool-age children, Controlling), and this information may prove useful for further revisions of the concept of attachment disorder. One such example was suggested by Boris and Zeanah (1999) who have suggested that it may be helpful to conceptualize a spectrum of disturbance. On one end would be secure attachment; the spectrum of disturbance would then move on to 'ordinary' forms of Insecure attachment (Avoidant and Resistant), then on to Disorganized attachment, and then to Secure Base Distortions and finally to Disorders of Non-Attachment (which approximates the attachment disorder).

Finally, although attachment disorder symptoms focus on the child's behavior with caregiver (and secondarily toward strangers), one useful alternative model may be to extend the focus to include the child's pattern of social relationships with peers. The rationale for this approach is not only that disturbances in peer relationships have been linked with attachment disorder behavior (Hodges & Tizard, 1989), but also that the disturbance implied by an attachment disorder may index a broader disturbance in social relationships rather than only in attachment relationships. Such an approach might be more useful with older than with younger children, however, and would at a minimum require delineating individual differences. It also may be the case that disturbed peer relationships are best conceptualized as an associated feature rather than a core criterion of attachment disorders.

Assessment methodology

Whereas in the previous section we examined what kind of behaviors need to be assessed for making an attachment disorder diagnosis, in this section we identify promising methods for eliciting this information from observations, clinical interview, questionnaires, and social-cognitive/interview assessments with children. We focus on assessing the core defining behavioral features of the attachment disorder diagnoses (i.e., 'disinhibited' and 'inhibited' patterns). Other information necessary for making a diagnosis, such as age of onset or evidence of PDD, is readily obtainable through clinical interview with caregivers and is not reviewed.

Observations Behavioral observation is a natural starting point for assessing attachment disorders because behavioral descriptions of the child's behavior have been central to the development of the concept, from the 1920s to the contemporary reports. However, despite the fact that observations have figured prominently in the development of the attachment disorder concept, no established observational protocol has been validated.

Fortunately, existing data provide some important lessons for developing a behavioral assessment protocol. The first is that observations of the child's behavior toward strangers is especially informative. Although that may be obvious, there are difficulties in devising observational assessments of children's behavior toward strangers because most reports are based on anecdotal and clinical observations rather than any particular methodology. Consequently, it is not clear how reliably 'indiscriminate' approach and physical contact seeking with unfamiliar adults could be elicited – or even if it is plausible or necessary to develop a 'standard' method of assessment. Neither is it clear how pervasive this pattern of behavior towards strangers has to be to meet criteria or constitute a severe impairment. For example, is it necessary

for the child to exhibit the disinhibited pattern consistently, or at least to more than one stranger? Furthermore, if, for example, the likelihood of showing inappropriate social approach and seeking physical contact with unfamiliar adults is governed by nuances in the environment or characteristics of the stranger, then assessing the child's behavior in only one context would be severely limited or misleading. Clinical research could provide some useful information concerning the contextual determinants of disinhibited attachment disorder behavior and the extent to which there is variation in these behaviors. One possible line for further research would be to capitalize on existing experimental approaches for studying children's latency to approach unfamiliar adults (e.g., Kagan, Snidman, & Arcus, 1998). Although these procedures were developed to assess temperamental variation, they may be of use for assessing approach to unfamiliar adults and violation of interpersonal boundaries within a more standardized setting. Extensions to a clinic setting may be complicated, but the general message seems to be that detailed observations of the child's initial approach toward the clinicians and of the child's response toward the clinicians in the course of the assessment could provide some of the most important information for a clinical determination of an attachment disorder.

Second, there is already a structured observational assessment for examining quality of attachment relationship between child and caregiver that also includes an unfamiliar adult, the Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978). Limitations of using the Strange Situation for studying children with suspected attachment disorder should be noted. Most importantly, the Strange Situation was designed to study individual differences in the quality of attachment between a child and caregiver, and so there is an a priori assumption that there is a selective attachment between child and caregiver (i.e., the Strange Situation is not used to determine *if* there is an attachment relationship). If there is not a selective or discriminating attachment relationship between the child and caregiver, then the meaning of the child's behavior in the procedure may be difficult to interpret.

Notwithstanding this important caveat, several studies have used the Strange Situation or separation-reunion procedures with children known to exhibit attachment disorder behavior (Chisholm, 1998; Goldberg, 1997; O'Connor et al., 2003). Three findings are consistent across studies. The first is that children with a history of institutional deprivation but who are then placed in a low-risk environment with a caring parent show an increased likelihood of non-secure attachment, even several years after being placed in the adoptive home. Second, the distributions of non-secure attachments formed may not be typical of other high-risk groups, suggesting that conventional models of insecure behavior may not generalize to this population.

