8-1991

Prereferral Intervention: A Review of the Research

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A REVIEW OF THE RESEARCH

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ABSTRACT

There is a national trend toward requiring prereferral intervention procedures prior to placing students in special education programs. A review of the research associated with prereferral intervention is presented. Findings suggest that prereferral intervention approaches can have positive impact on special education service delivery practices. The findings also indicate that such interventions can increase the abilities of teachers to educate students who are experiencing difficulty and improve the attitudes of teachers toward such students. Furthermore, the interventions implemented under the prereferral intervention approaches appear to produce the desired student performance, which decreases the overidentification of students as having handicaps. In sum, prereferral intervention may be a viable option to more traditional general and special education service delivery practices. Caveats to such conclusions and future research needs are discussed.

* * *

A service delivery approach supported by a majority of State Education Agencies (SEAs) is prereferral intervention (Carter & Sugai, 1989). This approach can be defined broadly as a systematic collaborative effort to assist general education teachers (Pugach & Johnson, 1989). Prereferral intervention is designed to (a) reduce the need for special education services by providing assistance to students in the general education classroom (Graden, Casey, & Christenson, 1985), (b) decrease the overidentification of students as having handicaps (Graden, Casey, & Christenson, 1985), (c) facilitate the integration of students with handicaps into the general education environment (Evan, 1990),

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and (d) increase the abilities of teachers to educate students who are experiencing difficulties and improve the attitudes of teachers toward such students (Graden, 1989; Pugach & Johnson, 1989).

Prereferral intervention represents a rethinking of general and special education service delivery practices (Pugach & Johnson, 1989). It represents a trend toward increasing the use of more indirect special education services and the integration of general and special education (Graden, 1989; Graden, Casey, & Christenson, 1985). Furthermore, scholars have associated prereferral intervention with the Regular Education Initiative (REI), as well as with efforts to promote a fuller realization of mainstreaming (e.g., Evan, 1990). The purpose of this review is to examine the effects of prereferral intervention approaches on (a) special education service delivery practices, (b) the performance of students, and (c) the abilities and attitudes of teachers. Another purpose of this study was to investigate clarifying evidence associated with prereferral intervention.

Method

Article Selection Procedures

The literature examined was identified through computer searches of the Exceptional Child Education Resources Abstracts, Dissertation Abstracts, and Psychological Abstracts. Descriptors included professional consultation, consultation programs, consult, special education, services for disabled, and intervention with schools. (Prereferral or prereferral intervention are not employed as descriptors by the abstracting services.) An ancestral search was also conducted from the identified articles. That is, the reference sections from the identified manuscripts were examined to locate additional papers.

The review was limited to articles associated directly with prereferral intervention. Manuscripts reviewed were those in which the researcher(s) studied a prereferral intervention approach or factors associated with prereferral intervention. The prereferral intervention approaches reviewed include (a) Teacher Assistance Teams (as developed by Chalfant, Pysh, & Moultrie, 1976), (b) School Consultation Committees (as developed by McGothlin, 1981), (c) the prereferral intervention model (as developed by Graden, Casey, & Bonstrom, 1983), (d) Teacher Resource Teams (as developed by Maher, in press), (e) Mainstream Assistance Teams (as developed by Fuchs & Fuchs, 1989a), and (f) collaborative peer problem solving (as developed by Pugach & Johnson, 1988). Articles not included in this review are those in which researcher(s) reported they had studied some other service delivery approach or factors unassociated with prereferral intervention. A total of 16 articles were identified. Thirteen of the manuscripts were investigations of the effects of a prereferral intervention approach, and the remaining three were examinations of factors associated with prereferral intervention. Five of the 13 studies of prereferral intervention approaches focused on the effects on special education service delivery.
practices, five on student performance, and three on the abilities and attitudes of teachers. One of the remaining three manuscripts was an examination of the effect of the number, type, availability, extent of use, preference of use, and effectiveness of prereferral interventions on mildly handicapped classification rate. The two remaining articles were analyses of the prereferral interventions used by teachers.

**Analysis Techniques**

Articles were examined for author(s), year of publication, research focus, dependent and independent variables (if applicable), and results. Categorization of the information was completed independently by two coders. Percentage of agreement was calculated for each category using the following formula: agreements between coders A and B divided by agreements and disagreements between coders A and B multiplied by 100 (Kazdin, 1982). Average agreement across the categories was .97, ranging from .95 to 1.00. Disagreements were resolved through discussion between coders.

