A CORRELATIONAL STUDY USING THE BEHAVIOR DIMENSIONS RATING SCALE & THE BEHAVIOR ASSESSMENT SYSTEM FOR CHILDREN WITH TWO GROUPS OF ELEMENTARY SCHOOL-AGED STUDENTS IN SPECIAL PROGRAMS

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the requirements for the Degree of

DOCTOR OF PHILOSOPHY

By

Noel Dwyer Livaudais, B.S., M.A.
Denton, Texas
December, 1995
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Livaudais, Noel Dwyer, *A Correlational Study Using the Behavior Dimensions Rating Scale & the Behavior Assessment System for Children with Two Groups of Elementary School-Aged Students in Special Programs*. Doctor of Philosophy (Special Education), December, 1995, 52 pp., 6 tables, 3 illustrations, references, 113 titles.

This study examined the correlation between two commercially available behavior rating scales. The two scales used were the Behavior Dimensions Rating Scale (BDRS) and the Behavior Assessment System for Children (BASC). Students from a special education behavior management class (primarily students with emotional disabilities) were rated on the two scales and students from a general education behavior management class (primarily students with conduct problems without disabilities) were rated on the two scales. The behaviors of 22 students from each group were rated on the two scales. The overall results of all 44 students on the BDRS was analyzed with the overall results of all 44 students on the BASC to determine if the two scales were correlated. Additionally, the two groups were compared to each other on each scale to determine if the two programs served two distinct populations.

The findings indicated that the BDRS and the BASC did correlate significantly with each other and both could be used to obtain similar behavioral information. The findings also indicated that the overall behavioral data on the two populations had a slight insignificant correlation and therefore determined that these two programs did serve two different populations. This information could be used by administrators and teachers to plan an appropriate education for these two groups of students. Furthermore, it could assist in the development of appropriate training for administrators and for teachers.
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CHAPTER 1

INTRODUCTION TO THE STUDY

The educational community is facing an uncertain future. Charter schools, vouchers, and inclusion are some of the solutions being touted to improve the education of all students. The financial aspects of running schools is a major concern and sometimes an obstacle to delivering the best possible educational programs. Educators are being asked to assume increased responsibilities with less funding while society is requesting greater accountability (Kauffman, 1993; Sixteenth Annual Report to Congress, 1994). If all children can learn, then they should all become high achievers.

Being accountable for the achievement and adult success of students with disabilities in general can be a challenge. However, for students with emotional/behavioral disabilities (EBD), it can be an insurmountable task. Kauffman (1993) stated that special education is subjected to enormous pressures to change. There is, of course, much disagreement about what and how to change.

Disappointing Outcomes

The Sixteenth Annual Report to Congress (1994) indicates that students with EBD have lower grades than any other group of students with disabilities, are more likely to be placed in restrictive settings, and are more likely to drop out of school. Leone, McLaughlin, and Meisel (1992) report that students with EBD are the least successful in public schools. It also reported that absenteeism and dropout rates were higher for students with disabilities than for the general population of students (Kortering & Blackorby, 1992; Leone et al., 1992). Epstein, Kinder, and Bursuck (1989) report that students with poor academic skills and poor behaviors have a rather bleak outlook. Fairweather and Shaver (1991) report that a major factor in
transitioning from high school to adulthood is access to and success in postsecondary education and training. If students do not finish high school (that is, they become dropouts), they are effectively blocked from accessing ordinary pathways to successful adulthood. Feldman and Newcomb (1969) reported that participating in and completing postsecondary college and vocational programs enhanced the development of self-esteem.

Research continues to suggest that students who drop out of school are at the greatest risk for lifelong problems (Bullis & Gaylord-Ross, 1991; Edgar, Levine, & Maddox, 1985; Haring & Lovett, 1990; Hasazi, Gordon, & Roe, 1985; Lichtenstein, 1993; Mithaug, Horiuchi, & Fanning, 1985; Sitlington, 1990; Zetlin & Hosseini, 1989). Studies of dropouts in the general population also suggest long-term negative outcomes related to dropping out (Rumberger, 1987; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Siegal, Robert, Waxman, and Gaylord-Ross (1992) reported that longitudinal vocational studies found these programs had an enabling effect on students with mild disabilities. Although confirming high dropout rates among students with learning disabilities (LD), deBettencourt, Zigmond, and Thornton (1989) did not confirm the negative impact of dropping out as had been found for students with EBD.

Students dropping out of school presents a serious issue to educators, according to Kortering, Haring, and Klockars (1992). Dropping out of school is not a desired outcome, therefore educators must be able to address this problem in an effective manner. Ysseldyke, Thurlow, and Shriner (1992) report that outcomes and standards are important concepts for special educators to consider. They indicate that it is critical for special educators to understand how outcomes and accountability assessments are taking shape. This understanding will enable educators to develop action plans that will address the problem of students with EBD dropping out of school.

Action Plans
Before a solution can be implemented, there needs to be a plan of action. Students with disabilities are entitled to an education that is planned and monitored. This education should be based on needs that are determined through appropriate assessment (Zigmond & Miller, 1986). Action plans should be developed in a scientifically sound manner so as to ensure student success.