Third, some children who show disinhibited behavior toward strangers were initially rated as having a secure or typical insecure attachment to their adoptive parent. The implication is that the existence of disturbed/disordered behavior with strangers does not necessarily rule out what appeared to be 'normal' behavior with the caregiver; reciprocally, apparently normal behavior toward the caregiver may co-exist with disinhibited behavior toward the stranger. The existence of disinhibited attachment disorder behavior would impugn the validity of the secure/insecure classification on theoretical grounds (see Bowlby, 1982), and so this finding requires careful consideration and further investigation. One implication is that there is a pressing need to develop reliable measures that indicate whether or not a selective/ discriminating attachment relationship has formed between the child and caregiver.

The absence of any such method or measure will be a stumbling block for further progress. The finding that disinhibited behavior toward a stranger may co-occur with apparently normal behavior toward the caregiver in the Strange Situation also raises important points about the limitations of conventional coding schemes. One response might be to amend existing schemes in order to include behavior toward the stranger as part of the overall assessment (see, O'Connor et al., 2003). In summary, because the Strange Situation is a standardized observational procedure for observing child-parent interaction across low and high stress conditions and because it involves an unfamiliar adult, it has some natural advantages over alternative procedures. However, it is the use of the separation-reunion paradigm as an observational assessment and not the conventional coding systems or underlying assumptions that is advocated in this approach.

In addition to experimental procedures to assess children's approach toward unfamiliar adults and the Strange Situation, there may be other assessment methods that may be useful. One obvious possibility would be observational assessments of parent-child interaction in structured or semi-structured settings (e.g., Croft et al., 2001; Zeanah et al., 2000). This method provides valuable information for a typical clinical or research assessment. Whether or not this method would offer leverage for assessing attachment disorder behavior is less certain. Two limitations of this approach deserve special mention. The first concern is that, in the case of assessing disinhibited attachment disorder behavior, we know less about what kinds of disturbances we would observe in parent-child interactions than we would in observing strangers. In fact, as indicated previously, parent-child observations in a typical assessment may not be especially revealing. A second concern, which relates to the first, is that conventional observational assessments of parent-child interactions do not consistently induce mild stress, and so these interactions may be not be especially informative as regards attachment quality. Nevertheless, demonstrating that are no obvious difficulties apparent in conventional assessment of parent-child interactions among children with attachment disorders would be an important null finding (if in fact that is the case). Similarly, it would be helpful to know more about the 'typical' difficulties in parent-child interactions in these cases in order to inform more conventional forms of parenting interventions.

However essential behavioral observations may be to the assessment of attachment disorders, they do have important limitations. For example, although observational assessments may be useful for assessing children's approach and physical contact seeking with unfamiliar adults, they may not be adequate for detecting other features, such as whether or not the child would wander off (with or without a stranger) or if the child fails to respond to the caregiver when distressed (i.e., it would be more difficult to set up an observational assessment for these behaviors). In addition, carrying out standardised observational assessments may be difficult in some clinic settings, especially to the degree that the assessment includes a choreographed set of interactions, such as with the Strange Situation. Furthermore, observational assessments may be more appropriate for younger children. The extent to which the behavioral criteria establishing an attachment disorder extend to older children is not known, but it seems likely that neither the current criteria for disorder nor the observational settings used to elicit these behaviors would work as well from middle childhood. The implication is that observational methods should form part of an overall assessment battery that relies on multiple sources of information.

Interview As demonstrated by several groups (Chisholm, 1998; Hodges & Tizard, 1989; O'Connor et al., 2000; Zeanah et al., 2002), interview methods appear to be adequate for assessing the presence or absence of disinhibited and inhibited symptoms; this is so even in the absence of an established interview protocol, although existing reports are limited to young children. Advantages of an interview format are that it provides an opportunity to assess the history, nature, and context of the 'symptoms.' This may be especially important given that we are in the early stages of understanding attachment disorders. An investigator-based instrument such as a semi-structured clinical interview would have the advantage (e.g., over questionnaire methods) that it would increase the reliability among clinicians and researchers in how attachment disorder behavior is defined. Of particular interest is information about the course of the attachment disorder behaviors, including whether or not they were apparent immediately at placement and if there was any change in severity over time (e.g., that may be associated with a change in the child's relationship with caregiver). Interview methods would also be best-suited to gather information on the consistency and contextual determinants of the attachment disorder behavior. For example, it would be of interest to know whether or not child's disinhibited attachment behavior was as likely to occur regardless of the parent's presence and whether or not the child felt anxiety or fear. This is the kind of information that would not be readily accessed in an observational assessment, yet could be critical for further understanding the phenomena of attachment disorder. Thus, information derived from a clinical interview provides essential information not obtainable through other methods.

