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# [Archived] Efficacy of Attachment-Based Interventions

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## Introduction

There is growing prospective and retrospective evidence linking the quality of early infant-caregiver attachment relationships with later social and emotional outcomes.[1,2] Four types of infant attachment have been described. *Secure infant-caregiver attachment* is believed to develop when the caregiver responds to the child's distress in a sensitive manner. *Insecure-avoidant infant-caregiver attachment* presumably results from the caregiver consistently responding to the child's distress in ways that are rejecting. *Insecure-resistant infant-caregiver attachment* is thought to occur when the caregiver responds to the child's distress in ways that are inconsistent and unpredictable. *Insecure-disorganized infant-caregiver attachment* evidently develops when the caregiver displays unusual and ultimately frightening behaviours in the presence of the child. Of the four patterns of infant-caregiver attachment (secure, avoidant, resistant, disorganized), the disorganized classification has been identified as a powerful childhood risk for later socio-emotional maladjustment and psychopathology.[2,3]

## Subject

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Children who have disorganized attachment with their primary attachment figure have been shown to be vulnerable to stress, have problems with regulation and control of negative emotions, and display oppositional, hostile-aggressive behaviours, and coercive styles of interaction.[2,3] They may exhibit low self-esteem, internalizing and externalizing problems in the early school years, poor peer interactions, unusual or bizarre behaviour in the classroom, high teacher ratings of dissociative behaviour and internalizing symptoms in middle childhood, high levels of teacher-rated social and behavioural difficulties in class, low mathematics attainment, and impaired formal operational skills.[3] They may show high levels of overall psychopathology at 17 years.[3] Disorganized attachment with a primary attachment figure is over-represented in groups of children with clinical problems and those who are victims of maltreatment.[1,2,3] A majority of children with early disorganized attachment with their primary attachment figure during infancy go on to develop significant social and emotional maladjustment and psychopathology.[3,4] Thus, an attachment-based intervention should focus on preventing and/or reducing disorganized attachment.

**Problems and Research Context**

Historically, most attachment-based interventions have focused on improving caregiver sensitivity (which could be defined as the capacity to read cues and signals accurately and respond promptly and appropriately), with the assumption that this would promote secure child-caregiver attachment, which in turn would be linked to positive social and emotional outcomes. Attempts at improving caregiver sensitivity have been largely through targeting caregiver representations and/or caregiver behaviour during interactions with their children.[5] However, while caregiver sensitivity is linked to the organized types of attachment (secure, avoidant, resistant), it may not be as robustly linked to disorganized attachment.[6] Thus, attachment-based interventions that target child-caregiver interactions to date may not have focused on the most clinically significant caregiver behaviours to prevent or reduce disorganized attachment. This might reflect the fact that, in addition to the still fresh discovery that disorganized attachment is often associated with markedly negative outcomes, it is only recently that researchers have uncovered one possible child-caregiver interactional pathway to disorganized attachment. This pathway includes children's exposure to specific forms of aberrant caregiving behaviours that are referred to as "atypical" or frightening, dissociated, disoriented (arguably qualitatively distinct from sensitivity or extreme forms of insensitivity),[7] and may account for some of the poorest outcomes for children.  Examples of atypical caregiver behaviours include failing to keep

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a child safe, failing to comfort a distressed child, laughing while the child is distressed, mocking or teasing a distressed child, asking for affection and reassurance from the child, stilling or freezing (i.e., absence of movements and facial expressions for extended periods, as seen in some dissociated states), or threatening to harm. Thus, given current knowledge, one could argue that an attachment-based intervention that targets caregiver behaviour should focus both on improving caregiver sensitivity (to promote secure attachment and the associated positive socio-emotional outcomes) and on reducing and/or eliminating atypical caregiver behaviours, a known precursor of disorganized attachment[7] (to prevent or reduce disorganized attachment and associated negative outcomes).