The scientific method has three components: (a) hypothesis formulation, (b) deduction, and (c) testing of the hypothesis (Borg & Gall, 1989). When students begin having difficulties in school, a hypothesis is developed, deductions are made and data are collected. If the hypothesis is supported, then a plan can be developed and implemented to provide an appropriate program. It is also imperative to determine the effectiveness of programs once they are implemented (Neel, Meadows, Levine, & Edgar, 1988). They further indicated that it was necessary for schools to develop and to administer data collection systems that will enable them to meet the needs of all of their students.

One of the behavioral assessment instruments used most often is the behavior rating scale (Skiba, 1989). It has been suggested that data collected through the use of these scales provide stable, cross-environmental aspects of personality (Cairns & Green, 1979). Behavior rating scales offer a behavioral assessment based upon observation, perceptions and interactions of people associated with the person being rated (Wilson & Bullock, 1989). Further research of behavior rating scales is needed (Simpson, 1989).

Purpose

The purpose of this study was twofold. First, the study verified that the overall score of the Behavior Dimensions Rating Scale (BDRS) significantly correlated with the overall score of the Behavior Assessment System for Children (BASC) (Teacher Rating Scale) for students being served in a general education behavioral program and for students in a special education behavior management program. Secondly, the study
compared the overall scores of students in Resource 3 (Behavior Management Class) with the overall scores of students in the Special Opportunity Schools (S.O.S.) on both instruments and determined that these classes truly serve two distinct populations.

Significance

This study identified behavioral differences between students being served by a special education behavior management program and students being served by a general education behavior management program. It determined that a 43-item instrument (BDRS) yielded sufficient results to justify its use over a more lengthy (148-item) instrument (BASC) when time was an important element to consider. The BDRS would be an excellent screening instrument followed by a BASC for those students whose scores indicate a problem on the BDRS. The BASC provides considerable valuable behavioral information for students which would not be needed for those without significant problems. At a time when educators are being asked to assume more responsibilities, being able to obtain accurate behavioral information in an efficient manner could be critical.

Limitations

The major limitation of this study is that it may not have generalizability to other settings because of the limited number of subjects available. This study examined behaviors of forty-four students served in two special programs. A second limitation is that only one teacher completed the instrument. Although each teacher knew each student for at least the minimum amount of time required by the instruments being used, there was no control over how well an individual teacher knew each student.

Definitions:

1. Students with Emotional/Behavioral Disabilities (EBD): A condition exhibiting one or more of the following characteristics — over a long period of time — to a marked degree — which adversely affects educational performance. The
characteristics are:

- an inability to learn which cannot be explained by intellectual, sensory, or health factors
- an inability to build or maintain satisfactory interpersonal relationships with peers or teachers
- inappropriate types of behavior or feelings under normal circumstances
- a general pervasive mood of unhappiness or depression or
- a tendency to develop physical symptoms or fears associated with personal or school problems (Federal Register, P.L. 94-142; IDEA).

2. Behavior Rating Scale: Standardized, norm-referenced type instrument used to rate an individual's behavior (Rizzo & Zabel, 1988).

3. Behavior Assessment System for Children (BASC) - A multidimensional approach to evaluating the behavior and self perceptions of children aged 4 to 18 (Reynolds & Kamphaus, 1992). (see Appendix B)

4. Behavior Dimensions Rating Scale (BDRS) - An individualized, self-scoring assessment instrument designed to measure patterns of behavior related to emotional problems (Bullock & Wilson, 1989). (see Appendix A)

5. Special Opportunity School (S.O.S.) - designed to provide the behaviorally at-risk student with an alternative, instructional environment that teaches the skills necessary to meet expectations of the regular classroom. The program is designed to challenge students academically and socially by using problem solving instructional strategies and a strong behavior management system. The target population for the assessment and remediation of behavior patterns which are detrimental to the learning process will be elementary age students beginning at six years of age. The district supports the belief that this early intervention model will prevent potential problems (A North Texas suburban school district).

6. Resource 3/Behavior Management Class: A program that serves students
identified with disabilities who have been determined by an Admission, Review, and Dismissal committee to need behavior management assistance. An intervention program for behavior management and enhancement of mental health. Integration back into the general academic class is based on consistent behavior (A North Texas suburban school district).
This literature review examined what has been done from 1966 through the present by researchers studying behavior rating scales. The literature review was completed by searching ERIC (Educational Resources Information Center), GENL (Index of General Journal Articles), the Dissertation Abstracts, MEDLINE (Contains everything that is in Medicus plus selected material from the International Nursing Index and the Index to Dental Literature), PsychLit (Psychological Abstracts) and the references listed in the manuals of the Behavior Assessment System for Children (BASC) and the Behavior Dimensions Rating Scale (BDRS). References that were addressed in this review covered standardization, characteristics of behavior rating scales, uses of behavior rating scales, and research pertaining to the BDRS and the BASC. Generally, students with EBD have displayed far more problems than other students with or without disabilities (Epstein, Cullinan, & Gadow, 1986). Bullock (1992) wrote that rating devices and checklists are informal means of collecting information. Behavior rating scales appear to be useful tools that enable educators to meet the challenge of educating students with EBD by pulling together behavioral information quickly and efficiently.

