Assessing and treating aggression in children and adolescents with developmental disabilities: a 20-year overview
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CRD summary
This overview of the assessment and treatment of aggression in children with developmental disabilities identified a number of effective treatments, but suggested that more research is needed using group experimental designs. The lack of an assessment of study quality and the limited reporting of data and methods suggest that the authors’ conclusions might not be reliable.

Authors' objectives
To review the existing literature on aggression in children with intellectual disabilities assessing recent developments in assessment and treatment. The systematic review was split into two parts, one evaluating methods of assessment of aggression and the other evaluating treatment. This abstract reported on the treatment part only.

Searching
Psychological Abstracts was searched from 1983 to 2003, as were the reference lists of included studies; the search terms were not reported. Book chapters and literature reviews were used as secondary sources (details not provided). Book chapters, dissertations, reviews, bibliographies and government publications were excluded from the review.

Study selection
Study designs of evaluations included in the review
Studies with experimental designs using group methodology or single-case designs with adequate controls were eligible for inclusion. Single-case designs with inadequate baseline, without an adequate period of time to establish a treatment trend, or with inadequately defined target behaviours, were excluded.

Specific interventions included in the review
The inclusion criteria did not specify the treatments. The included studies assessed individual treatments or combined treatment programmes. The treatments included functional communication training; differential reinforcement of other behaviours; time out; noncontingent reinforcement; aversive stimuli; manipulation of establishing operations; social skills training; and the pharmacological treatment, risperidone.

Participants included in the review
Studies of children and adolescents with an intellectual or developmental disability aged from 0 to 22 years were eligible for inclusion. Studies of older people were excluded unless the results for those under 22 years could be extracted separately.

Outcomes assessed in the review
The inclusion criteria did not specify the outcomes. The outcomes reported by the included studies were frequency of aggressive behaviour, and conduct problems, compliant/calm and adaptive social scores on the Nisonger Child Behaviour Rating Form (NCBRF).

How were decisions on the relevance of primary studies made?
The authors did not state how the papers were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
The authors did not state that they assessed study validity, although studies included in the review had to meet minimum methodological criteria with respect to experimental design (details reported in the 'Study Designs' section).
Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. Details of the study participants, research design, whether or not there was functional analysis, interventions, and the main result relating to aggressive behaviour were extracted from each study.

Methods of synthesis
How were the studies combined?
The study results were tabulated and reported in a brief narrative synthesis according to type of treatment.

How were differences between studies investigated?
Differences between the studies were only briefly discussed in relation to study design and treatment.

Results of the review
Thirty-four studies were included: 3 group designs (n=245) of which 2 were double-blind placebo-controlled randomised trials of risperidone, 19 reversal designs (n=28), 8 multiple baseline designs (n=16) and 4 multi-element designs (n=4).

All the evaluated treatments successfully reduced aggression with the frequency of aggressive behaviour reduced to zero in most cases. The two trials of risperidone both found that risperidone treatment led to significantly reduced scores on NCBRF problem scales, with one finding improvements in the conduct problem scale and the other in the compliant/calm and adaptive social scales.

Authors’ conclusions
The authors’ conclusions appear to be that there have been relatively few studies in the past 20 years that used adequate experimental methods for assessing or treating children with developmental disabilities. From the part of the review assessing treatment for aggression, the authors concluded that a number of effective treatments have been identified, but the number of studies evaluating each procedure is small. Differential reinforcement of other behaviours has a long history as an established treatment. There is also substantial evidence to support the use of functional communication training in children with developmental disabilities.

CRD commentary
This review specified some inclusion criteria, but apart from eligible participants they were not stated clearly and applied to both review questions. The search was limited to one printed source of abstracts and reference lists of the identified studies, thus relevant studies might have been missed. The authors did state that they produced not an exhaustive review but one that intended to represent current trends and practices. They performed no validity assessment, apart from specifying minimum eligibility requirements regarding study design, and there was no indication of the reliability of the study results. It was not reported whether two people selected studies for the review and extracted the data only limited details of each study were presented, particularly for intervention details and results. No attempts were made to synthesise the results of the studies of treatments for aggression.

The authors’ conclusions are more about the types of treatments identified for treating aggression in children and adolescents with developmental disabilities, rather than the effectiveness of the treatments; this makes it difficult to assess their reliability based on the evidence presented. Overall, the limited reporting of the included studies and the lack of an assessment of study quality assessment hamper the reader’s interpretation of the studies included in this review. The authors’ conclusions should therefore be interpreted with caution as they might not be reliable.

Implications of the review for practice and research
Practice: The authors did not state any implications for practice.

Research: The authors stated that more group studies of treatments and combinations of treatments are needed to
establish treatment efficacy and generalisability to other settings.

**Bibliographic details**

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**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.