This is to certify that the

thesis entitled

Application of the Deficit and Strengths Perspectives to a Secondary School for Students Diagnosed with Emotional and Behavior Disorders

presented by

Michelle Marie Stevens

has been accepted towards fulfillment
of the requirements for

Master of Science degree in **Criminal Justice**

Major professor

Date 09-06-02

APPLICATION OF THE DEFICIT AND STRENGTHS PERSPECTIVES TO A SECONDARY SCHOOL FOR STUDENTS DIAGNOSED WITH EMOTIONAL AND BEHAVIOR DISORDERS

By

Michelle Marie Stevens

A THESIS

Submitted to
Michigan State University
In partial fulfillment of the requirements
For the degree of

MASTER OF SCIENCE

Department of Criminal Justice

2002

ABSTRACT

APPLICATION OF THE DEFICIT AND STRENGTHS PERSPECTIVES TO A SECONDARY SCHOOL FOR STUDENTS DIAGNOSED WITH EMOTIONAL AND BEHAVIOR DISORDERS

By

Michelle Marie Stevens

Education is vital for success in society. Students with Emotional and Behavior Disorders (EBD) do not receive an adequate education. Inadequate education, including failure to complete high school and unsatisfactory academic skills, has been consistently linked to criminality in prior research. Thus, without an adequate education, students diagnosed with EBD have a high risk for future criminality. Effective educational approaches have been shown effective in combating school failure. This research compared two perspectives, with contrasting approaches to education, in regard to student retention and student academic performance in a school for students diagnosed with Emotional and Behavior Disorders. Four school years were included in the research. The Deficit perspective governed the first two years. The Strengths perspective governed the last two years. Comparisons of contact hours per day and test scores were made between the two contrasting perspectives.

This thesis is dedicated to my Father, Wes, who was a source of unending guidance, knowledge, and support; my Mother, Carolyn, who was always ready to lend a helping hand or listening ear; my Brother, Mike, who could always make me laugh and helped to put things in perspective; and to Antonio, who selflessly gave support and encouragement through whatever form needed

ACKNOWLEDGMENTS

I would like to acknowledge Dr. Vincent Hoffman, for his patience, encouragement, and support; Dr. Wes Stevens, for his guidance and time; Dr. Christina DeJong, for her statistical expertise and guidance throughout my program; and Dr. Shelia Maxwell, for her helpful feedback and direction.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

Introduction

Education is important to success in society. Without an adequate education, opportunities for achievement in society are limited. With limited opportunities and limited education, individuals are not afforded the chance to become contributing members of society. In turn, such individuals have an increased risk of engaging in criminal behaviors.

Students with Emotional and Behavior Disorders (EBD) often do not obtain an adequate education (Razeghi, 1998; Rosenberg, Wilson, Maheady, & Sindelar, 1992). With a lack of education, students with EBD are not afforded the opportunities for success in society (Barr & Parrett, 1995; Razeghi, 1998; Rosenberg et al.). Students with EBD experience limited access to employment, impaired social adjustment, and increased risk of criminal behavior due to a lack of adequate intellectual, emotional, and social skills (Eber, Nelson, & Miles, 1997; Prater, Sileo, & Black, 2000; Razeghi, 1998; Scanlon & Mellard, 2002)

Emotional and Behavior Disorder is a descriptive diagnosis (DSM-IV, 1994) given to youth whose behavior surpasses the tolerance and comprehension of others (Whelan, 1998). The troubling behavior is seen as stemming from emotional hurts (Cassel, Chow, DeMoulin, & Reiger, 2001b). Estimates of the number of school aged youth who are diagnosed with EBD range from two to twenty percent, with four percent being the standard (Forness & Kavale, 2001; Kauffman, 1999; Reinert, 1976).

Students diagnosed with EBD reflect the highest dropout rate of children in any disability category, with one-third of students diagnosed with EBD completing school

(Brooks & Sabatino, 1996; Razeghi, 1998; Rosenberg et al., 1992; Wagner, 1989; Wood & Cronin, 1999). Dropping out of school has been highly correlated with future criminality, as the average prison inmate dropped out of school after the tenth grade and performs at more than three years below the tenth grade level (Bell, Conard, Gazze, Greenwood, Lutz, & Suppa, 1983). Due to their lack of imperative skills and high dropout rate, students diagnosed with EBD are at high risk of future involvement with the criminal justice system (Barr & Parrett, 1995; Brooks & Sabatino, 1996; Cassel, Chow, DeMoulin & Reiger, 2001c; Cullingford, 1999).