Standardization

Standardization refers to the ability of the test user to compare scores from a small group with those of a large group (Lindvall, 1961). Achenbach and Edelbrock (1978) suggest moving toward a greater standardization of instrumentation in rating measures. This would facilitate the usefulness of standardized measures.

Researchers have found different behavioral measures (e.g. behavior rating
scales, checklists) to be significantly interrelated (Greenbaum, Dedrick, Prange, & Friedman, 1994; Miller & Martin, 1995; Vonisser, Quay, & Love, 1980). Anastasi (1982) reported that ratings are based on cumulative information gathered over time. Wilson, Moore, and Bullock (1987) reported that the BDRS will maintain the same structure across different groups and over time. Standardization gives stability and focus to the study of students with EBD (Detwiler, 1986).

Characteristics of Behavior Rating Scales

There are several characteristics of behavior rating scales that are of interest to educators. Among these characteristics are ease of use, minimal training, and multigroup use. These characteristics make them popular instruments of behavioral assessments.

Ease of use is an important consideration when requesting teachers or administrators to complete an additional specific task. Guilford (1954) wrote that the ease of use by rating scales/checklists gave them unusual appeal. They required not only less time, but also less training for raters. Rating scales have been reported to be reliable and valid indicators of behavior that were both less expensive and less time-consuming to use (Helmes, Csapo, & Shorts, 1987; King, Rogers, Walters, & Oldershaw, 1994). Eggebeen (1993) reported that behavior rating scales provided an indication of how others see students with and without EBD and gives a comparison of those behaviors. Andrews (1993) also reported differences between groups of students using behavior rating scales. Research has confirmed that behavior rating scales can be used with large groups and that they can promise satisfactory use for many years to come (Anastasi, 1988; Hughes, 1988; Jackson, Olsen, Schafer & Holmes, 1986; Nelson, Rutherford, Center, & Walker, 1991).

The amount of training needed to administer behavior rating scales is minimal. Even clerical staff can be taught to administer these scales (Reynolds & Kamphaus,
Raters can be teachers, psychologists, diagnosticians, juvenile justice personnel, or other individuals working in these fields (Bullock & Wilson, 1989). Raters should be familiar with the individuals being rated and with the definitions of the behaviors being rated (Bullock & Wilson, 1989).

Behavior rating scales are also multigroup instruments. Various behavior rating scales can be used or adapted for use with children, adolescents or adults in schools, hospitals, or other clinical settings (Anastasi, 1988; Bullock, Zagar, Donahue, & Pelton, 1985; Gabel, Stadler, Bjorn, Shindledecker, & Bowden, 1994; Li, Shen, Chen, Zhau, Li, & Lu, 1991; Schachar, Sandberg, & Rutter, 1986; Schaughency, Vannatta, Langhinrichsen, Lally, & Seeley, 1992; Song, Jones, Lippert, Metzgen, Miller, & Borreca, 1984).

Uses of Behavior Rating Scales

Screening and identification are a critically important part of working with students with EBD. Studies have reported that ratings can be considered in diagnosis and placement (Eisert, 1988; Gresham, 1985; McCarthy & Paraskevopoulos, 1969). Bullock and Brown (1972a) reported that BDRS had components that teachers believe to be major areas of concern. Their findings substantiated teachers' abilities to observe and to judge effectively the behavior patterns exhibited by children with whom they have worked. Miller and Martin (1985) reported the BASC to be a more comprehensive assessment than the Child Behavior Checklist (CBCL) (Achenbach, 1991). They indicated that the BASC allowed for a more focused assessment of a child's problems in school.

Stoudenmire and Comola (1973) reported no differences in behaviors reported by camp counselors or parents using the Devereaux Child Behavior Rating Scale. According to Forbes (1978), a scale could assist in differentiating children with hyperactivity from children with EBD with similar symptoms. Research indicates that checklists/scales can be useful for initial screening and early identification of students.
with inappropriate social behavior (Bullock, Wilson, & Campbell, 1990; Hoge, 1983; McDowell, Adamson, & Wood, 1982; Todis, Severson, & Walker, 1990). Bullock et al. (1985) compared behavioral characteristics of students with EBD being educated in five different settings. They reported differences, but not between every setting, which indicates there could be assessment/placement problems that better screening might have avoided. Robinson (1985) reported that behavior rating scales could be useful in determining appropriate placement. Watson (1987) reported that classification decisions were unreliable and did not generally make use of data from behavior rating scales. Wilson et al. (1987) reported behavior rating scales to have wide application in education and psychology especially with students with EBD. They confirmed that the BDRS was a valid and reliable screening measure of EBD in school age children. Current research appears to support the use of rating scales for screening and identification.