Questionnaire Questionnaire assessments have a long history in research in child psychopathology. In most cases, information gleaned from questionnaires corresponds reasonably well to data collected through other methods. Whether or not existing questionnaire assessments of attachment disorder behavior will be successful remains to be seen.

Several concerns about questionnaire assessment of attachment disorders should be noted. Most significant is the concern about parents' understanding of the behaviors being assessed. That is, given the confusion and uncertainty surrounding attachment disorders by professionals, it could be expected that parents may have difficulty understanding what is being questioned. Confusion among respondents over what is meant by 'indiscriminate sociability' (or similarly phrased questionnaire items) may be accentuated by the increasing familiarity of the notion of attachment disorder among parents of institutionally reared and foster children coupled with substantial dis-similarities among professionals and parents in what is meant by the term. As a result, it is likely that different parents would interpret items on a questionnaire differently, and so obfuscate the meaning of the results. The sensitivity of questionnaire assessments to differentiate attachment disorder behavior from temperamentally high sociability might be one particular area of concern. Furthermore, some features of attachment disorder behavior may be too subtle or complex to pick up in a questionnaire assessment (this may be especially the case for the several different kinds of behavioral abnormalities covered in the inhibited form of attachment disorder). This is supported by the generally poor record of questionnaire methods for assessing individual differences in attachment security and insecurity. To the extent that there are errors from questionnaire methods, it seems likely that the direction of error would be false positives, resulting in

misleadingly high rates of attachment disorder behavior in children with a history of selective attachments.

Social cognitions That there exist attachment representations or internal working models of relationships and that these influence children's behavior toward caregivers and others (such as teachers and peers) is a core component of attachment theory. These representations are a focus of research and intervention with older children and adults and supplant behavioral assessments past early childhood. Research of this kind has been aided by the development of several methodological approaches for studying children's attachment representations through story stems or doll play or related projective techniques. To date, this assessment strategy has not yet been applied to children with attachment disorders, and so social cognitive assessments of attachment disorder is the least developed methodology. A major question for research of this kind is, what is the quality of attachment representations among children with an attachment disorder? More fundamentally, is it possible to access attachment related representations in that population of children, especially given that many of the children affected are quite young?

Extrapolating from the behavioral data, it might be that children with an attachment disorder exhibit disturbed representations that do not resemble those of 'ordinary' insecure children (e.g., avoidant, rejecting, catastrophic themes, etc). It may be that the form of insecurity in representational models may reflect more rudimentary disturbances in understanding and accessing and using mental states of self and other in making sense of behavior. If that is so, as implied by preliminary clinical impressions, then the implication would be that the disturbance is not simply concerning attachment relationships, but may be about relationships more broadly. Research of this kind is needed because it would offer another source of information and insight into the phenomenology of attachment disorder and because it would extend the criteria for attachment disorder in a way that might be more relevant for older children.

Conclusions concerning assessment

No 'gold standard' exists for assessing attachment disorders, and very little information is available on the convergence of information from alternative assessment methods. Given this state of affairs, progress in defining attachment disorders or differentiating among the range of alternative conceptualizations that have been proposed to supplant or modify existing DSM-IV/ICD-10 criteria is unlikely. Nor it is likely that substantial progress in treatment will occur if the practice of assessment remains inconsistent among researchers and practitioners. Table 1 displays several summary statements and recommendations for assessment of attachment disorders.

TREATMENT

No treatment method has been shown to be effective for children with attachment disorders. However, a number of treatments have been proposed, and there is substantial interest in trying to meet the high level of needs of children with attachment disorder and their parents. Existing treatment approached and their underlying assumptions are considered in this section.

