

CAHE JC Critically Appraised Article Summary

Journal Club Details

Date of submission	April 2008
Journal Club location	Port Pirie Journal Club
JC Discipline/s	Occupational Therapy
JC Facilitator	Alison Vine

Clinical Scenario

Is there an overall improvement in development or behaviour in children under 5yrs with developmental delays/behaviour issues who receive therapy with a developmental framework?

Review Question/PICO/PACO

- P Children under 5yrs with developmental delays/behaviour issues
- I Therapy with a focus on attachment theory/circle of security
- C Therapy with a developmental framework
- O Overall wellbeing/improvement in development or behaviour

Article/Paper

Hoffman KT, Marvin RS, Cooper G & Powell B 2006, 'Changing toddlers' and preschoolers' attachment classifications: the circle of security intervention', *Journal of Consulting and Clinical Psychology*, 74(6), 1017-1026.

Article Methodology:	Cohort
Returned JC on:	April 2008
By CAHE staff member:	Mat Prior

* Please note: the appraised article does not specifically target children with developmental delays, nor does it directly compare against other forms of developmental therapy. However, it does represent the closest matching found within the literature to the PICO question.



Ques No.	Yes	Can't Tell	No	Comments
1	✓			The study addressed a clearly focused issue; specifically, it wished to "...track changes in children's attachment classifications...post-intervention" (p1017), hypothesising that there "...would be a significant decrease in disorganised attachment classifications and a significant decrease in insecure attachment classification" (p1018). Whilst the issue was clear, the definition of target population could be made more explicit.
2	✓			The methods used were appropriate. As the authors noted, a controlled study may have provided more robust findings, however a pre-/post-test cohort study is still relevant.
3		✓		The cohort was recruited from a child services program within a 'a medium-sized city in Washington state', however parents/children were invited to participate based on a subjective assessment of family functioning by the 'Head Start' service. What constituted 'low' and 'high' levels of family functioning are unclear, and as such it cannot be determined with certainty that the intended group of participants under that classification were recruited. It is also interesting to note that all families were living below the designated poverty line, which may raise issues of generalisability.
4	✓			<p>*NB: As this study reports on an intervention, 'exposure accurately measured' is not applicable. Rather, the criteria has been changed to assess the 'standardisation/accuracy of intervention'.</p> <p>Full details of the intervention are presented on p1020-1021 of the article. An individualised treatment plan was devised following identification of child attachment and caregiving patterns & identification of relevant issues, which was coupled with small group sessions of the intervention protocol (20 weeks, 75min/week), which included video review of situations, discussion of attachment and identification of attachment cues from the children.</p> <p>In order to ensure standardisation of intervention, 'catch-up' sessions were made available to subjects who were unable to attend a session, whilst subjects were excluded if they missed more than 4 of the 20 intervention sessions.</p>
5	✓			Within a 10day period following the 20 th intervention session, subjects undertook final assessment in a 90min laboratory session to determine child attachment behaviours and security. Whilst the specific methods to assess the children differed, this was reportedly due to the use of age-specific assessment scales, which appeared appropriate (p1021). Observers were blinded to pre-intervention classification, and reportedly had excellent agreement of classification (p=0.000) (p1022).



Ques No.	Yes	Can't Tell	No	Comments
6	✓			The authors have identified and clearly discussed the main limitations and potential confounders of this study; most notably the study design and the sample. Whether such results could reasonably be expected with another intervention, or no intervention, are uncertain due to the lack of a control group in this pre-/post-test cohort study. Moreover, there are also questions as to the generalisability of the results, as the sample was purposefully recruited and represented a particularly low socio-economic group. In addition, the sample comprised subjects who were willing to participate, and the authors note that it is unclear whether the program would yield similar results in populations of lower motivation, which may have particular relevance within lower socio-economic groups (p1024).
7		✓		Whilst the follow up period of 10 days would seemingly be enough to determine short-term changes associated with the program, it is unclear as to whether the effects continue in the absence of active participation following the end of the 20 week schedule.
8	✓			<ol style="list-style-type: none"> 1. High-risk attachment classifications significantly decreased post-intervention; with 60% of children being classified as showing 'disorganised-controlling' or 'insecure-other' attachment behaviours pre-intervention, compared to only 25% post-intervention. 2. Similarly, the amount of children who were classified as demonstrating 'secure' attachment behavior significantly increased from 20% to 54% post-intervention. There was also a significant decrease in 'disorganised' behavioural classifications to 'organised' behavioural classifications ($p < 0.001$). 3. Of the 13 children classified as 'secure' pre-intervention, only one regressed to a more high-risk classification; however parental drug-use appears a likely explanation.
9		N/A		
10	✓			The results appear quite believable. The intervention program was comprehensive and well-described, and as such it certainly appears as if it could affect changes in parent-child attachment behaviour (particularly as isolated examples of parental responses from the intervention are presented). The assessment tools appear to be both standardised and widely accepted (multiple references), & thus the classifications appear to be appropriate.
11		✓		It is difficult to determine whether the results can be applied to the local population. The sample was a particularly narrow one drawn from a very specific geographical and socio-economic population. Consideration of the local population to whom any similar interventions would be used with would need to be considered.



University of South Australia

CAHE

Centre for Allied Health Evidence

a collaborating centre of



THE JOANNA BRIGGS INSTITUTE

Ques No.	Yes	Can't Tell	No	Comments
12	✓			Whilst there have been positive reports for different attachment theory interventions, thus supporting the results of this study, there reportedly is also currently a lack of consensus as to the overall effectiveness of such interventions, and as to which may be most beneficial. However, the usual goal of attachment theory interventions is to "...improve the caregivers' sensitivity to infant attachment and exploratory signals, with the assumption that this will, in turn, increase the likelihood that the infant or toddler will develop a secure attachment with that caregiver..." - which would appear to be consistent with the conclusions of this study.