

CAHE JC Critically Appraised Article Summary

Journal Club Details

Date of submission	June 2009
Journal Club location	Port Pirrie Regional Health Service
JC Facilitator	Andrea Fisher
JC Discipline	Occupational Therapy

Clinical Scenario

Is parent education effective in improving the developmental skills of children (<6 y/o) with Global Developmental Delay?

Review Question/PICO/PACO

- P** pre-school aged children with developmental delay and their parents
- I** Incredible Years Parent Training (IYPT)(with developmental disabilities adaptations), a 12 week group based parent training program
- C** usual care control
- O** parenting behaviours during parent-child interactions
- Child behaviour problems

Article/Paper: McIntyre L (2008) Parent training for young children with developmental disabilities: Randomised controlled trial. *American Journal on Mental Retardation*, 113 (5): 356-368

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Article Methodology: Randomised Controlled Trial

Returned JC on: August 2009

By CAHE staff member: Kylie Johnston

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Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>The research question was focused, with a well defined intervention (IYPT) adapted were made for developmental disabilities.</p> <p>Population: inclusion criteria for “developmental disability” was an Adaptive Behaviour Composite Standard score of between 45 and 85 on the Vineland Adaptive Behaviour Scales, so need to see how that compares with Australian definitions. Note non-ambulant, deaf and or blind children were excluded.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> parent behaviour in parent-child interactions: 15 minutes of observation (partial coding for 7 inappropriate parent behaviours) degree of child behaviour problems: Child Behaviour Checklist (Achenbach 2000): 99 items frequency of parental praise child impact: Family Impact Questionnaire (Dinenberg and baker 1993) 50 items parent satisfaction with treatment
2	✓			A RCT is an appropriate design to address this issue
3			✓	<p>Alternate patients allocated to the experimental group, so quasi-randomised at best.</p> <p>While chief investigator did not screen potential participants, appears they did speak with them over the phone, so allocation was not concealed.</p> <p>No differences between baseline characteristics of experimental and control groups, including disability scores</p>
4	✓			Persons performing the outcome assessments were blinded to experimental or control conditions, and independent of the study intervention
5	✓ partial			<p>All intervention was carried out as intended (checklists completed each session). Average attendance rate was 89% of sessions, and all but 3 families attended at least 75% of sessions.</p> <p>5 participants dropped out (3 from experimental, 2 from control), and these were all lost to follow up (ie no intention to treat analysis).</p>
6			✓	As mentioned at the end of the discussion, the experimental group had a greater dose of services (12 weekly 2.5 hour sessions, while control group did not receive any equivalent interaction with health professionals or other parents of children with disability)
7		✓		No sample size calculation reported, so unclear if this study is sufficiently powered to detect change. This is a limitation of the study particularly given the large number of outcome measures used.

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8	✓			<p>The results are presented as mean (SD) scores for intervention and control groups at pre and post assessment. Post assessment occurred in the immediate post-intervention period. Comparison between the groups over the two time periods is made using ANOVA.</p> <p>Main results were:</p> <ol style="list-style-type: none"> 1. A between group difference in the % of parent inappropriate behaviour during observed time (15 mins), from 8 to 2 mins in experimental group, and remained at 7 mins in control group (calculated from percentages of 15 mins in Table 2). 2. A statistically and clinically significant difference between groups in child behaviour problems (Child Behaviour Checklist) <p>This 12 week parent training program demonstrated a short term reduction in inappropriate parent behaviour (during a short observation period), and a reduced parent report of child behaviour problems.</p>
9		✓		<p>Confidence intervals not reported. Sufficient information is generally provided to determine actual effect size, and partial etas are also provided to indicate effect size.</p>
10				<p>This question is about generalisability and applicability of study findings to your own setting, so is best answered by your facility. Points I would highlight include:</p> <ol style="list-style-type: none"> 1. As the author points out, this study only reports on the immediate program effects (around 1 week after completion). The considerable costs of such a program could not be justified without further studies to examine the persistence of changes in the medium to long term. 2. Study performed in motivated (volunteer respondents) white, middle class participants from 2 counties in New York. 3. The main outcome measured were parent-completed questionnaires, with the exception of a brief period of partial-and frequency coding of parent-child behaviour by observers..