A high school drop out earns $250, 000 less over their lifetime than does an individual who graduates (Winters, 1997). Furthermore, studies have found that 45-50% of inmates are unemployed at the time of their arrest (Bell et al., 1983; Martinez, 1988). It is reported that individuals who do not complete a high school education cost the U.S. Nation $240 billion in crime, welfare, and health costs (Winters, 1997). Consequently, when students with Emotional and Behavior Disorders drop out of school, social health, welfare, and correctional institutions become the bases of their education (Razeghi, 1998).

The nature of traditional public school regulations, overcrowded classrooms, and absence of educational methods geared to the unique needs of students are barriers to educating a student diagnosed with EBD (Bakken & Kortering, 1999; Battistich & Hom, 1997; Gunter, Denny, & Venn, 2000; Gunter & Reed, 1997). Therefore, many students with EBD attend special educational programs within regular schools or separate schools specifically for students with EBD (Eber et al., 1997; Forness & Kavale, 2001). Special EBD programs are proposed to be instrumental in mediating school dropout, preventing

future social dependence, and reducing involvement in the criminal justice system (Kern, Delaney, Clarke, Dunlap, & Childs, 2001; Lloyd, Forness, & Kavale, 1998). Effective, alternative schools are reported to have substantial positive influences on children at-risk for future criminality (Barr & Parrett, 1995; Brook, Nomura, & Cohen, 1989; Edmonds, 1986; Rutter, 1979).

Although there is a growing body of research exploring the relationship between teaching approaches and the needs of students in special education, existing studies on educational approaches are inadequate and inconsistent in establishing the effectiveness of educational approaches (Bakken & Kortering, 1999; Cox, Davidson & Bynum, 1995; Forness & Kavale, 2001; Kauffman & Pullen, 1996; Kern et al., 2001; Lloyd et al., 1998; Maccini & Gagnon, 2000; Razeghi, 1998; Sutherland, 2000). The studies that exist tend to focus on populations of special education students, students with severe emotional problems, student drug use, and student delinquency. Few studies focus only on students diagnosed with Emotional and Behavior Disorders. In addition, existing research on the Deficit and Strengths approaches in education with populations of students with EBD are limited in numbers and consistency.

Purpose of Study

This study compares the outcomes of two perspectives in an education program designed specifically for students with EBD. The purpose of this study is to compare the Deficit perspective approach and the Strengths perspective approach to education of students with EBD. The two approaches to educating students with EBD compared in this study consist of contrasting models of human growth and development. The Deficit

approach emphasizes the students' shortcomings and problems. The Strengths perspective stresses the importance of the students' strengths and future potential.

Relevance of Study

If students diagnosed with EBD drop out of school before acquiring the necessary skills and knowledge to adequately adjust as adults in society, the costs to society and to social institutions are increased. This increased cost is reflected in the National and States budget allocation of fewer dollars to educational programming and increased allocation to correctional programs (Whelan, 1998). The shift in fund allocations and the prevalence of existing research suggests that educational programs for troubled youth could be a primary target for social interventions.

Although this study will report findings regarding the influence of educational programs only for youth diagnosed with EBD, findings from this study could contribute to public understanding of the potential role of different approaches in the education of youth at-risk for school failure and criminality. This study could contribute to the field of Criminal Justice. If this study finds that one approach produces greater student attendance and higher passage of state tests than another approach, then this research could contribute to the broader public understanding of factors that may increase student retention, thus reducing the number of student dropouts. Furthermore, if higher student retention can be achieved, then the findings from this study could contribute to public policy discussions on preventing or reducing juvenile delinquency and subsequent criminal behavior.

CHAPTER II

Literature Review

The purpose of this study is to examine the relationship between two alternative approaches to the education of students diagnosed with Emotional and Behavior Disorders on school attendance and academic performance. This chapter reviews the literature on the relationship between criminality and delinquency with student success in school and educational approaches with adolescents. In so doing, the literature review: first, discusses existing research on the relationship between school success and delinquency and subsequent criminality; second, examines the relationship between student success in school and educational perspectives; and third, discusses elements of two approaches to education students with EBD.