Table 1 Conclusions and recommendations concerning assessment

1. Current criteria for the attachment disorders set out by DSM-IV and ICD-10 are not adequate for guiding clinical research or practice.
2. Multiple methods of assessment are needed, and convergence among sources of information and types of assessment should be sought.
3. Observations have played a key role in the assessment of attachment disorder behavior and should be included as part of an assessment. A focus for observations is comparing the child's behavior with familiar caregivers to the child's behavior with strangers, particularly inappropriate social approach. A clinical interview provides the history and context of attachment disorder behavior is therefore essential complement to an assessment. Assessments of the child's cognitions or representations require further attention. Questionnaire methods may be least informative method of assessment.
4. The Strange Situation may be a useful assessment methodology, but conventional coding criteria are not and, by themselves, are insufficient and may be misleading.
5. Assessment of the quality of the child-caregiver attachment relationship is essential; no currently available measures indicate the presence of a selective attachment with a caregiver, and this is a priority for further research.
6. Assessment for attachment disorder should include detailed investigation of co-occurring behavioral and emotional problems, cognitive and neuropsychological functioning, and social relationships, especially with peers.
7. Behavioral definitions of attachment disorder appear to be adequate for younger children, but may be inadequate for children of primary school age or older. Cognitive processes underlying attachment disorder behavior may differ from those thought to characterize insecure attachment (e.g., there may be an absence of social cognitions or use of mental state terms to explain behavior of self and other).

Attachment-based interventions

A natural starting point for intervention for children with attachment disorders is the existing set of attachment-based interventions (Lieberman, 1991; van den Boom, 1995; see, Lieberman & Zeanah, 1999). A number of attachment-based interventions have been successfully applied and shown to be effective for high-risk parent-infant dyads, where high risk is defined in terms of infant irritability, adverse psychosocial conditions, risk for mental disorder in the parent, or insecure attachment (see van IJzendoorn, Jeffer, & Duyvesteyn, 1995). A general conclusion from the large and steadily growing literature is that several particular interventions are moderately effective, but the mechanisms underlying the treatment response are as yet not clear, and very few studies compare attachment-based interventions with an intervention derived from an alternative theoretical perspective.

Several themes from these established interventions are worth noting. First, established attachment-based interventions are concerned with real-life interactions between parent and child, and particularly the parent's sensitivity and responsiveness to the child. Treatment focusing on parent-child interactions may be complemented with individual treatment with the parent to help the parent be more aware of the child's distress (and how to help the child when that happens) and to examine the factors that impair the parent's ability to respond sensitively to the child. The aim is to facilitate the parent's capacity to act as a secure base for the child and, in turn, to increase the child's willingness to use the parent as a secure base. In this way, there are direct links between the hypothesized mechanism accounting for attachment insecurity and what is done in the treatment setting.

Second, established interventions involve young children, most often infants, and typically in the context of parent-infant therapy. Attachment-based interventions for older children are not well-developed; nor it is known if the parent-child dyadic focus is a precondition for effective treatment. Third, attachment-based interventions have almost exclusively focused on parent-child dyads in which the parent's insensitivity is suspected as the cause of the child's difficulties. That is, the intervention is to treat the relationship that is thought to be the cause of the child's disturbance in the first place. This situation is very different from most instances of reported attachment disorder in which the child is placed with adoptive/foster caregivers who may be typically sensitive (e.g., as perhaps demonstrated with older biological children). In other words, the foster/adoptive parents may not be insensitive or a contributing cause of the child's attachment disorder, but nevertheless the child has not developed a selective attachment relationship to them.

It is surprising that, as yet, no studies have investigated the effectiveness of some of the more established attachment-based interventions with children with attachment disorder. Few clues exist as to the success of this treatment approach, and there are reasons to be cautious about the likely outcomes. The principle concern is that some of the assumptions underlying the treatment model do not apply in the case of children with attachment disorder. For instance, it may well be that the foster/adoptive caregiver is not 'secure-ogenic' and that his/her caregiving could be enhanced from an attachment-based intervention. Nevertheless, even if the caregiving is modestly rejecting, intrusive, or inconsistent, a question that needs to be addressed prior to treatment is why the child has not developed a 'normal' insecure attachment to the caregiver and instead continues to show attachment disorder behavior, in many cases several years after placement. A more puzzling case is that of an adoptive/foster caregiver who is 'adequately' sensitive but the child exhibits attachment disorder behavior; it would seem unlikely that improving parental sensitive responsiveness (in already sensitive parent) would yield positive changes in the parent-child relationship. Thus, the theory underlying attachment-based interventions would not help to illuminate why, in a important minority of cases, children continue to exhibit a lack of selective attachment behavior despite years of either optimal or non-optimal but 'adequate' caregiving. A related concern is that we do not know what sort of caregiving environment leads to the formation of a selective attachment among children with an attachment disorder. In other words, existing attachment-based interventions have been devised to treat insecure attachment, and so they may not be adequate for treating children who appear not to have developed a selective attachment with the parent despite years of caregiving.

