

Routinely used interventions to improve attachment in infants and young children: a national survey and two systematic reviews

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Scientific summary

Improving attachment in infants and young children

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Scientific summary

Background

Attachment refers to a specific aspect of a relationship between a child and their caregiver that serves to make the child feel safe. Four attachment 'patterns' are used to classify infants' attachment relationships into categories: 'secure', 'insecure resistant', 'insecure avoidant' and 'disorganised'. Having a secure attachment pattern allows an infant to develop in an environment where they are able to explore from a secure base and adapt to threatening situations knowing that a safe haven (their caregiver) is in close proximity. Not all children have secure attachments to their caregivers, and research highlights the potential negative impact that 'disorganised' and, to some extent, 'insecure' attachment patterns can have on an individual's development. Some children raised in extremely insufficient caregiving circumstances may also develop disordered attachment, which is characterised by a pervasive absence of, or an impairment in, attachment behaviour to caregivers, and places the child at high risk of poor adaptation and has an impact on the child's social and emotional development and their mental health.

A range of parenting interventions have been developed that aim to promote secure attachment, reduce disorganised attachment patterns or reduce severe attachment problems. However, it appears that many interventions that are routinely used in clinical practice do not have a high level of evidence [e.g. randomised controlled trials (RCTs)] behind them. It is important that such interventions are robustly evaluated to determine their effectiveness and safety.

There is a need to investigate which attachment-focused interventions are currently used in UK practice and to then examine the evidence regarding their efficacy, as well as to identify which interventions have been tested in RCTs.

Objective

The main aim of the current study was to identify interventions that are routinely used to improve attachment in infants and young children and to examine the evidence for their use.

This research aimed to:

1. conduct a large-scale survey to identify interventions that are routinely used in the UK to improve the quality of attachment relationships to parents/caregivers
2. conduct a systematic review to evaluate the evidence supporting these manualised interventions, and other parenting interventions for children with (or at risk of) severe attachment problems
3. develop recommendations for future clinical trial research on the effectiveness of commonly used interventions that lack a robust evidence base.

Method

Phase 1 consisted of a large comprehensive UK survey of organisations that provide interventions for children aged 0–13 years who are at an increased risk of or have serious attachment problems in order to identify commonly used manualised interventions and referral practices for attachment problems.

Phase 2 consisted of two systematic reviews. The first updated a previous published systematic review conducted within the team, identifying RCT evidence of parenting interventions aimed to reduce disorganised attachment or increase the rate of secure attachment between infant and caregiver. Second, we reviewed all of the available research evidence on the commonly used manualised interventions collected from the survey in phase 1.

For the two parts of the systematic reviews, a search was conducted across 15 databases, including EMBASE, ERIC, MEDLINE and PsycInfo. Different screening criteria and different data extraction methods were used for the two elements of the systematic review work. We followed the methods outlined by the Centre for Reviews and Dissemination and the Cochrane Collaboration. For the first review we examined RCT evidence from 2016 to the present date as an update to our last review in order to evaluate the effectiveness of parenting interventions used to improve attachment patterns. The most recent version of the Cochrane risk-of-bias tool was used to carry out a quality assessment of the final included studies. The second review investigated all of the available research evidence on the 10 identified routinely used interventions, regardless of study design. These 10 interventions were identified from the UK national survey that we distributed during phase 1. As the second review included all study designs, quality assessment was conducted using the Cochrane risk-of-bias tool for RCTs and the Risk Of Bias In Non-randomised Studies – of Interventions (ROBINS-I) tool for all other studies. We did not quality assess case studies and case series designs.

Results

Survey

We received 625 responses from 734 services across all four nations of the UK. From the survey responses we identified the 10 most commonly used attachment interventions, which in turn informed the focus of the systematic review.