Teachers and principals have always been an essential part of education. Several studies substantiated teachers' abilities to observe and to judge effectively the behavior patterns of the children with whom they work (Bullock & Brown, 1972B; Finkelman, Ferrares, & Garmezy, 1989; Schachar et al., 1986). Zern, Kenney, and Kvaraceus (1974) reported that there had been too much reliance on medical diagnosis and that there should be more emphasis on cognitive styles for teaching students with EBD. Dunlap and Dillard (1980) reported that principals could be effective raters, just as teachers can be. Ramsey (1981) found significant differences between teacher reports and those of either principals or counselors. Fogel and Nelson (1983) reported that behavioral observations did not bias academic grades. McNamara, Fetsco, and Barona (1986) agree that involved people tend to be more stable in their attitudes toward an issue than those who are not involved. Simpson (1991) reported that it was important to use as many raters as possible when going through the screening and identification process. Teacher and principal involvement
with students with EBD can be critical and is supported by site-based decision-making currently mandated by the State of Texas. Involvement can mean class visitation or acknowledgment outside of classes.

The outcome of screening and identification is generally programming to match the needs identified. McCarthy and Paraskevopoulos (1969) reported that ratings of students in class can help establish priorities in terms of time, resources, and/or methods. Blue (1975) reported scales provided an increased awareness and appreciation of communication levels of all children. Weinstein and MacDonald (1986) reported that school psychologists needed to know more about strategies because this will help with the design and implementation of programs. Psychologists are often called on for assistance in developing behavioral strategies to meet specific student needs and behavior rating scales are used to define problem behaviors. It has been reported that scales can help to determine treatment needs (Baker & Hall, 1988; Helmes, Csapo, & Shorts, 1987; Mattison & Gamble, 1992; Sattler, 1988). Bullock (1992) wrote that rating devices and checklists are informal means of collecting information.

Rating scales can also allow for analysis of intensity or perceived frequency and are more reliable and less susceptible to bias than are the psychiatric classification schemes. The results can be used for structuring the classroom, developing instructional activities and for devising reinforcement procedures. Kixmiller and Briggs (1993) agreed that results from rating scales and checklists can be used to plan specific interventions/treatments.

A final area of concern is accountability. Educators are increasingly called on to prove that their programs are working. Many have successfully used scales to measure the effectiveness and improvement of their programs (Atwell, 1982; Buckley, 1983, Chronister, 1994; Freimark, 1992; Guttman, 1993; Jackson et al., 1986; Matthews,
1983; Millman & Schaefer, 1975; Voelm, 1983; Weinstein, 1969). This is an essential and valid use of behavior rating scales.

Research Pertaining to BDRS and BASC

In reviewing not only the literature, but also the specific manuals for the BDRS and the BASC, several studies using these instruments were found. The BDRS manual cited several studies that used the BDRS to examine behavior patterns of children and adolescents (Bullock & Brown, 1972a, 1972b; Bullock & Wilson, 1988; Bullock & Zagar, 1980; Bullock et al., 1985, Campbell, Bullock, & Wilson, 1988; Guetzloe, 1975; Johnson, 1983; Sarnacki, 1987; Wilson et al., 1987). The BASC had correlational studies done with the Teacher's Report Form, the Revised Behavior Problem Checklist, Conners' Teacher Rating Scales, Burks' Behavior Rating Scales and the Behavior Rating Profile (Reynolds & Kamphaus, 1992). Sandoval and Echandia (1994) reported that the BASC is composed of the best measures of their kind and represents an approach of choice for identifying children with emotional and behavioral disabilities in school. Daniel (1993) reported that parents tend to provide subscale profiles with greater variability than is typical of teacher ratings, which implies that parents may be more sensitive to specific aspects of their child's behavior. It was also used in a study that compared two behavior rating scales of different lengths (Miller & Martin, 1995). They reported that the BASC could better differentiate between anxiety and depression or hyperactivity and aggression. The BASC is relatively new (1992) and some studies that have used this instrument are not as yet published. Kline (1994) reviewed the BASC and reported it represented a definite advance in multi-informant evaluation.

Summary

This review examined six areas of concern covering the use of behavior rating scales/checklists. The evidence was clear that these tools are both essential and effective. The next step was to determine if there was a difference between/among the
commercially available scales used. This study examined two of the commercially available behavior rating scales.
CHAPTER III

METHODOLOGY

The purpose of this study was twofold. First, it examined the overall scores of the Behavioral Dimensions Rating Scale (BDRS) and the Behavior Assessment System for Children (BASC) for students being served in a general education behavioral program and for students in a special education behavior management program to determine if they correlated. Secondly, it compared the overall score on each scale for elementary aged students in a Resource 3 (Behavior Management class) with the overall score on each scale for elementary aged students in the Special Opportunity School (S.O.S.) class.

Research Questions

The literature review revealed that there is considerable interest in the use of behavior rating scales. Using this information as a springboard for further research, this study attempted to answer the following research questions:

Research Question 1: Will there be any correlation between the overall scores of the BDRS and the overall scores of the BASC?

Research Question 2: Will the overall scores of the Resource 3 students appear different from the overall scores of the S.O.S. students on the BDRS?

Research Question 3: Will the overall scores of the Resource 3 students appear different from the overall scores of the S.O.S. students on the BASC?