Furthermore, it is not clear if inhibited and disinhibited types of attachment disorders may respond to different treatment approaches. Based on data from follow-up studies of adopted institutionalized children, ordinary sensitivity may be adequate to ameliorate signs of inhibited attachment disorder following adoption. On the other hand, persistence of disinhibited behavior implies that more than ordinary sensitive responsiveness may be required to ameliorate this behavioral pattern.

Alternative treatment models

Several alternative treatments have been proposed or might be thought to be relevant for children with attachment disorders.

Holding therapies Perhaps the only form of treatment to be applied to children with attachment disorders with any regularity is holding therapy. Holding therapy describes a kind of intervention that has been proposed to address the serious difficulties that children with attachment disorder present with. Although there are a variety of perspectives on what holding therapy is, they generally originate from a history of alternative therapies, from 'rage reduction' with aggressive children to attempts to treat individuals with autism, dating back decades. Despite the fact that all of these efforts were unsuccessful, the use of holding in therapy has been carried over and has now been applied to children with attachment disorders for several years.

There are several general features of holding therapy (see, Keck & Kupecky, 1995). First, and most importantly, holding therapy is so called because an essential element is close physical contact with a therapist or therapists. Holding entails the child laying across the lap of one or two therapists (or occasionally a therapist and parent), with child's head in the lap of the lead therapist. Touch and eye contact between the child and the therapist(s) are necessary and encouraged strongly throughout the treatment. As it is typically practiced, this format is adopted for long periods of time (sessions of 45 minutes or longer) on a daily basis over a period of typically 2 weeks. What else happens in the course of holding and how it is relevant to the treatment of attachment disorder is less extensively discussed, and likely to vary more widely among practitioners. Of course, holding is not the only component of this form of treatment for children suspected of having an attachment disorder, but because it is thought to be the central therapeutic mechanism and essential for treatment success, it is the focus of this discussion.

The rationale for physical contact varies somewhat among authors, but several points are repeatedly made by advocates of the treatment. For example, physical contact is more intense than 'talking' or play therapies, and so is thought to be more likely to address the needs of children with attachment disorders. Specifically, holding is thought to provide the child with an experience of safety and security that is contrary to previous experiences of severe abuse or neglect. It is in this context that the touch/holding experiences in holding therapy are thought to perhaps mimic the touch/holding experiences that are part of the normative attachment process between caregivers and infants – although holding takes place with older children (i.e., non-infants). Holding is also thought to be the way to 'break through' to the child who may otherwise shun non-physical interventions. A further feature of holding is that it is thought to 'contain' and perhaps modulate the child's distress or rage.

Not surprisingly, holding therapy has attracted considerable controversy. Several specific concerns have been raised. For example, although holding therapy is thought to enhance the child's capacity to attach to others, it is not clear how and indeed if this happens. None of the above assertions for the use of holding therapy has received empirical support or systematic evaluation. There is then the concern that therapies based on holding cite attachment theory as a justification, or at least a theoretical foundation, for its practice. This, too, is open to criticism. Indeed, there seems no basis for holding therapy from attachment theory, and many features of holding therapy are contrary to fundamental attachment theory principles (Lieberman & Zeanah, 1999). Indeed, nothing like holding is practiced in the course of the established treatments based on attachment theory reviewed in the previous section. More to the point, from the perspective of the established attachment therapies, the holding approach would be viewed as intrusive and therefore non-sensitive and counter-therapeutic.

This latter point is a matter of some debate, however. Several commentators note that the holding treatment is not experienced as intrusive or threatening to the child with an attachment disorder – and that this is indicative of the existence of an attachment disorder (e.g., Fearnley, 1996). In contrast, others have used terms such as 'aggressive reattachment' to indicate that the treatment needs to be intrusive if it is to be effective (this is where the 'breaking through' metaphor applies). If holding therapy is experienced by the child as intrusive, then it is difficult to see how this context would foster the formation of attachment relationships. Moreover, this is the point at which concerns have been raised that holding therapy may be traumatizing to the already traumatized child.