It is important to note that the descriptions as well as the types and rigorousness of the methodologies were uneven across the manuscripts. Thus, the relative detail provided for each paper is reflective of such unevenness rather than a systematic effort to weigh some articles more heavily than others. The information is summarized in Table 1 and discussed in the remainder of this paper. Table 1 presents the developer(s), description of the prereferral intervention approach, and summary of associated general outcomes. Outcomes attributable to specific researcher(s) are summarized in the remainder of the paper.

**Results**

**Effect on Special Education Service Delivery Practices**

Chalfant and colleagues (1979) implemented Teacher Assistance Teams (TATs) across five school districts. In a case study of one of the five school districts, the TATs at seven schools resolved 129 (63.5%) of 203 referrals. The teams referred an average of 74 (36.5%; range = 13.2% to 60%) students for special education services. Chalfant et al., however, failed to provide a comparative standard to fully evaluate the effect of the TAT approach.

In another case study, McGlothlin (1981) studied the effect of a School Consultation Committee (SCC). McGlothlin reported there was a 50% reduction in referrals for formal assessment. A comparative standard and more specific data, however, were not provided.

Graden, Casey, and Christenson (1985) implemented a prereferral intervention model across six schools (incorporating the results from three schools in an earlier study by Graden et al., 1983). The model was modified across the six schools to ensure the cooperation of the principals. The modifications ranged from having referrals flow through the child study team to the consulting teacher
<table>
<thead>
<tr>
<th>Approach</th>
<th>Developer(s)</th>
<th>Description</th>
<th>Outcome summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher assistance team</td>
<td>Chalfant, Pysh, &amp; Moultrie (1976)</td>
<td>Peer problem-solving group provides assistance to referring teachers. Group members include the referring teacher and elected faculty.</td>
<td>Referrals for special education were reduced.</td>
</tr>
<tr>
<td>School consultation committee</td>
<td>McGlothlin (1981)</td>
<td>Team of regular and special education teachers helps teachers design, implement, and evaluate interventions.</td>
<td>Referrals for formal assessment were reduced.</td>
</tr>
<tr>
<td>Prereferral intervention model</td>
<td>Graden, Casey, &amp; Christenson (1985)</td>
<td>A consultant (e.g., teacher) is assigned by the school administration to provide assistance (i.e., consultation, observation, and conference) to classroom teachers.</td>
<td>Formal assessment and special education classification rates were reduced in some schools.</td>
</tr>
<tr>
<td>Teacher resource team</td>
<td>Maher (in press)</td>
<td>An outside consultant trains regular classroom teachers and 3 building-level specialists to provide consultation, technical assistance, and inservice training to regular classroom teachers.</td>
<td>Student and teacher improvement gains were met in a majority of cases. Referral for formal assessment decreased.</td>
</tr>
<tr>
<td>Mainstream assistance team</td>
<td>Fuchs &amp; Fuchs (1989a &amp; 1989b)</td>
<td>BC3—consultants in conjunction with the multidisciplinary team guide referring teachers through problem identification, analysis, classroom visits, plus formative evaluations. BC2—collaborative problem identification and analysis plus at least 2 classroom observations with feedback by the consultant. BC1—collaboration between consultant and teacher to identify and analyze problems.</td>
<td>Student behavior problems decreased in frequency. Most inclusive variants (BC2 and BC3) were more effective than BC1 version.</td>
</tr>
<tr>
<td>Peer problem solving</td>
<td>Pugach &amp; Johnson (1988)</td>
<td>A peer is assigned to assist the referring teacher in clarifying classroom problems, generating potential interventions, and developing an intervention evaluation plan.</td>
<td>Teacher’s tolerance for the range of teachable students increased.</td>
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Note. Specific outcomes attributable to specific studies are discussed in the text.

aBC = Behavioral Component.
to referrals made directly to the consulting teacher. Relative to the pre-implementation of the model, formal assessment and special education placement rates declined in four of the six schools. However, in the remaining two schools there were upward trends in the number of students formally assessed and then placed in special education. It appears that the idiosyncratic modifications made to the prereferral intervention model were unassociated with the differential treatment outcomes.

