This investigation examined the relationship between personal efficacy ratings of preservice teachers seeking licensure in the area of emotional and behavioral disorders (EBD) and performance ratings by their practicum supervisors. Forty-five teachers completing the Emotional Behavioral Disorders practicum at the University of Minnesota were asked to complete the Teacher Efficacy Scale, which measures personal efficacy and the teacher's sense of teaching efficacy. No significant differences were found between personal efficacy and teacher ratings. No differences were found between male and female teachers, elementary and secondary teachers, or type of practicum placement. The findings of this study yielded contrary results to prior research in teacher efficacy. Given the unique challenges faced by EBD teachers, studies examining the differences between these teachers and regular education teacher ratings of personal efficacy are suggested. (Contains 12 references.) (JDD)
Self-Efficacy and Performance Ratings of Preservice Teachers in the Area of Emotional and Behavioral Disorders

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Running Head: SELF-EFFICACY AND PERFORMANCE RATINGS
Teacher efficacy accounts for individual differences in teaching performance. The differences found in the behavior of low- and high-efficacy teachers were in academic focus, teacher feedback, and classroom management. The theory of teacher efficacy is of particular relevance in special education because of the nature of the student population. This investigation examined the relationship between personal efficacy ratings of preservice teachers seeking licensure in the area of emotional and behavioral disorders and performance ratings by the practicum supervisors. The effects of gender, certification level, and practicum site on personal efficacy ratings were also examined. No significant differences were found between personal efficacy and teacher ratings. In addition, differences related to gender, certification level, and practicum site were not found. These results were discussed in light of prior research that revealed a significant relation between efficacy and similar outcome variables.
Self-Efficacy and Performance Ratings of Preservice Teachers in the Area of Emotional and Behavioral Disorders

Introduction

Teachers' sense of efficacy has been defined as the belief in their own ability to affect student performance. This belief influences student-teacher interactions and the teachers' success in producing student achievement gains (Dembo & Gibson, 1985; Greenwood, Olejnik, & Parkay, 1990). Studies in the area of self-efficacy have not investigated specific subgroups of teachers. One of these subgroups are teachers of students identified as emotionally and behaviorally disordered (EBD). EBD teachers may differ in self-efficacy.

Development of the Teacher Efficacy Scale

Gibson and Dembo (1984) developed and validated a scale, The Teacher Efficacy Scale, that measured two dimensions of self-efficacy. Results of a factor analysis conducted on responses from 208 elementary school teachers revealed two factors that correspond to Bandura's two component model of efficacy (Dembo & Gibson, 1985). Factor one, the teacher's sense of personal efficacy, represents the teacher's belief that they have the skills and abilities to bring about student learning. One example of items in this area is, "When the grades of my students improve it is usually because I found more effective teaching approaches." Factor two, the teacher's sense of teaching efficacy, is the
belief that the teacher’s ability to bring about change is limited by external factors such as family background, home environment, and parental influence. An item from this factor is, "A teacher is very limited by what he/she can achieve because a student’s home environment is a large influence on his or her achievement." Gibson and Dembo also found that teacher efficacy appears to be a distinctively separate construct from verbal ability and flexibility, both of which have been related to student achievement gains.

Gibson and Dembo (1984) claim that teacher sense of efficacy accounts for individual differences in teaching effectiveness. They examined the relationship between assessed teacher efficacy and observable teacher behaviors related to academic focus and teacher feedback. Observation instruments were used to code classroom behavior for teacher-use-of-time and a question-answer-feedback sequence. Results indicated that high-efficacy teachers spent more time in whole group instruction than did low-efficacy teachers, indicating that students received more supervision, and also spent more time monitoring and checking seatwork. In the area of teacher feedback, low-efficacy teachers were more likely to lack persistence when a student gave an incorrect answer. These teachers would tend to go on to another student, supply the answer, or allow another student to call out the answer. High-efficacy teachers, on the other hand, tended to be more effective in
leading the students to the correct answer through repeating the question, providing a clue, or asking a new question.

These findings, although based on a small sample, are supported by a large body of teacher effectiveness literature that indicates successful teachers tend to maintain a strong academic focus and spend less time in nonacademic tasks (Brophy, 1986-87). The differential feedback patterns in this study are supported by findings in teacher expectation literature as well (Good, 1981). Teachers who, in general, expect the students to learn and who are confident in their own ability to teach persist or stay with a student until the student responds.