The survey collected information on measures used to assess attachment, a wide range of additional interventions, the training that professionals received and the way in which professionals defined attachment. This highlighted the limited use of standardised tools for assessing attachment and a lack of consistency in the use of the term attachment, with respondents providing a wide variety of definitions. The inconsistent use of the term attachment may have adverse effects on practitioner reports and recommendations for treatment and on the quality and appropriateness of interventions offered to children.

Systematic review 1

Interventions to increase the rate of secure attachment

Out of the seven new studies identified, all seven were RCT studies focused on increasing the rate of secure attachment. As this was an update of a previous review, a meta-analysis was conducted with the final studies found in this review, combined with the studies found in the previous review, meaning that there were 26 RCTs in total that aimed to increase rates of secure attachment. A meta-analysis revealed that, overall, attachment-focused parenting interventions significantly increase the rate of secure attachment ($p < 0.001$) [pooled odds ratio (OR) 1.85, 95% confidence interval (CI) 1.36 to 2.52]. There were no significant effects in terms of the number of sessions ($p = 0.07$), if video feedback was used ($p = 0.55$), the age of the child ($p = 0.43$) and whether or not a male caregiver was included ($p = 0.30$).

Interventions to reduce disorganised attachment patterns

Out of the seven new studies identified, six RCTs focused on decreasing disorganised attachment. These were combined with those included studies in the previous review, giving a total of 20 RCTs in the meta-analysis. The results showed that, overall, attachment-focused parenting interventions

significantly reduce disorganised attachment ($p < 0.001$) (pooled OR 0.54, 95% CI 0.39 to 0.77). There were no significant effects in terms of the number of sessions ($p = 0.14$), if video feedback was used ($p = 0.51$), the age of the child ($p = 0.14$) and whether or not a male caregiver was included ($p = 0.63$).

Systematic review 2

Interventions for attachment used in routine UK practice

Overall, we identified 61 studies meeting our criteria that used one of the 10 most commonly used attachment-based interventions identified in our survey. Video feedback to promote positive parenting had the strongest evidence base, with 17 overall research studies and 15 RCTs. Attachment biobehavioural catch-up had the second-strongest evidence base, with 11 RCTs. This contrasts with the survey results, which showed that these two interventions were the least commonly used among the top 10 interventions in the UK. Notably, the most commonly used interventions, including Individual Child Psychotherapy, Dyadic Developmental Psychotherapy and Theraplay, had little to no currently available published research evidence regarding their efficacy.

Implications for research

Taking into consideration the results from both of our reviews, we identified gaps in the literature that suggest important areas for future high-quality research. There is good evidence that attachment in infancy is a potential predictor of future relationships and individual qualities. It is also evident that disorganised attachment patterns can be reduced and secure attachment patterns can increase with effective interventions, mainly employing interventions that focus on promoting sensitive caregiving. Many interventions that are found to be used in UK services have a limited amount of evidence of efficacy, so there is an urgent need to conduct robust research on these interventions, including RCTs.

Implications for practice

There is an extensive body of evidence to suggest that certain types of attachment interventions are effective and should be employed in practice. Many interventions identified are aimed at improving parenting sensitivity, which has been found to be a significant predictor of attachment security. It is also important to assess attachment in services using validated measures. The availability of evidence-based attachment interventions in the UK is limited, despite good evidence and the recommendations of the National Institute for Health and Care Excellence in 2015. The finding of a less rigid and inconsistent understanding of attachment among professionals can have an impact on the delivery of interventions. Our collaboration and involvement from our Expert Reference Group and patient and public involvement workshops has shown that practice is limited by access to training and robust measures, which can often have a high cost and be time-consuming. A more structured approach to the use of interventions for attachment, and to testing and routinely monitoring these interventions, is needed.

Ethics statement

The survey was conducted in accordance with the University College London Code of Conduct for Research and was approved by the University College London Research Ethics Committee prior to data collection (project ID 16687/001, approval granted 18 November 2019).

Study registration

This study is registered as PROSPERO CRD42019137362.

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