School Success and Criminality

Studies illustrate a consistent connection between school success, delinquency, and subsequent criminality (Barr & Parrett, 1995; Bell et al., 1983; Cassel et al., 2001c; Martinez, 1988; Stephens, 1990; Sutherland & Wehby, 2001; Winters, 1997). Dropping out of school is one factor that has been connected to delinquency and subsequent criminality (Gottfredson, 2001).

The link between school failure and delinquency has been shown to be complex. Research conducted by Jarjoura (1993) found that involvement in delinquency varies by the reason for dropping out of school. Using data from two waves of the National Longitudinal Survey of Youth, Jarjoura determined that dropping out does not always increase a person's likelihood for delinquent behavior. Students who dropped out of school because of poor grades, problems at home, or financial difficulties did not differ

significantly in the level of involvement in violence from graduates (Jarjoura, 1993). Students who dropped out to get married, because they were pregnant, disliked school, and those who were expelled or dropped out for other reasons did show to have higher levels of violence than those who did not dropout (Jarjoura, 1993). Students who dropped out because of poor grades or for financial reasons were found to have significantly higher levels of involvement in theft than those who stayed in school (Jarjoura, 1993). Students who dropped out for other reasons did not show an increase in involvement in theft (Jarjoura, 1993). A later study conducted by Jarjoura (1996) exemplified the complexity of the dropout-delinquency relationship by examining the effect of social class on delinquency and dropout. The research found that dropping out of school is connected with higher rates of delinquent behavior for middle-class youth than for lower-class youth (Jarjoura, 1996).

Research conducted on the dropout-delinquency link has also examined the predictors of delinquency. School, family, social, behavioral, and psychological measures have all been found to be good predictors of school dropout (Janosz, LeBlanc, Boulerice, & Tremblay, 1997). Janosz et al. found that the above listed measures are stable and strong despite variations in sample and sociohistorical variations.

A study published by the United States Department of Justice, conducted on the characteristics of individuals admitted to Texas prisons, reported that more than 60% of admissions had not completed a high school education (Martinez, 1988). This research involved a sample of 1,483 inmates using a case study combined with individual interviews. Research conducted by Stephens (1990) reports that 79% of the randomly sampled 220 inmates were high school dropouts.

Poor academic achievement is another factor, besides dropping out, that has consistently been associated with delinquency and subsequent criminality (Bates et al., 1992; Bell et al., 1983; Gottfredson, 2001; Sutherland & Wehby, 2001; Winters, 1997). A 1992 study conducted on a sample of 161 inmates found that the average inmate was at a 5^{th}-6^{th} grade academic level (Bates et al., 1992). Findings of a study conducted in 1983 on prisoners in Louisiana, Pennsylvania, and Washington reported that the average inmate had completed the 10^{th} grade in school, but was performing academically at more than three years below the 10^{th} grade level (Bates et al.). The same study found that at least 42% of the inmates had some type of learning deficiency. The researchers operationalized learning deficiency as "scoring at or below the fifth grade level on at least one of the subtests on the Tests of Adult Basic Education" (Bates et al.).

Effective Education Approaches

Research on education approaches research identifies specific education factors that appear to be instrumental in mediating the above discussed consequences of dropping out of high school and low academic achievement for at-risk students (Alspaugh, 1997; Farmer, Farmer, & Gut, 1999; Gunter et al., 2000; Gunter & Reed, 1997; Gottfredson, 2001; Harrison, Gunter, & Reed, 1996; Kauffman, Lloyd, & Baker, 1995; Lloyd et al., 1998; Razeghi, 1998). One such mediating factor is school programs directed at a target population such as low academic achievers or delinquent youth. The directed schools have been found more effective than programs with a general direction (Cox et al., 1995). Small schools, with the K-6, 7-12 grade level organization, have been found to have lower dropout rates than larger schools with a more segregated organization (Alspaugh, 1997). Alspaugh hypothesizes that factors such as a higher

percent of student participation in extracurricular activities and the extended period of time students spend with a small number of teachers may play a part in the lower dropout rate of small schools (Alspaugh, 1997).