Subject Selection

Permission to conduct this study was received from the Director of Special Education, the Assistant Superintendent of Elementary Instruction, and the Deputy
Superintendent for a North Texas suburban school district. This study was submitted to and approved by the Institutional Review Board of the University of North Texas. Four of six Resource 3 teachers and five S.O.S. teachers in a North Texas suburban school district completed both the BDRS and the BASC for each of the students from the elementary Resource 3 classes and thirty-seven students from the S.O.S. classes were rated on the BDRS and on the BASC by their teachers. The following groups were part of this study: (a) students in Resource 3/Behavior Management classes (primarily students with emotional disabilities) located in two elementary schools and (b) students in the S.O.S. classes (primarily students with conduct problems without disabilities) located in one elementary school. There were students in grades 1-6. The data from nineteen students was deemed unusable for the study. Fourteen were invalidated because their age did not fit the age range of the BASC form being used in the study. Three BASC forms were incomplete and one had no date of birth. The last unusable BASC form had no date of birth and the BDRS form was incomplete. There were forty-four subjects used in the study. Due to prior commitments on their time, the remaining two elementary Resource 3 teachers were unable to participate. The tables indicate teacher participation at each school, the data used from each school and the number of students participating by grade level at each school.

Table 1

<table>
<thead>
<tr>
<th>Teacher Participants by School/Program</th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
</tr>
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<tbody>
<tr>
<td>Resource 3</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>S.O.S.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
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### Table 2

**The Number of Teachers Whose Data Was Used by School/Program**

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<th>Elementary 2</th>
<th>Elementary 3</th>
<th>Elementary 4</th>
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<tbody>
<tr>
<td>Resource 3</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>S.O.S.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
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</tbody>
</table>

### Table 3

**The Number of Students in the Study by School and Grade Level**

<table>
<thead>
<tr>
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<th>R3 - School 1</th>
<th>R3 - School 2</th>
<th>R3 - School 3</th>
<th>R3 - School 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge*</td>
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<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Grade 1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Grade 2</td>
<td>3**</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Grade 3</td>
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<td>0</td>
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<td>3</td>
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<tr>
<td>Grade 4</td>
<td>3</td>
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<td>4</td>
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<tr>
<td>Grade 5</td>
<td>2</td>
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</tr>
<tr>
<td>Grade 6</td>
<td>1</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>0</td>
<td>9</td>
<td>22</td>
</tr>
</tbody>
</table>

**Bridge is a grade between K & 1st. **Includes the study's only two females

### Instrumentation

The BDRS (Bullock & Wilson, 1989) is an assessment instrument designed to measure patterns of behavior related to emotional problems. It is easy to use and can
be completed and scored in less than 30 minutes. It covers a wide range of observable behaviors and was nationally validated on subjects from kindergarten through grade 11. Upon completion, the BDRS yields 4 subscale scores and a total score. Only the overall score was used in this study. The BDRS has been previously compared to the Revised Behavior Problem Checklist (RBPC) Quay & Peterson, 1983), and the Walker Problem Behavior Identification Checklist (WPBIC) (Walker, 1983). (See APPENDIX A for more detailed information.)

The BASC (Reynolds & Kamphaus, 1992) is a multimethod, multidimensional approach to evaluating the behavior and self-perceptions of children. Although it has five components, only the overall score of the computer-scored Teacher Rating Scale was used for this study. The Teacher Rating Scale gathers descriptions of the student's observable behavior. It was nationally validated on children aged 4 to 18. It has an easy to use format and was scored by computer. The BASC has been previously compared with the Teacher's Report Form (TRF) (Achenbach, 1991), Revised Behavior Problem Checklist (RBPC) (Quay & Peterson, 1983), the Conners' Teacher Rating Scales (CTRS-39) (Conners, 1989), the Burks' Behavior Rating Scales (BBRS) (Burks, 1977), and the Behavior Rating Profile (BRP) (Brown & Hammill, 1983). (See APPENDIX B for more detailed information.)

Setting

The setting in which this study was conducted was a suburban school district in North Central Texas. The district has a student population of approximately 20,000 students, of whom about 2,000 are served by Special Education.

Data Collection

The data was collected in May of 1995. Rating Forms were distributed by the investigator. The rating forms were returned to the investigator via school mail by eight teachers and in person by one teacher.
Procedures

The behavior rating scales used in this study have been previously validated, but had not been compared to each other. The nine teachers involved in the nine classes chosen for this study were asked to complete both a BDRS form and a BASC form on each of their students. The forms were disseminated and collected by the investigator. The investigator reviewed the meanings of the bipolar behavior descriptors of the BDRS when distributing the forms to each teacher. Verbal directions for administering both instruments were given by the investigator when the forms were disseminated to the teachers. The BDRS forms were hand scored by the investigator and the BASC forms were scored by computer. Upon completion of the study, the teachers were also asked to indicate which behavior rating scale they preferred to use.

Analysis

A correlational analysis was done using the standard scores of the overall results of the two scales. The Pearson product-moment correlation coefficient was used to describe the strength of the relationship between the two variables in this study (e.g. the overall scores of the BDRS and the overall scores of the BASC). The Pearson correlation coefficient was an appropriate correlational statistic for determining the magnitude of relationship between students' scores on two measures (Borg & Gall, 1989).