There are, in addition, a number of conceptual notions suggested by the holding therapy treatment model that need to be questioned and in some cases discarded. One such idea is the notion that development in attachment disordered children has in some way been 'frozen' and that a part of the intervention is to 'unfreeze' the child's development (e.g., such as the child's emerging attachment relationship with caregivers). Thus, it is up to holding therapy to 'reactivate delayed development' (Keck & Kupecky, 1995). This notion, which shares something with the concepts of 'developmental arrest,' 'regression' and other terms borrowed from the psychoanalytic literature, has no support in contemporary developmental theory or research. That is, it is contrary to how development and psychopathology are conceptualized. Thus, rather than view development as arrested or frozen, it is appropriate to conceptualize disturbance or psychopathology as development that has followed a pathway that is maladaptive (which may be seen in, for example, the subsequent formation of negative relationships with caregivers, peers or teachers; or, in the formation of cognitive models or expectations of others as rejecting and self as worthless that are increasingly recalcitrant to change). The pathway model (see, e.g., Bowlby, 1988) provides a scientifically and clinically more accurate picture of how development proceeds and what the task of the clinician is in facilitating healthy development. Even used as metaphor, the idea that development 'freezes' is misleading. Development does not 'stop.'

Additionally, there is something of a paradox as to why holding therapy might facilitate attachment with caregivers. Thus, one of the clinical concerns for children with attachment disorder is boundary violation and uninvited contact with strangers, yet what holding therapy introduces is close physical contact with a stranger (therapist). Why should forcing physical contact and eye contact with a stranger be expected to reduce such behavior with other strangers? A final question concerns the role of cognitive mediation. For example, in the course of the treatment are children's cognitions about self and others changed? The writings on holding therapy indicate that this would take place, but there is no evidence that this is so and, in fact, it would be unlikely to expect that such a dramatic change in children's cognitions would come about in the course of the 2-week treatment, however intensive it might be – although very little is known about children's cognitions in the course of attachment-based, holding, or other forms of therapy.

In the USA there have been six reported deaths of children attributed either directly to holding therapy and its variants (e.g., 'rebirthing therapy' or 'compression holding') or to children whose parents were being advised by therapists practicing these methods. In each case, either therapist and/or parent practiced blantantly sadistic methods to coerce the child into 'attaching.' To be sure, most practitioners of holding therapy are not likely to use such extreme methods, but based on the deaths

that have occurred, such practices are widespread and exceed reasonable limits of safety in any known risk/benefit analysis.

Assisting the parent to 'take charge' with children who are more difficult to manage has merit, as does containing the child's rageful outbursts through restraint. Nevertheless, these practices are included routinely in more conventional treatments and in no way should they be confused with the excessive derivatives of holding therapy.

Faced with mounting criticism about the effectiveness and appropriateness of holding therapy, practitioners are now beginning to research its use. To date, little evidence exists on the efficacy of holding therapies. Evidence that has been reported (e.g., Myeroff, Mertlich, & Gross, 1999) is suspect given substantial conceptual and methodological flaws, such as small and selective samples, uncertain validity of the attachment disorder diagnosis, and no comparison with other less costly and invasive treatments. An even greater limitation is that studies have not included reliable measures of attachment between the child and caregiver and have instead relied on measures of general behavioral/emotional problems as the index of response. This is no small problem given that the criterion for attachment disorders used by many proponents of holding therapy more closely resembles disruptive behavioral disorders than attachment disorders. Given that there are less intensive, less expensive, and more effective ways of decreasing behavioral/emotional problems (Scott, Spender, Doolan, Jacobs, & Aspland, 2001; Webster-Stratton, 1998), studies of holding therapy that rely on the reduction of 'traditional' behavioral/emotional problems seem to weaken rather than strengthen the claim for the treatments. If a change in attachment quality on reliable instruments could be demonstrated, then this would be an important piece of evidence supporting the use of holding therapy. However, no such evidence has been reported.

One further inevitable and significant conclusion is that attachment therapy and holding therapies are based on different expectations, principles, and practices and are carried out by distinct sets of practitioners – and on children who differ significantly in their clinical presentation.