Teacher Characteristics Related to Efficacy

In a study that investigated teacher characteristics associated with teacher success in producing learning gains, Brophy and Evertson (1977) found that role definitions and expectations on the part of teachers were important factors that led to increases in student learning. Teachers who were more successful in producing student learning gains tended to have higher expectations and assume personal responsibility for making sure students learned. These teachers viewed obstacles or difficulties as something to be overcome by discovering teaching methods that would be appropriate. They did not see these obstacles as an indication that students were incapable of learning.
A teacher's sense of efficacy or the belief that he/she can have a positive effect on student learning appears to be related to teachers' classroom management (Woolfolk, Rosoff, & Hoy, 1990). These investigators examined the relationships and separate effects of the two dimensions of teacher efficacy, personal efficacy and teaching efficacy, and teachers' beliefs about management. The Teacher Efficacy Scale developed by Gibson and Dembo was used to measure the two dimensions of efficacy. For the 55 religious school teachers studied, confidence in one's instructional abilities (personal efficacy) related to more humanistic attitudes about classroom control. The stronger or more optimistic belief that all students can be taught (general teaching efficacy), the more humanistic the teachers' belief about control and the greater support for pupil autonomy in problem solving. Both those with greater sense of personal efficacy and teacher efficacy seemed more trusting of students, able to relinquish control, and share responsibility for classroom problems.

Efficacy and Competence

Trentham, Silvern, and Brogdon (1985) investigated relationships among the teachers' sense of efficacy and the superintendents' ratings of teacher's competency. The superintendents from 15 school districts each selected five superior, 5 average, and 5 low teachers based on their performance. No operational definitions of categories were
provided for the superintendents. Each of the teachers was mailed a questionnaire developed to measure efficacy specifically as it pertains to teachers. Superior and average competency teachers could be differentiated from low competency teachers on the basis of four significant variables, one of which was efficacy scores. Efficacy scores correlated with competency scores positively. This supported the predicted relationship that teachers who believe they make a difference are also seen by superintendents as persons with higher performance ratings. The other variable related to efficacy scores was willingness to rechoose teaching as a career. Those teachers who would continue to select teaching as a career had higher efficacy scores. This finding could be predicted from the literature. Teachers who see themselves as able to cope are more satisfied with the activities that they are involved in.

In a related study, the relationship between teacher's efficacy and teaching behaviors was studied in student teacher interns (Saklofske, Michayluk, & Randawa, 1988). Results yielded small but significant correlations between supervising teacher ratings of teaching behaviors and personal teaching efficacy as measured by a modified version of the Teacher Efficacy Scale developed by Gibson and Dembo (1984). The teaching behaviors rated were lesson presenting, classroom management, and questioning behaviors.
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These results support the existence of a relationship between teacher efficacy and teaching behaviors; however, the nature of the correlational analyses do not allow for casual relationships to be determined.

Gender and Grade Level Differences and Efficacy

Some of the research done in the area of teacher efficacy indicated that there are differences between elementary and secondary teachers' personal efficacy. Gender differences have also been found. Evans and Tribble (1986) compared the perceived teaching problems of elementary and secondary teachers of both sexes with perceived teaching problems of beginning teachers. Veenman's (1984) rankings of the problems of beginning teachers were used as a comparison. Most of the teachers involved in his meta-analysis were in their first year of teaching. They found preservice and beginning teachers similar in regards to perceived professional problems; however, beginning teachers placed higher priority on the important tasks of assessing students' work and relationships with parents. In addition, they investigated whether preservice teachers' level of concern about these teaching problems were related to their sense of efficacy. This study revealed gender differences and teaching specialty effects. Preservice elementary (male and female) and female teachers (regardless of teaching specialty) professed a significantly stronger sense of efficacy than
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did males and their secondary counterparts. This suggests an advantage in selection of fully committed individuals to work with children and an emphasis on commitment to education in seminars.

These same differences in gender and grade level were further supported by a study conducted in a large, urban school district (Greenwood, Olejnik, & Parkay, 1990). This study classified teachers into four efficacy belief pattern groups based on the responses to the two Rand items. Sixty percent of the female teachers were classified in the pattern that reflects the belief that teachers in general can make a difference and the teacher can personally make a difference, while only 35% of male teachers were so classified. Sixty-seven percent of the elementary teachers (88% female) were classified in this pattern as well while only 34% of the middle school teachers (60% female) and 49% of the high school teachers (56% female) were so classified.