The Pearson product-moment correlation coefficient was calculated using the standard scores of the overall results of the BDRS and the standard scores of the overall scores of the BASC for students in all participating Resource 3 classes and for students in the participating S.O.S. classes. According to Hinkle, Wiersma, and Jurs (1988), scattergrams offer a pictorial representation of the relationship between variables. They further state that the value of the correlation coefficient is a function of the slope of the general pattern of points in the scattergram and the width of the ellipse that encloses those points. Scattergrams can ensure that outliers, which can
distort the value of $r$, are not present (Glass & Hopkins, 1984). The accepted level of significance for this study was established at the .05 level.

The SPSS 6.1 (1995) statistical package was used to complete the correlational analysis. This analysis was done to determine if the results from the BDRS could be used interchangeably with the results from the BASC.

The SPSS statistical package was also used to do a correlational analysis between the Resource 3 student group and the S.O.S student group. Using the standard scores from the overall scores of the BDRS from both groups, the Pearson correlational coefficient was computed. Using the standard scores from the overall scores of the BASC from both groups, the Pearson product-moment correlational coefficient was computed. This analysis was completed to determine whether or not the results from the two groups were correlated.
CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this study was twofold. First, it examined the overall scores of the Behavioral Dimensions Rating Scale (BDRS) and the overall scores of the Behavior Assessment System for Children (BASC) Teacher Rating Scale for students being served in a general education behavioral program (primarily students with conduct disorders without disabilities) and for students in a special education behavior management program (primarily students with emotional disabilities) and determined that the scores were significantly correlated. Secondly, the study compared the overall scores of students in Resource 3 (Behavior Management Class) with the overall scores of the students in the Special Opportunity School (S.O.S.) on both instruments.

BDRS forms and BASC forms were distributed to eleven teachers at 4 elementary schools. Nine teachers from three schools returned the completed forms and the data from eight teachers and three schools were used in the data analysis. Seven of the nine teachers completing the forms preferred the BDRS. It should be noted that the sample used for this study is one of convenience.

Research Questions

Three research questions were composed for this study. In this section each question will be answered separately. The statistical procedures used and a brief discussion also accompany each question.

Research Question 1: Will there be any correlation between the overall scores of the BDRS and the overall scores of the BASC?
Table 4 displays the statistical data for research question 1. The results indicate that the BDRS and the BASC do provide similar behavioral information with correlation coefficient of .577 which is moderately positive. The significance level is .000 and although the computed r is not strong, it can be interpreted as not due to random error because there is little probability that the scales would give dissimilar overall results. Additionally, the scattergram (figure 1) for all students does not reveal any outliers. The scattergram displays a linear trend in the relationship between the overall score of the BDRS and the overall score of the BASC, thus indicating that the Pearson r was an appropriate index to use for this study. The width of the ellipse that would enclose the points is average which indicates an average correlation, as the correlation increases the width of the scattergram's ellipse will narrow. The slope indicates a generally positive direction. The data indicate that if the score on one scale is elevated, then the score on the other instrument will be elevated.

The data shows a correlation when comparing the overall scores of the BDRS with the overall scores of the BASC. This suggests that the data collected on the BDRS and the BASC could be used interchangeably by school personnel. When students move from other districts or return from hospitalizations with data from a variety of behavior rating scales, it is imperative to know if the information from one can be considered the equivalent of another. This study verifies that this is true for the BDRS and the BASC. The moderate correlation indicates that outside factors could also be contributing to the overall scores of either or both instruments. The significance level .000 surpassed the level .05 agreed upon for this study.

Table 4

Pearson Correlation Coefficients Analysis
Research Question 2: Will the overall scores of the Resource 3 students appear different from the overall scores of the S.O.S. students on the BDRS?

The Pearson correlation coefficient for the two groups on the BDRS can be found in Table 5. The results indicate that there is low correlation (.058) between these two groups. The linear trend of the scattergram displayed in figure 2 indicates that the Pearson r was an appropriate measure to use for this study. The scattergram in figure 2 indicates a generally positive slope (direction) with some scattering, which would indicate low correlation between the two groups of students on the BDRS. The score for a student in one group does not necessarily rise or fall as the score rises or falls for a student in the other group. This would be expected, as the S.O.S. classes are designed to meet the behavioral needs of students without emotional disabilities, while the Resource 3 classes are designed to meet the behavioral needs of students with emotional disabilities.

<p>| | | |</p>
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*significance level of .05
Research Question 3: Will the overall scores of the Resource 3 students appear different from the overall scores of the S.O.S. students on the BASC?

