NSW Speech Pathology
Evidence Based Practice Interest Group

Critically Appraised Paper (CAP)

CLINICAL BOTTOM LINE: In this box write the main findings from the study – the abstract usually describes this succinctly. Think about what you could tell another speech pathologist about this paper within a couple of sentences. Communicate the most important clinical implication(s).

Clinical Question [patient/problem, intervention, (comparison), outcome]: For consistency, use wording so that you capture patient/client first, followed by intervention then outcome. For instance, in children with a phonological impairment of unknown origin (patient), does PACT therapy twice weekly (intervention) improve intelligibility (outcome)? You may wish to add additional research questions that were explored.

Search Terms: Consider inserting the 'keywords' usually at the beginning of the article. .

Search Systems: Insert name of search system, or name of person who recommended article.

Citation: Insert all details re: citation, so that another clinician can locate paper – avoid acronyms. Powell, T. (1993) Phonetic inventory constraints in young children: factors effecting acquisition patterns during treatment. Clinical Linguistics and Phonetics, 7, 45-57.

Design: Describe the design. E.g., Randomised controlled trial OR 'single subject multiple baseline design across subjects. The design should be clear from the methodology section of the paper.

Participants: Describe the subjects/ participants, including: participant numbers/ ages / gender / ages or average age, overall presenting characteristics e.g., normal receptive and expressive language, IQ, oromotor skills, hearing. No history of OME. Then, the general phonological characteristics e.g., moderate-severe phonological impairment., with common phonological processes including CR, FCD etc etc. PLUS anything else that is relevant to describe the participants.

Experimental Group: In this section summarise the *procedure / methodology,* including issues such as service delivery (where, when, who -including the duration of intervention), note target selection, type of intervention approach and actual procedure, method for evaluating response and / stimulus generalisation (if conducted). Also consider noting how was improvement measured – probes of conversational speech collected once a fortnight. Mention I follow-up was conducted. Note how family / parents were involved / not involved.

Control Group: Was a control included – yes / no. (In this body of research, typically no……)

Results: Summarised the findings from the study. It can be helpful for readers if you exemplify the results with case study data – if available.

Comments on Design: Consider the strengths/ weaknesses of the design – did the design establish cause/effect? How was the efficacy of the intervention measured? Was follow-up conducted? Did the authors comment on the limitations of the overall study (not just design)– if so, you may want to note them here.

Level of Evidence (NH&MRC): typically Level IV within this area of literature.

Appraised By: Insert names here. **Group**: Paediatric Speech Group
Elise Baker,

Date: Insert date here.

Nov 2002

Form based on Worrall & Bennett, Evidence based Practice: Barriers & Facilitators for Speech-Language Pathologists, *Journal of Medical Speech-Language Pathology* 2:9, xi – xvi

Guidelines for completion of the CAP

Clinical Bottom Line
The consensus of the reviewers on implications of the paper on clinical practice. Whilst this may be somewhat subjective, it is hoped that robust discussion, the Level of Evidence and your comments on the design will enable you to produce a practical/realistic 'bottom line'. Many of the papers in Speech Pathology may have limitations, but the Clinical Bottom line should be aimed to help clinicians apply what evidence there is.

Clinical Question
This should ideally include four components:

- the patient or problem
- the intervention (or diagnostic test or prognostic factor)
- the comparison intervention or test *(optional)*
- the outcome

Design
Refer to pages 12 to 15 of the EBPIG Resource Package for guidance in reviewing the design used.

Comments on Design
Pages 12 to 15 of the Resource Manual should again assist here. You may also find it useful to refer to the forms 'Evaluating case studies/case series' and 'Critical appraisal sheet' adapted from Dr Lil Mikuletic's (see 'Critiquing/Appraising the Evidence).

Level of Evidence
It is recommended that the paper you are reviewing be rated against the NH&MRC Levels of Evidence, as reproduced here. The levels may be updated from time to time by the NH&MRC, but use of the ratings listed here will ensure consistency across CATs and groups. These levels are listed with comments on pages 15 and 16 of the Resource Package.

LEVEL

I. Evidence obtained from a systematic review of all relevant controlled trials

II. Evidence obtained from at least one properly designed randomised controlled trial

III. **1** Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method)

2 Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case-control studies, or interrupted time series with a control group

3 Evidence obtained from comparative studies with historical control, two or more single-arm studies or interrupted time series without a parallel control group

IV. Evidence obtained from case series, either post-test or pre-test and post-test