Expanding on this work, Ponti, Zins, and Graden (1988) employed a seven-component framework developed by Maher and colleagues (Maher & Bennet, 1984; Maher & Illback, 1985), denoted by the acronym DURABLE (Discussing, Understanding, Reinforcing, Acquiring, Building, Learning, and Evaluation), to implement the prereferral intervention approach. They studied the impact of the approach on the range of services provided by the school, rate of referrals for formal assessment, and perceptions of teachers regarding the prereferral intervention approach. Relative to preimplementation of the model (Years 1 through 3), the range of services increased to include more consultation and counseling. The rate of referrals for formal assessment decreased by 40% (Years 4 and 5). Additionally, teachers indicated that they viewed the prereferral intervention approach positively and that it provided them more support and assistance.

Maher (in press) systematically (i.e., team members were selected and provided extensive training) implemented Teacher Resource Teams (TRTs) in two high schools. The TRTs met an average of 1 hour 42 minutes and 1 hour 25 minutes per week. Respectively, the teams discussed an average of 6.2 and 5.3 cases per meeting. The TRTs at the two high schools discussed a total of 235 cases. Seventy-eight student attainment goals were set with goal attainment occurring in 59 (75%) of the cases. Eighty teacher improvement goals (e.g., change instructional methods) were set, with goal attainment in 66 (85%) of the cases; the TRTs did not think it was necessary to set goals in 74 cases. The decreases in the number of referrals for special education from 15.0 to 6.8 and from 13.8 to 5.8 were statistically significant. In addition, teachers indicated they were satisfied with the prereferral intervention support services they received under the TRT approach. Systematic prereferral support services did not exist prior to the implementation of the TRTs.

Effect on the Performance of Students

Grabner and Dobbs (1984), in a case study, examined the effect of a TAT approach on the disruptive behavior of a seventh-grade student. Although no formal data were provided, the teacher reported that the behavioral contract implemented under the TAT approach was effective. Consumer satisfaction alone, however, may be an insufficient basis on which to evaluate the approach or recommend its use.

In another case study, Zins, Graden, and Ponti (1988) studied the effect of the prereferral intervention model (described earlier) on the disruptive and non-
compliant behaviors of a first-grade student. By the second week of the intervention, the student’s weekly occurrences of physical aggression towards others and property were reduced from 4 to 0, spitting was reduced from 26 to 7, and cursing was reduced from 23 to 13. However, the weekly occurrences of noncompliance by the student failed to decline. An analysis of why the intervention failed to produce the desired effect was not conducted.

In a series of studies, Fuchs and Fuchs (1989a, 1989b, 1990) studied a Mainstream Assistance Team (MAT) approach. The MAT was based on the four-stage behavioral consultation model developed by Tobari and Davis (1979). MATs initially developed a variety of interventions. However, because teachers failed to monitor and record student performance consistently, the MATs always implemented a self-management intervention. The intervention required students to monitor, record, and evaluate their behavior as well as provide verbal feedback to themselves. Behavioral observations and rating scales administered to teachers (reported earlier by Fuchs, 1989) indicated the intervention reduced the occurrences of the problem behaviors of students. Furthermore, teachers’ attitudes toward the target students improved. (More specific information was not provided.)

In a component analysis, Fuchs and Fuchs (1989b) examined the effects of three increasingly inclusive variants (Behavioral Component [BC] 1, 2, and 3, respectively) of the MAT approach on student performance (see Table 1). Direct observations of the behaviors of students indicated there were statistically nonsignificant differences among the three variants. However, these findings conflicted with the effectiveness ratings of the teachers. Teachers indicated that the most inclusive versions (BC 2 and 3) were more effective than the least inclusive version (BC 1). Fuchs and Fuchs (1989b) pointed out that the inconsistency in the findings may have resulted from the inaccuracy of the behavioral observations and/or teacher ratings, or because the behavioral observation and teacher ratings addressed different dimensions of behavior. That is, behavioral observations generated frequency data, whereas teacher ratings represented judgments about severity, manageability, and tolerance of behavior.

Fuchs and Fuchs (1990) attempted to clarify these conflicting findings. They employed a different teacher rating scale and compared teacher ratings communicated to the consultant with those expressed anonymously. Fuchs and Fuchs also increased the frequency of behavioral observations and compared the behaviors of target students to their peers. Treatment fidelity data indicated the teachers under each of the variants implemented the self-management intervention with similar frequency, thoroughness, and accuracy. Because the initial interventions were adequate under the most inclusive version (BC 3), the MATs did not modify any of the interventions. As a result, there was little or no difference between the BC 2 and 3 versions.