Education programs focusing on employability skills training have also been shown to be effective in mediating low academic achievement and high dropout rates. Schools implementing such focus have been found to have fewer students dropout of school, placed in juvenile justice programs, or are suspended from school (Casey, 1996). Kovaleski, Glicking, & Morrow (1999) conducted a study on 105 school districts in Pennsylvania and found that an Instructional Support Team had positive effects on academic performance. Instructional Support Teams consisted of the school principal, the students' teacher, a support teacher, and other specialists. Members of the group worked together in a problem solving process upon identification of a students' difficulty. Students working with implementation at a high level of intensity of the Instructional Support team showed a significant increase in academic performance (Kovaleski et al., 1999). Positive changes in academic performance and negative behaviors brought about by alternative education programs appear to be short-lived once the student is returned to the traditional school (Cox, 1999).

School Perspectives

This section of the literature review examines two perspectives to educating youth, the Deficit and the Strengths perspectives. The two perspectives reflect contrasting understandings of the behavior and experience of students. The differences in understandings contribute to differences in curriculum, teaching, and interventions with

students. The following section discusses the Deficit and the Strengths Perspectives with regard to: views of individuals, roles of professionals, and approaches to education.

Deficit Perspective

View of Individual.

The Deficit approach views individuals with disorders as deviating from normalized patterns of behavior, thinking, and emotions (Cassel, Chow, DeMoulin, & Reiger, 2000; Maccini & Gagnon, 2000). Such deviations are viewed as stemming from damage to, or deficit within, an individual (Cassel, Chow, DeMoulin, & Reiger, 2001a; Martens, 2000; Rosenberg et al., 1992). The literature attributes such deficits to biological structures and environment influence.

Deficits in individuals' biochemistry are believed to be an underlying cause of some disorders (Forness & Kavale, 2001). The lack of chemicals in individuals' brains are thought to cause disorders such as depression, ADHD, or schizophrenia (DSM-IV, 1994). In accordance with the deficit approach, pharmacological drugs are introduced into the individuals' body containing a synthetic form of the chemical they are lacking (Apter, 1982).

Environmental influences result in deficits in individual development and learning. Educational environment (classroom structure, educational material, etc.) is credited for deficits in a student's academic ability and performance (Chinien, Boutin, & Letteri, 1997; Farmer, Farmer, & Gut, 1999; Harrison et al., 1996). Familial and peer influences have been associated with individual deficiencies in social interaction i.e., delinquency, conduct disorder, or adult maladjustment (Farmer et al., 1999; Forness & Kavale, 2001).

Individuals with deficits who exhibit characteristics or symptoms of abnormal behavior, thinking, and emotions are placed in categories of diagnosis, such as schizophrenia or depression (Forness & Kavale, 2001; Magg & Forness, 1998; DSM-IV). The primary sourcebook for the deficit perspective, the Diagnostic and Statistical Manual of Mental Disorders (4th ed.), contains more than 16 primary categories of diagnosis (DSM-IV, 1994; Magg & Forness, 1998). Individuals with these diagnoses are viewed as disabled or handicapped, therefore, lacking the internal resources to overcome their problems alone (Morgan & Reinhart, 1991).

Diagnostic labeling is seen as a necessity from the Deficit perspective (Brooks & Sabatino, 1996; Kauffman, 1999; Kauffman & Pullen, 1996; Magg & Forness, 1998). Diagnostic labels allow for clear communication among professionals working with an individual exhibiting characteristics of a disorder (Brooks & Sabatino, 1996). Diagnostic labels also help to ensure proper treatment of a disorder (Kauffman, 1999; Kauffman & Pullen, 1996).

Role of Professionals.

Helping professionals, working from a Deficit perspective, emphasize the diagnosis and treatment of an individual's problem (Leon, 1999; Whelan, 1998). In diagnosing an individual, professionals often use standardized tests. (Cassel et al, 2000; Cassel et al., 2001a,b,c; Magg & Forness, 1998). Standardized tests measure many different things such as intelligence, social interaction, and personality (DSM-IV, 1994). The tests are used by professionals to obtain information about an individual, in order to better form treatment plans around the individual's needs (Magg & Forness, 1998).