**Key Research Questions and Recent Research Results**

There is good evidence for how to improve caregiver sensitivity and promote secure child-caregiver attachment. In a meta-analysis of 70 published studies (including 9,957 children and parents, and a core set of 51 randomized controlled trials with 6,282 mothers and children), Bakermans-Kranenburg, van IJzendoorn & Juffer[8] demonstrated that the most effective attachment-based interventions to improve parent sensitivity ($d$ = 0.33, p <.001) and promote secure infant-caregiver attachment ($d$ = 0.20, p <.001) included the following characteristics: (1) a clear and exclusive focus on behavioural training for parent sensitivity rather than a focus on sensitivity plus support, or a focus on sensitivity plus support plus internal representations (e.g. individual therapy); (2) the use of video feedback; (3) fewer than five sessions (fewer than five sessions were as effective as five to 16 sessions, and 16 sessions or more were least effective); (4) a later start, i.e. after the infant is six months or older (rather than during pregnancy or before age six months); and (5) conducted by non-professionals. In addition, the intervention site (home versus office) and the presence of multiple risk factors did not affect efficacy, but interventions conducted with clinically referred patients/clients and those that included fathers were more effective than interventions without such characteristics. One shortcoming of the Bakermans-Kranenburg et al.[8] meta-analysis is that it did not address the question of whether attachment-based interventions focusing on caregiver sensitivity have a significant impact on preventing disorganized attachment.

To address this question, Bakermans-Kranenburg, van IJzendoorn & Juffer[6] examined 15 studies (n= 842) from the original 2003 meta-analysis that provided information on the impact of the attachment-based intervention on preventing the emergence of disorganized attachment. Overall, attachment-based interventions that focus on improving caregiver sensitivity have

limited effectiveness ($d$ = 0.05, not significant) in preventing or reducing disorganized attachment. However, a few sensitivity-focused interventions seemed to have some impact, suggesting that disorganized attachment might change as a side effect of some sensitivity-focused attachment interventions. The sensitivity-focused attachment interventions that changed disorganized attachment started after infant age six months (rather than during pregnancy and before infant age six months), focused on children at risk (rather than parents at risk), and were conducted by professionals rather than non-professionals. The authors concluded that attachment interventions that focus on preventing or reducing disorganized attachment might need to focus specifically on caregiver behaviours associated with disorganized attachment, such as atypical caregiver behaviours. In two recent studies, Benoit et al.[9,10] demonstrated that a brief, focused, behavioural parent training intervention could reduce atypical caregiver behaviours.

**Conclusions**

In summary, attachment-based interventions to date have focused mainly on precursors of organized types of attachment rather than on precursors of disorganized attachment, reflecting the fact that the extent of negative sequelae of disorganized child-caregiver attachment has only recently been identified, as have precursors of disorganized attachment. Given the high base rate of organized but insecure (avoidant or resistant) attachment in the general population, it might not be realistic or even necessary to focus interventions on preventing or eliminating avoidant or resistant attachment, unless the infant is symptomatic. On the other hand, a large proportion of infants who develop insecure-disorganized attachment with their primary caregiver go on to develop significant social and emotional maladjustment and psychopathology. Thus, clinically, insecure-disorganized child-caregiver attachment appears to be the most significant type of attachment that requires intervention. The direct focus on antecedents of disorganized attachment, such as atypical caregiver behaviours, represents a promising direction for future research.

**Implications**

Research findings suggest that an attachment-based intervention should focus on improving caregiver sensitivity to promote secure child-caregiver attachment and the positive social and emotional outcomes associated with secure attachment. However, an exclusive focus on improving caregiver sensitivity may be neither sufficient nor effective in preventing or reducing the most clinically relevant type of insecure attachment, i.e. disorganized attachment. Recent

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research findings suggest that a focus on reducing atypical caregiver behaviours might be a promising direction to reduce disorganized child-caregiver attachment. More research is needed to determine whether a reduction in factors linked to disorganized attachment, such as atypical caregiver behaviours, is in fact linked to a reduction in disorganized attachment and the associated poor social and emotional outcomes for children. More research is also needed to determine what intervention techniques are most effective in reducing atypical caregiver behaviours (or other precursors of disorganized child-caregiver attachment) and disorganized child-caregiver attachment. It is important to appreciate that when dealing with problems in the child-caregiver attachment relationship, recent meta-analyses[5,8] show that the best interventions to date are brief, use video feedback, start after infant age six months, and have a clear and exclusive focus on behavioural training of the parent rather than a focus on sensitivity plus support, or a focus on sensitivity plus support plus internal representations. However, other researchers emphasize the need for home-based, intensive, and long-term interventions for some of the most disturbed and dysfunctional families.[4] There is obviously a need for more research to identify what characteristics of attachment-based interventions best meet the needs of specific families. There is also a need to train service providers in the use of proven attachment-based techniques and in recognizing disorganized attachment and its precursors.

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