Only the two most inclusive variants (BC 2 and 3) produced a statistically significant decrease in the problem behaviors of target students relative to their
peers. Consistent with these findings, teacher ratings of the problem behaviors of target students under the two most inclusive variants showed a statistically significant decrease, whereas those of the teachers under the least inclusive version (BC 1) did not. Fuchs and Fuchs (1990) pointed out that relatively few school districts may have the resources required to implement the most inclusive variants.

**Effect on the Abilities and Attitudes of Teachers**

Pugach and Johnson (1988) studied the effect of a collaborative peer problem-solving process on the tolerance, accuracy of problem identification, and effectiveness of the prereferral interventions of teachers. Relative to teachers in the nonequivalent control group (43 teachers from elementary schools), teachers under the intervention group (48 teachers from elementary and junior high schools) showed a statistically greater increase in their tolerance for the range of cognitive abilities their idealized teachable students might exhibit. Furthermore, teachers redefined 91% of the classroom problems and reported (no formal observations were conducted) that the interventions produced the desired behavioral change.

In two related studies, researchers surveyed educators regarding prereferral intervention (Carter & Sugai, 1989; Harrington & Gibson, 1986). Carter and Sugai reported that a majority of states required or recommended that local education agencies establish prereferral intervention procedures. However, a majority of the SEA officials surveyed indicated they were unsure of the effectiveness of prereferral intervention procedures.

Only 5% of the 41 general education teachers surveyed by Harrington and Gibson (1986) thought preassessment teams provided them with new intervention ideas. A majority of the teachers indicated that the teams failed to explore a sufficient variety of intervention options and those they provided were unsuccessful. Forty-two percent of the teachers indicated they had failed to implement the recommended interventions. Nevertheless, 74% of the teachers (only 56% responded to this question) indicated they would like to have the preassessment process maintained.

**Effect of Prereferral Interventions on Classification Rate**

McCall (1990) studied the association among (a) number, (b) type, (c) extent of use, (d) preference of use, and (e) effectiveness of prereferral interventions and the mildly handicapped classification rates of low and high (2% to 5% and 9% to 15% of the total school enrollment) school districts. Low and high classification rate school districts failed to differ on the number, type, extent of use, or preference of use. However, teachers in low classification rate school districts viewed classroom-, school-, and district-based prereferral interventions as more likely to be successful.
Analyses of Prereferral Intervention Used by Teachers

Ysseldyke, Pianta, Christenson, Wang, & Algozzine (1983) studied the association between the type of prereferral interventions general education teachers employed and the reasons for their referrals for formal assessment. They also asked teachers to indicate those individuals they conferred with prior to making a formal referral for assessment. The interventions used most often by teachers included (a) instructional methods (i.e., techniques used to teach academic and social behaviors), (b) behavioral strategies (i.e., negative or positive reinforcement), (c) structural changes (i.e., changes in the amount of structure provided the student, e.g., one-to-one work with an aide), and (d) specialized help (provide the student additional specialized assistance, e.g., resource room). With the exception of behavioral strategies used for behavior problems, little association was noted between the teachers' reasons for referral and the types of prereferral intervention they employed. Furthermore, teachers most often conferred with special education teachers, principals, and parents prior to referring a student for formal assessment.

In an extension of this work, Sevick and Ysseldyke (1986), in two studies, investigated the proposed and actual prereferral interventions of general education teachers and the reasons for their referrals for formal assessment. In Study 1, based on a 2-page summary describing a student with unmanageable behavior, general education teachers (N = 59) were asked to rate a number of interventions they would employ. Teachers rated highest those interventions that (a) would provide them more information on the student (e.g., achievement test scores), (b) they directed (e.g., they provided the student feedback regarding classroom expectations), and (c) involved some type of contingency management. Teachers rated tutoring, retention, and placement of the student in another general education classroom or in a self-contained special education classroom lowest.

In the second study, teachers were asked their reasons for making referrals for formal assessment and the prereferral interventions they used most often. Teachers most often referred students for behavioral problems. The interventions they used most often included behavioral strategies (e.g., reinforcement), conferences with the student or parents, and modification of instructional methods (e.g., intervention used to teach an academic lesson or influence behavior).