Individuals engaged in holding therapy have taken on the difficult task of treating children with very severe disturbances of the kind described by the attachment disorder concept – the same kinds of children and families that are often unfortunately neglected, avoided, and misunderstood by many clinicians. Books and articles published by the growing list of practitioners working with children thought to have attachment disorders contain a wealth of information about the kinds of behaviors these children display and the difficulties faced in treating these children (e.g., Hughes, 1999). This information has been helpful, and it has also been important that there have been (partly) successful efforts to alert clinicians and parents to the particular kinds of difficulties presented by children with severely disturbed attachment histories. Equally importantly, to their credit, practitioners of holding therapy are among the few who have sought to develop treatments for children and families who are provided few options and little reason for optimism from other clinicians. Unfortunately, an unhelpful side-effect of these efforts has been a premature foreclosure on holding therapy as a clinical tool and solution. There is as yet no systematic evidence that holding therapy is effective and so the enthusiastic adoption of this treatment model is unsupported. Systematic and rigorous clinical research is needed before this treatment is proposed as a clinical tool and recommended as a form of treatment.

Parent training and family support It is a common experience for a parent to feel de-skilled if his/her adoptive/foster child shows little inclination to seek her/him out when distressed and if the caregiver describes the arrangement with the child as more of a co-existence than a 'relationship.' That this occurs with parents who successfully raised other children (many of whom were likely securely attached to them) is yet a further source of confusion, frustration, and uncertainty to both parents and professionals. One important implication of this is that parents' feelings of confusion and rejection are themselves important targets for clinical intervention in their own right. Whether or not supporting parents would have carry-over effects and promote the child's development is uncertain, but should not influence whether or not parent support is included as part of a treatment approach.

Anecdotal evidence suggests that one way to support parents is through support groups. A number of support groups specifically for adoptive parents of ex-institutionally reared or foster children have arisen. This reflects not only the importance of social networks, but also the general dissatisfaction of these parents with the kinds of more traditional services available from social service agencies, clinicians, and even traditional parent support groups. In many ways, the existence of these support groups has pushed the boundaries of traditional support groups. This is so with respect to geographic location, as the internet includes many groups and networking opportunities, nationally and internationally. Furthermore, support groups of this kind have been successful in agitating for change and an increased appreciation of the particular needs of children with very adverse early care histories. It is probably fair to assume that parents who consider adopting internationally have much more information (albeit not unbiased) than previous parents.

More difficult issues arise when discussing how to conceptualize the adoptive/ foster parents in the treatment process. Specifically, what role can be ascribed to parents for promoting positive change in treatment? What can adoptive/foster parents do to promote their child's healthy development and formation of attachment relationships? We do not as yet understand adoptive/foster parents' role in the course of attachment disorder. That is, adoptive/foster parents are not causal agents in the origin of the attachment disorder, but what their contribution is to the longitudinal course of this disturbance is not known.

Anecdotal evidence and preliminary observations from further follow-up assessments suggest that parents may be able to reduce some of the core features of disinhibited attachment disorder, such as wandering off or inappropriate approach to strangers. That is, through parental prohibition and/ or reinforcement and well as parental vigilance and constant reminders, children can be encouraged not to approach strangers or wander off without notifying parents. This does not suggest that there is a corresponding improvement in the child-caregiver attachment relationship, but simply that some behavioral features of disinhibited behavior can be managed through comparatively simple means. An important question is whether or not these behavioral changes are accompanied by changes in putative social cognitive abnormalities that underlie disinhibited behavior.

The manner in which parents are engaged in the treatment process needs to be handled carefully. Thus, parents' frustration and detachment, which may be very evident by the time clinicians become involved, may be mistaken as a source of the child's disturbance rather than a result of it. Indeed, clinician mis-reading of the

history of the disturbance and mis-appropriating treatment and expectations is a major reason why many parents may have appealed to less conventional treatments. Practitioners experienced with working with children with severely disturbed attachments may not be able to adequately treat the disturbance (e.g., with holding therapy), but they are successful in sympathizing with parental concerns and are aware of the typical problems encountered by these highly distressed parents. This helps explain why they have been successful in gathering attention and trust among distressed and needy parents.

A further kind of intervention that is widely practiced is respite care. This is a form of intervention that is a regular and important part of treatment planning, and likely one of the most important ways of offering support to parents. Although there is no reason to doubt its usefulness, some questions about the use of respite care have been raised. Specifically, it seems likely that children with poor attachment experiences would be the least able to cope with repeated separations, and so assessing the impact of the separation on the child may well be an important component of the respite care. This issue requires further attention.