The Pearson correlation coefficient for the two groups on the BASC can be found in Table 6. The results indicate that there is a negative correlation -.185 between these two groups. The scattergram in figure 3 indicates a negative slope which would form a wide ellipse that would indicate low correlation of the two groups on the BASC. This indicates that the overall score for one student does not necessarily rise or fall as the overall score for another student rises or falls. This would be expected, as the S.O.S. classes are designed to meet the behavioral needs of students without emotional disabilities, and the Resource 3 classes are designed for students with identified disabilities.
Neither question 2 nor question 3 reached the expected level of significance. This could be due to having some students misplaced in one or both groups. However, according to Borg and Gall (1989), the level of significance of the research results is not the same as the practical significance of the research results. The number of subjects largely influences the statistical significance of the research results. The number of subjects was a "given" and could not be adjusted by the investigator. Borg and Gall (1989) also report that educational researchers seldom use random samples which are technically a requirement of statistical significance tests. When examining specific programs or students in specific programs, random sampling is not usually an option to the researcher.
CHAPTER V

SUMMARY AND RECOMMENDATIONS

This study was proposed to determine whether or not two commercially available behavior rating scales, the BDRS and the BASC, would yield correlated results on two groups of elementary-aged students in special behavior management programs. Furthermore, the study sought to determine whether there were behavioral differences between the students in a regular education behavior management program and the students in a special education behavior management program. Both scales had been previously compared with other scales but not with each other.

Teachers of five classes of S.O.S. students at one elementary school and teachers of six classes of Resource 3 students at three elementary schools were invited to participate in this study. All five S.O.S. teachers participated, but only the data from four teachers were used, and four Resource 3 teachers participated. There were 37 possible S.O.S. subjects, of which 22 were used, and there were 26 possible Resource 3 subjects, of which 22 were used. Of the 63 possible subjects, the data from 19 was considered unusable. Fourteen were invalidated because their age did not fit the age range of the BASC form used, three BASC forms were incomplete and one had no birth date, and the last unusable form had no date of birth and the BDRS form was incomplete.

The results indicate that the BDRS and the BASC do provide similar behavioral information to educators. Eight of the nine teachers completing both forms responded to a request to indicate their preference of the two forms and to indicate the number of minutes it took for them to complete each type of behavior rating scale. Of those eight respondents, seven preferred the BDRS. The average time spent completing the
BDRS was 7.9 minutes as indicated by seven of the nine participants. The average time spent completing the BASC was 15 minutes as indicated by seven of the nine participants. As indicated in the literature review, time is an important consideration to teachers in completing additional tasks. Therefore, time could be the deciding factor of their preference of the BDRS over the BASC.

One possible outcome of this study could be a differentiated use of these two behavior rating scales. For initial or large scale screenings, the BDRS could be used most efficiently. Once specific problems have been identified, the more in-depth BASC could be employed.

The study also examined whether the two programs served different populations and the results indicated that the students in each program do have different behavioral needs. Results indicate that differentiated programming should be utilized in order to meet the particular needs of the students being served in each program.

Recommendations for future research would be as follows:

1. Research could be done at the end of each year on the students in each program to determine if those results would verify the current results.

2. Research could be cumulative, that is, each year data could be added together to provide a larger subject pool (some subjects would be the same from year to year.

3. Research could be repeated using additional school districts with similar programs to compare.

4. Research needs to be done to ascertain exactly what behavioral needs students are having and programming to meet those needs must be developed.

5. Research has to be ongoing for special programs to determine program effectiveness.
6. Research needs to continue to address behavioral concerns and discipline issues as this is an area of critical concern to the American people.
APPENDIX A

BEHAVIOR DIMENSIONS RATING SCALE
The Behavior Dimensions Rating Scale (BDRS) was developed by Lyndal M. Bullock and Michael J. Wilson. It was originally published and copyrighted by DLM publishers in 1989 and is currently available from Riverside Publishers. It covers a wide range of observable behaviors and uses bipolar behavior descriptors. The rater chooses a position on a 7-point continuum (e.g., hurts others + + + + + + + praises others) that best typifies the behavior exhibited by the student.

Its primary purpose is to measure patterns of behavior related to emotional problems. It is a screening device that can be used by teachers, psychologists, diagnosticians, and juvenile justice system personnel. It can also be used as a tool to monitor behavioral change.

The BDRS has a standard set of items related to an individual’s behavior to which more than one rater may respond. From the ratings given, the user may create a profile of a student’s behavior pattern that will aide in the identification of specific problem areas. It is an effective initial screening device that may be used during the referral process. The BDRS can be used to monitor behavior in various environments and during various times of the day to check for consistency of behaviors related to emotional disabilities. The information can be useful to practitioners before, during or following placement. The BDRS can be used to document baseline behaviors against which progress in behavioral intervention may be measured. The BDRS provides a systematic means of observing a student’s behavior that allows school personnel to detect periodic changes, trends, or behavioral cycles in an individual student.

The BDRS has an easy to use one-page format that can be completed and scored in less than 30 minutes. It has four subscales (i.e. Aggressive/Acting Out, Irresponsible/Inattentive, Socially Withdrawn, and Fearful/Anxious). The form allows the rater to focus on observation and recording of data by making use of a self-scoring form that automatically records the responses on the scoring page.
The rater should observe the ratee for at least two weeks prior to recording on the BDRS form. The definitions of the bipolar behavior descriptors should be reviewed and studied in advance. The descriptors represent extremes of the behaviors being rated. The rater should record his/her initial and strongest impression of the student. The information obtained through this rating scale should be used with other collected data on any given student.