The Present Study

Research in the area of teacher efficacy has not studied specific subgroups of teachers. One of these subgroups is teachers of students identified as emotionally and behaviorally disordered (EBD). Teachers of students labeled EBD may differ in self-efficacy from teachers in regular education. If a difference exists, it would be useful information to have given the unique challenges faced by these teachers. Students identified as EBD bring with
them to school a myriad of problems related to circumstances out of the teacher’s control. Teachers of students identified as EBD must believe that they can affect a change despite these circumstances. Efficacy differences in gender and certification level have been found for teachers in general. It would be important to know if the same differences hold true for teachers of students with emotional and behavioral disorders. This would provide valuable information in selecting and training teachers in the area of EBD. Furthermore, the relationship between this group of teachers’ sense of self-efficacy and their teaching performance needs to be studied.

The purpose of this study was to examine (a) the relationship between preservice teachers’ rating of personal efficacy and performance ratings by their practicum supervisors, (b) gender differences in preservice teachers’ ratings of personal efficacy, (c) differences between personal efficacy ratings of preservice teachers certified in elementary education and those certified in secondary education, and (d) differences between personal efficacy of preservice teachers who were provisionally certified and completed their EBD practicum on the job, and those placed by the practicum supervisors at a practicum site. A discussion of the findings and their implications for teacher training programs in the area of emotional and behavioral disorders will follow.
Self-Efficacy and Performance Ratings

Method

Participants and Setting

A total of 45 practicum teachers (17 male and 38 female) were asked to complete the Teacher Efficacy Scale (Gibson & Dembo, 1984). Twenty-two of the practicum teachers were certified in elementary education and 18 were certified at the secondary level with five holding specialty area certificates for kindergarten through twelfth grade. Three held specialty certificates in art education and two held certificates in the area of Trainable Mentally Handicapped and Moderately Mentally Handicapped certificates. The teachers were completing the Emotional Behavioral Disorders (EBD) practicum as a part of the University of Minnesota's EBD licensure program.

The University of Minnesota's practicum program consists of a 10-week, full-time experience in an educational setting providing services to students identified as having emotional disorders. The exception to this is summer practicum, which lasts only six weeks. Thirty-eight percent of the practicum teachers completed the practicum "on-the-job" and held provisional EBD teaching certificates. The remaining practicum teachers were placed in classrooms with certified EBD teachers as their cooperating or supervising teachers. Most teachers completed the practicum in districts within the metropolitan area, but a small number completed their practicum...
experience in a rural setting.

Practicum teachers participating in this study were enrolled in the 1990-91 academic year. Nine were enrolled during the Fall, five during winter quarter, ten during spring quarter, and 21 in the summer practicum program.

Measures

The dependent measures in the study were the Teacher Efficacy Scale (Gibson & Dembo, 1984) and performance ratings completed by the university practicum supervisors. The Teacher Efficacy Scale measures two dimensions of efficacy. The first, Factor 1, measures personal efficacy, which is the belief that one has the skills and abilities to bring about student learning. Factor 2 represents the teacher's sense of teaching efficacy. This is the belief that any teacher's ability to bring about change is significantly limited by factors external to the teacher, e.g., home environment. The scale consists of 32 items presented in a Likert format in which the teachers select a number (1=strongly disagree to 6=strongly agree) to indicate their level of agreement with each statement. The last two items are referred to as the Rand items developed for studies of efficacy conducted by Berman and McLaughlin (1977). One item is the "I can do it" item which states "If I try really hard, I can get through to even the most difficult or unmotivated students." The second item is the "It can't be done" item, which states "When it comes right
down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment."

At the conclusion of each practicum experience the university supervisors were asked to rate the teaching performance of each practicum student they had supervised. A rating of 1 to 10 was given, with 1 defined as very poor or failing teaching performance and 10 defined as outstanding or excellent teaching performance. This rating was based on the supervisor's direct observations of the practicum teacher in the classroom. The areas considered during the observations were behavior management, academic planning and instruction, and collaborative work with team members and other professionals.

**Procedure**

During each of the final EBD practicum seminars for fall, winter, spring, and summer, the teachers were asked to complete the Teacher Efficacy Scale (Gibson & Dembo, 1984). The teachers spent approximately 20 minutes completing the scale. Following the conclusion of each practicum, the university supervisors were asked to provide a performance rating for each student they had supervised. All ratings were done independently of the scoring of the Teacher Efficacy Scale.

After all data were collected, the Teacher Efficacy Scale was scored and coded for Factor 1 and 2, and the Rand
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items. The scoring procedure was as follows. Templates were used to total the nine items for factor 1 or personal efficacy and the six items for factor 2, teaching efficacy. In addition, the rating for each of the Rand items (item 31 and 32) was coded. This was done for each survey completed.