Social-cognitive treatment approaches In addition to treatment models derived from attachment theory, it is worth considering alternative treatment options that focus not on the attachment relationships *per se*, but instead on the social and cognitive disturbances that underlie or at least accompany attachment disorder behavior. We have not yet been able to characterize in detail the kinds of social-cognitive problems of children with attachment disorders. On the other hand, there is growing appreciation that children with attachment disorders experience a range of social problems, including peer rejection and difficulty forming friendships. What kinds of social-cognitive problems underlie these disturbances is not clear. They may differ from what has been reported in aggressive or depressed children, so that rather than, for example, mis-attributing aggressive/hostile intent to others, they may have difficulty understanding social situations and making use of mental states in explaining behavior. Such impairments in 'mentalizing' may appear closer to severe immaturity rather than to disturbances found in other clinical groups.

Several interventions have been developed for children who have been rejected by their peers (e.g., Lochman, Coie, Underwood, & Terry, 1993). This important treatment approach deserves to be investigated, not only because these interventions may be helpful in addressing significant impairment of the children (and in a safe and low-cost manner), but also because such studies would provide some leverage in testing hypotheses about whether or not improvement among children with an attachment disorder can come about only through substantial change in the child's relationship with the caregiver.

In summary, there exists no accepted treatment for children with attachment disorders. Moreover, as implied by the previous discussion, we do not yet know about the long-term prospects of children who exhibit attachment disorder behavior from middle childhood. There is a suggestion from existing naturalistic studies that attachment disorder behavior persists, even following adoption into normal, caring families for a period of many years. If an intervention as pervasive as adoption shows comparatively little evidence of marked change, then questions should be asked about the goals for treatments lasting only several weeks. Recommendations concerning treatment are displayed in Table 2.

Table 2 Conclusions and recommendations concerning treatment

1. No treatments have been shown to be effective for children with attachment disorders. In line with existing clinical, scientific, economic, and ethical standards, treatments for children with attachment disorders should be promoted only when they are evidence-based.
2. Treatments that have been applied, notably holding therapy, have not been adequately assessed. Treatments purporting to facilitate attachment relationships have not examined the extent to which there is an improvement in the quality of attachment relationship (using reliable measures of attachment quality).
3. Holding therapies are not based on attachment theory and do not resemble existing attachment-based interventions that have been subject to clinical research.
4. Coercive therapies, including many forms of holding therapy, are often dangerous, incompatible with attachment therapy, and are to be avoided in all children; application of these therapies to children with a history of maltreatment and serious trauma may be especially harmful.
5. Parent support, in the form of (in)formal networks or as part of ongoing clinical attention, may be an important kind of intervention for addressing parents' feelings of frustration, distress, and incompetence. Education concerning what attachment disorders are may also be important, although there is as yet a limited consensus on the specific characteristics of attachment disorders or what kind of treatment is required.
6. Treatments of attachment disorder shoudl be drawn from a variety of sources, including increasing parental sensitivity to promote attachment security, helping children develop better social problem-solving abilities, enhancing children's emotional understanding, and improving peer relations.
7. Systematic research into clinical treatments of children with attachment disorder requires an as yet lacking consensus on how attachment disorders are defined and assessed.

CONCLUSION

Despite more than 20 years since the establishment of 'disorders of attachment' in the DSM-III in 1980, there is still no consensual definition or assessment strategy; nor are there established clinical guidelines for treatment or management. Perhaps more alarming is the fact that there is little evidence that the diagnostic definitions currently in favor (DSM-IV and ICD-10) drive current clinical research. Indeed, research specifically addressing attachment disturbances and disorders has not used diagnostic criteria defined by DSM or ICD but has instead relied on behavioral descriptions reported from papers published many years prior to the codification of attachment disorder as a clinical diagnosis (e.g., Provence & Lipton, 1962; Tizard & Rees, 1975). This implies dissatisfaction with the current conceptualization of attachment disorder. We are sympathetic with this judgement. However, the rejection of DSM-IV and ICD-10 criteria, combined with an absence of an accepted alternative, presents a lost opportunity to make clinical research in this area more systematic, and creates a formidable stumbling block for progress in meeting the needs of a sizable number of children and families.

Our aim was to review and critique the current state of knowledge about the assessment and treatment of attachment disorders. This is inevitably a work in progress given the limited research base and the unformed nature of existing assessment tools and models of clinical treatment. Fortunately, the wide-scale appreciation of the reality of the disturbance implied by the attachment disorder and the increased interest in understanding the phenomena means that there is considerable scope for progress.

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