The BDRS was standardized on students representing the urban, urban fringes and rural areas of the four major regions of the U.S. A representative sample of students covering race/ethnicity, sex, grade range, emotional disturbance, and regular education/nonhandicapped was used in the standardization process.

Both internal and test-retest reliability results were obtained on the BDRS. Content, criterion-related, construct and convergent validity were also determined for the BDRS.

The BDRS is easy to administer and to score and assesses a wide range of observable behaviors.
APPENDIX B

BEHAVIOR ASSESSMENT SYSTEM FOR CHILDREN
The Behavior Assessment System for Children (BASC) was developed by Cecil R. Reynolds and Randy W. Kamphaus. It is published by American Guidance Service and was copyrighted in 1992. Its primary purpose is to facilitate the diagnosis and educational classification of children's emotional and behavioral disorders and to aid in the developing of treatment plans. It has five components that can be used independently or in any combination. The main components are the Teacher Rating Scale (TRS), the Parent Rating Scale (PRS) and the Self-Report of Personality (SRP). The remaining components are the Structured Developmental History (SDH) and the Student Observation System (SOS. The BASC measures both adaptive and clinical dimensions of behavior and personality.

It is an individual assessment tool designed to be used with students from 4 to 18 years of age. The Teacher Rating Scale has a preschool, child and adolescent level. The Parent Rating Scale also has a preschool, child and adolescent level. The Self-Report of Personality has a child and an adolescent level.

The amount of time required to complete the TRS and the PRS is from 10-20 minutes. The SRP requires about 30 minutes, while the SOS requires about 15 minutes. The SDH is a comprehensive history and background survey which will require varying amounts of time depending on each family.

Users of these instruments should have formal training in the administration, scoring and interpretation of behavior rating scales and self-report personality scales, however, clerical staff can be trained to administer and score the various components of the BASC. Interpreting and applying the results require at least a graduate level of education.

For this study, only the TRS will be used. Its items are descriptions of observable behaviors. It has the following clinical scale names: Aggression, Hyperactivity, Conduct Problems, Anxiety, Depression, Somatization, Attention Problems, Learning Problems, Atypicality, and Withdrawal. The adaptive scales include: Adaptability.
Leadership, Social Skills, and Study Skills. The composites for the TRS are:
Externalizing Problems, Internalizing Problems, School Problems, Adaptive Skills,
and a Behavior Symptoms Index. The TRS forms are available in hand-scoring
(carbonless) and computer entry forms.

The response format for the TRS has the rater circle N for Never, O for Often, S
for Sometimes, and A for Almost Always for the observed behaviors. The N, O, S and
A responses are then converted to 0, 1, 2, and 3 respectively and adding the points for
each scale yields a raw score, which can then be converted into a normative score. T-
scores and percentiles are available for both the scales and the composites of the TRS.
Available norm groups are general, gender-specific, and clinical. Forms with excessive
negative or positive responses can be identified and the computer scoring program can
also detect random or patterned responding. The record form offers information on
the significance and rarity of differences between composite scores or between a scale
score and the total score. Furthermore, the software programs offer an index of the
similarity of two profiles and the BASC Plus can pinpoint items that are related to the
Diagnostic and Statistical Manual of Mental Disorders (DSM III-R) categories.
Computerized scoring is available in the BASC Enhanced ASSIST and the BASC Plus
for IBM and compatibles with at least 640K memory. The BASC Plus also offers on-
line administration.

The BASC was standardized on US children aged 4 to 18 including a representa-
tive sample of children with disabilities from the Fall of 1988 through the Spring of
1991. There were 116 testing sites with an N=2,401 for the TRS. The sample was
controlled for age, gender, race, geographic region, SES/parent education, and special
populations based on the U.S. census data for 1990.

Validity for the BASC had the following:

Intercorrelations and Factor Analysis - the structure of the scales and
composites was based on factor analyses of items and of scales.
Content - Item content came from teachers, parents, children, psychologists, and reference sources.

Construct Concurrent - Groups of children with preexisting clinical diagnoses tend to show distinct BASC profiles.

Predictive - None

Clinical Sample - The manual has profiles for eight clinical groups.

The TRS correlates with the Teacher's Report Form (TRF) (Achenbach), Revised Behavior Problem Checklist (RBPC) (Quay & Peterson), Conners' Teacher Rating Scales (CTRS-39), Burks' Behavior Rating Scales (BBRS), and the Behavior Rating Profile (BRP) (Brown & Hammill).

The BASC is easy to administer and to score and assesses a wide range of positive and negative behaviors. It aids in differential diagnosis of specific categories of disorders, contains validity checks and consistency of scales across gender and age levels and between teacher and parent forms. It meets Federal mandates to differentiate between Attention Problems and Hyperactivity and is helpful in classifying students with Severe Emotional Disorders (SED). Items were dropped if they behaved differently by gender or race/ethnicity.
APPENDIX C

RAW DATA - RESEARCH QUESTION 1
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* denotes subjects not used in this study  **Bridge is a grade between K & 1st.
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*denotes subjects not used in this study **Bridge is a grade between K & 1st.
APPENDIX D

RAW DATA - RESEARCH QUESTIONS 2 & 3
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**Bridge is a grade between K & 1st.
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