Discussion

There is a national trend toward requiring prereferral intervention approaches (Carter & Sugai, 1989). Some educators think such approaches are viable options to more traditional general and special education service delivery practices (Harrington & Gibson, 1986). The findings suggest that prereferral intervention approaches can reduce the number of students referred for formal assessment and then placed in special education. The findings also indicate that
the strategies implemented under the prereferral intervention process more often than not produce the desired student performance. The prereferral intervention process also appears to increase the abilities of teachers to educate students who are experiencing difficulty and improve the attitudes of teachers toward such students. The importance of these latter findings is strengthened by reports that teachers apply inappropriate interventions (Sevick & Ysseldyke, 1986) and that their perceptions of the effectiveness of prereferral interventions are associated with mildly handicapped classification rate (McCall, 1990).

It is important to mention several caveats to such conclusions. With the exception of Fuchs and Fuchs (1989b, 1990), the pre- and quasi-experimental designs employed by the researchers failed to provide the experimental control necessary to make strong causal claims. Furthermore, with the exception of Maher (in press), the researchers who employed such designs failed to examine sources of invalidity. Although such evaluations are necessary to suggest causal claims under all experimental designs, they are particularly essential when pre- and quasi-experimental designs are utilized. A historical record, for example, of school activities that might confound the findings could be used to examine the validity of the treatment outcomes.

With notable exceptions (Fuchs & Fuchs, 1989b, 1990; Maher, in press), researchers also failed to assess treatment fidelity. That is, they failed to document that the prereferral intervention procedures were implemented as intended by their developer. Such assessments would have served to clarify the impact of the prereferral intervention approaches and would enable their replication across populations and programs. Treatment fidelity data would also serve to clarify whether a particular prereferral intervention approach is collaborative. Although scholars have debated this issue (e.g., Pugach & Johnson, 1989), the descriptions of the approaches failed to substantiate whether a particular approach was collaborative. Associated with this issue, researchers need to define collaboration under prereferral intervention to facilitate the development of more collaborative prereferral intervention approaches.

In sum, the findings of this review provide a framework for educators to develop both prereferral intervention approaches and prereferral intervention preservice and inservice training programs. A comprehensive approach to the conduct of prereferral intervention should include (a) clearly defined goals and objectives, (b) the selection of educators and other professionals with expertise and training to implement the approach (i.e., knowledgeable of intervention strategies appropriate for general education environments and of processes to facilitate collaboration), (c) the resources (time and funds) necessary to successfully implement prereferral intervention procedures and the classroom interventions employed under the procedures, and (d) formative and summative evaluation procedures to judge the effectiveness of the prereferral intervention approach.

Similarly, prereferral intervention preservice and inservice training programs should help educators to identify, develop, and implement interventions applicable for the general education environment. Teachers also need instruction on
the collaborative processes that underlie the prereferral intervention approaches. In addition, prereferral intervention training programs should provide educators extensive training in formative and summative evaluation procedures necessary to develop and refine prereferral intervention.

The findings also provide a framework to direct future research. Although decreases in the referral rates for formal assessment and changes in the attitudes of teachers are important, it is clear that positive changes in student performance that generalize across settings and time are most important. Thus, additional studies of the effect of prereferral intervention on student performance are needed. These studies should include both short-term and longitudinal comparative studies of the academic and social behaviors of students relative to those observed in more traditional general and special education settings.

Future research should also identify the factors that affect the implementation of prereferral intervention approaches, such as the administrative structures (e.g., resources, staffing, policies, and support), process variables (e.g., skills, roles, expectations, perceptions, and characteristics of staff responsible for implementing the approach), interventions (e.g., effectiveness and appropriateness of interventions for the general education environment), and characteristics of students whose needs are best met with prereferral intervention approaches (e.g., severity and type of academic and social deficits). These investigations would provide important information to develop and refine prereferral intervention approaches.

More comparative research of the relative effects of the individual program components included under the prereferral intervention approach is also needed. Although each of the prereferral intervention approaches included multiple components, only Fuchs and Fuchs (1989b, 1990) studied the relative contribution of the components. Such investigation would provide information to understand the role of the components and to develop prereferral intervention approaches that are most feasible to implement.

Researchers also need to monitor and evaluate the effectiveness of statewide prereferral intervention mandates. Furthermore, questions associated with the administrative structures of these mandates such as, “Who (general or special education) should control the prereferral intervention process?” or “Can general and special education share control of the process?” need to be addressed. These investigations would provide information to facilitate the progressive refinement of such mandates.

References


