Increasing social interaction among adolescents with intellectual disabilities and their general education peers: effective interventions

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CRD summary
This review examined the efficacy of interventions to increase social interaction among adolescents with intellectual disabilities in secondary schools and their general education peers. It concluded that such interventions are effective, but it is unclear which interventions are best in particular contexts. Despite limitations of the review, the authors' conclusions are reasonable and identify important areas of uncertainty.

Authors' objectives
To examine the efficacy of interventions to increase social interaction among adolescents with intellectual disabilities in secondary schools and their general education peers.

Searching
ERIC, Education Abstracts, PsycINFO and Social Science Abstracts were searched from 1975 to 2004 for studies published in peer-reviewed journals; the search terms were provided. Eighteen journals were handsearched and the bibliographies of relevant reviews were screened. The Social Sciences Citation Index was also used.

Study selection
Study designs of evaluations included in the review
Empirical investigations were eligible for inclusion.

Specific interventions included in the review
Studies of interventions aimed at increasing social interaction were eligible for inclusion. The included studies were of skills-based interventions such as social skills training and self-management and social interaction instruction, and support-based interventions such as peer training or support and general education class participation support. In most of the studies the intervention was implemented by a researcher.

Participants included in the review
Studies where at least half of the participants had an intellectual disability (as defined by the authors) and where they were receiving special education services in a secondary school setting were eligible for inclusion. People with secondary disabilities such as autism or health impairment were also included, but only where this was accompanied by intellectual disability. The participants were male and female and were aged from 11 to 22 years. Fifty-eight per cent of the participants had a sole label of intellectual disability. In the majority of the included studies the setting was outside general education classrooms, such as in cafeterias, special education classrooms and hallways. It was stated that the participants in the included studies had zero rates of social interaction at baseline, though specific details were not provided. All of the studies appeared to have been conducted in the USA.

Outcomes assessed in the review
Studies were eligible for inclusion where the outcome of interest was a measure of social interaction, obtained using direct observation techniques, between a student with intellectual disability and a general education peer for at least half of the participants. The included studies used direct observation sessions ranging from 3 minutes to the whole school day. The length of observation tended to be substantially shorter for studies of skills-based interventions than for those of support-based interventions.

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 validity.

Data extraction
The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction.

Methods of synthesis
How were the studies combined?
A narrative synthesis was conducted.

How were differences between studies investigated?
The studies were grouped by type of intervention and differences between the studies were discussed in relation to the participants, intervention settings, outcome measures and research design.

Results of the review
Twenty-six studies were included (109 participants with disabilities): 22 single-case design studies and 4 studies described as group design.

Although a formal quality assessment was not conducted, the authors did report whether studies included assessments of intervention integrity, i.e. whether the intervention was implemented as planned. It was assessed in 7 of the 26 studies and in some of these the assessment was very limited. The authors noted that this restricts the conclusions that can be drawn about whether the effects can be attributed to the intervention.

The studies were summarised individually; this makes it difficult to provide an overall summary of the results, especially since specific data for outcomes in the individual studies were not provided. Most of the studies showed some improvement in social interaction, though there was contradictory evidence. In their synthesis the authors highlighted a number of factors that make it difficult to draw conclusions about for whom, and under what conditions, skills-based and support-based interventions might be effective: the limited information provided by studies on the abilities of the participants; the variability in extent of intellectual disability; and the small number of studies investigating any single intervention. Most of the general education students in the included studies agreed to interact with their peers with intellectual disability when requested. Therefore, although most of the interventions increased participant interaction with general education peers, it is unclear whether this would be replicated in contexts where the general education students did not receive such a directive. Most of the interventions were multi-dimensional and it is unclear from the evidence available which components were essential. The direct observation period for outcome assessment for skills-based interventions was very short and it remains unclear whether benefits are sustained outside these short periods. In addition, the long-term effects of the interventions were not investigated.

Authors' conclusions
Skill-based and support-based interventions are effective at facilitating peer interaction. However, the focus and degree of behaviour change varied across interventions and there is a need for discussion about for whom, and under what conditions, these interventions might be effective.

CRD commentary
The review addressed a clear research question using defined inclusion criteria. Several sources were searched for studies though only published studies were sought, thus introducing the risk of publication bias. The quality of the studies was not formally assessed. The study selection and data extraction processes do not seem to have been carried out in duplicate or checked, thereby introducing the risk of error and bias. Relevant details were provided about the participants, context and interventions. However, only a narrative summary of the results was provided, making it difficult to determine how improvement was defined. The narrative synthesis was appropriate and the authors
considered, in detail, the sources of diversity across the studies; this makes definitive interpretation of the results difficult. Despite the limitations, the authors’ conclusions seem reasonable and they clearly identify remaining areas of uncertainty.

Implications of the review for practice and research
Practice: When considering how to increase social interaction among students in secondary schools, practitioners should be careful to identify the specific aspect of social interaction being targeted, as this will guide as to the most appropriate intervention; use an intervention involving skills-based and support-based components; be cognisant of the resource implications of different interventions; and ensure that general and special educators collaborate.

Research: Further research, with a broader range of participants, is required to determine who, and in what settings, interventions aimed at increasing social interaction are effective and whether skills-based or support-based interventions are more effective. Other important questions identified were whether the interventions are increasing interactions in a way people with learning disabilities value as socially important; whether interventions maintain their effectiveness where general education peers are not directed to interact; whether the benefits are long-term; and whether the interventions can be implemented by teachers.

Bibliographic details

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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.