Results

Four research questions were addressed in this study:
(a) Is there a relationship between preservice EBD teachers' ratings of personal efficacy and performance ratings by their practicum supervisors; (b) Are there gender differences in preservice teachers' ratings of personal efficacy; (c) Are there differences between personal efficacy ratings of preservice teachers certified in elementary education and those certified in secondary education; and (d) Are there differences between personal efficacy ratings of preservice teachers who completed the EBD practicum on the job, and those who were placed by the university supervisors at a practicum site?

In order to establish the reliability of the instrument used to measure personal efficacy a correlational analysis was conducted to determine the relationship between the personal efficacy scores (factor 1) and teaching efficacy scores (factor 2) and the Rand items. The obtained correlations were: (a) between factor 1 and Rand II ($r = .578$); (b) between factor 2 and Rand I ($r = .576$); and (c) between factor 1 and factor 2 ($r = .314$).
To determine if there is a relationship between preservice EBD teachers' ratings of personal efficacy and performance ratings by their university supervisor, a second correlational analysis was conducted to determine the relationship between personal efficacy scores (factor 1) and university supervisors' performance ratings. The obtained coefficient for this analysis was .088.

To address the research questions regarding differences in gender, certification level, and practicum experience, the mean personal efficacy scores were compared. The reliability of the differences was examined using separate t-tests for independent means. The results are reported in Table 2. No significant differences were found between male and female teachers, elementary and secondary teachers, or by type of practicum placement.

Discussion

Data in this study support the idea that efficacy can be measured reliably. The significant intercorrelations found for factor 1 and factor 2, and the Rand items provide support for the reliability of the Teacher Efficacy Scale
(Gibson & Dembo, 1984). However, no clear relationship between personal efficacy and university practicum supervisors' performance ratings was established. Furthermore, no significant differences were found between the personal efficacy scores for female and male preservice teachers of students identified as having emotional and behavioral problems. In addition, no significant differences were found between certification levels (elementary and secondary), or for the type of practicum placement.

The findings of this study yielded contrary results to prior research in teacher efficacy. This study did not support the link between efficacy and teacher performance based on direct observation of behavior management, academic planning and instruction, and collaborative work with team members. This lack of evidence indicates that caution should be exercised when using the Teacher Efficacy Scale to predict future teaching performance of EBD teachers.

At this point much remains to be known about teachers' sense of efficacy and its usefulness in making educational decisions. The question of self-rating should be considered as part of this issue. Teachers may report a belief that they can effect change, but this may be very different from how they actually behave in teaching situations. The lack of significance in the results of this study may have been due to self-reporting bias. Another limitation of this
study were the performance ratings. The performance ratings were based on several observations of actual teaching situations, though limited by their lack of objectivity and specific criteria. There was little variability in the ratings, with all the ratings falling on the high end of the scale. Furthermore, the sample group was a self-selected group. It may be that teachers who choose to teach students identified as emotional and behavioral disordered, as a group, have a sense of being able to effect a change, regardless of performance and skill level.

Clearly further study in this area is indicated. Validation of the concept of efficacy as it relates to teachers needs to be established. Given the unique challenges faced by EBD teachers, studies examining the differences between these teachers and regular education teachers ratings of personal efficacy would seem warranted. Another area particular to teachers of students with emotional and behavioral disorders is the number of teachers who are teaching in EBD classrooms without full licensure. It would be interesting to investigate the differences that may exist in personal efficacy ratings of these teachers as compared to teachers of students identified as EBD who obtain full licensure before assuming a teaching position. Further validation of the measures of efficacy is needed as well as broader study of the relationship of efficacy to more clearly defined performance ratings.
Self-Efficacy and Performance Ratings

References


Self-Efficacy and Performance Ratings


Table 1

Mean Personal Efficacy Scores and Performance Ratings

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
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<tr>
<td>Personal Efficacy (Factor 1)</td>
<td>42.49</td>
<td>.69</td>
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<tr>
<td>Performance Rating</td>
<td>8.01</td>
<td>.12</td>
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Correlation coefficient for Personal Efficacy Measure and Performance Ratings: $r = .088$
Table 2
Mean Scores and Standard Deviations for the Personal Efficacy Measure

<table>
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<th>N</th>
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<tr>
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<td></td>
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<tr>
<td>Male</td>
<td>7</td>
<td>42.57</td>
<td>4.69</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td>42.47</td>
<td>4.71</td>
<td>.961</td>
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<td></td>
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<tr>
<td>Elementary</td>
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<td>41.19</td>
<td>4.31</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
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<td>43.84</td>
<td>4.99</td>
<td>.082</td>
</tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>On the Job</td>
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<td>41.24</td>
<td>4.25</td>
<td></td>
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<tr>
<td>Placed by Supervisor</td>
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<td>43.25</td>
<td>4.80</td>
<td>.151</td>
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