Professionals using the deficit approach design and implement treatment plans (Magg & Forness, 1998). Treatment plans are based on "fixing" individuals faults. The deficits perspective posits that such deficits in personality, brought about by childhood experiences and other influences, are deeply rooted in the structure of personality (Zoints, 1985). Approaches used to mediate the deficits seek to re-educate the person or provide supportive services (Apter, 1982). Progress is measured in terms of an individual meeting the treatment goals set by the professional (Holmes, 1996).

Education.

Educators operating from the Deficits perspective acknowledge that some students are unable to deal with the academic and social expectations in schools (Kern, Delaney, Clarke, Dunlap, & Childs, 2001). In academic instruction, teachers operating from the Deficits perspective use scripted lessons and the drill and practice approach, emphasizing repetition. (Gunter & Reed, 1997). Most educational lessons are textbook based (Gunter et al., 2000). Teachers using the deficit approach cover the content presented in the textbook, using the textbook as a guide for the depth and duration of teaching as each topic is covered (Schmidt, Houang, & Cogan, 2002). The correlation between what a textbook covers and what a teacher teaches is .95 (Schmidt, 2002).

Strengths Perspective

View of Individual.

The Strengths perspective believes that people do the best they can with what they think they have, and who they think they are, as well as individuals have the capacity to make appropriate decisions regarding what is best for them (Van Wormer, 1999; Weick, Rapp, & Kisthardt, 1989). The multidimensionality and uniqueness of an individual is a

primary assumption of the Strengths perspective (Van Wormer, 1999). The Strengths approach posits that in actuality people experience various realities and because of these multidimensional realities, there are multiple pathways to achieving a satisfactory life (Chapin, 1995; Weick et al.).

Resiliency, the ability to bounce back, is key in the Strengths perspective (Benard, 1997). This perspective believes that all individuals possess personal resiliency (Saleebey, 1996). Through resiliency, individuals are viewed as able to gain strength and knowledge from difficult situations and succeed against all odds (Saleebey, 1997). After having lived through difficult situations, individuals are viewed as survivors (Postmus, 2000). The Strengths perspective posits that individuals can develop an awareness of the attributes and principles that got them through their past trials and tribulations, and in so doing refocus a self-concept that builds a positive future (Saleebey, 1996).

The Strengths perspective also holds that humans are reservoirs of untapped resources- physically, emotionally, socially, and spiritually- that can be mobilized in times of need (Van Wormer, 1999). Untapped and undeveloped personal resources provide the instruments for an individual to move from a current undesirable situation to a superior situation (Saleebey, 1996). The recognition that individuals possess the capacity for growth is coupled with the belief that individuals never use all of their strengths in order to achieve their full potential (Kisthardt, 1997; Weick et al., 1989).

Role of Professionals.

The role of professionals in the strengths perspective is based on collaboration with the individual (Kisthardt, 1997). Professionals validate pain where it exists and suspend disbelief of an individuals personal stories and experiences (Holmes, 1997; Van

Wormer, 1999). The individual, not the professional, is viewed as the director of the helping process (Kisthardt, 1997). Meetings between a professional and an individual often occur in the community, rather than in a set office environment (Rapp, 1997).

Empowerment plays a key role for professionals operating from the Strengths perspective (Cowger, 1997; Holmes, 1997). Professionals aid an individual in becoming aware of the power that lie within him or her to gain control of their life's direction (Kurtz, 1997; Van Wormer, 1999). In empowering an individual, professionals emphasize increasing the awareness and the choices for behaviors (Holmes, 1997). Attention is also drawn to the consequences of behavior choices. Through exploring behavior choices, the ability to imagine an alternative future is fostered and the development of personal goals in encouraged (Saleebey, 1996).

Education.

Teachers operating from the Strengths perspective provide learning opportunities connected to individual learning needs (Benard, 1997). Academic lessons are designed to be relevant to youth's life experiences (Casey, 1996). In educating students, teachers choose activities to facilitate individual storytelling capacities, exploration of behavior choices, and a future goal orientation (Holmes, 1997). Students are often given an option as to the medium they use to carry out an assignment (Kern et al., 2001). In all aspects of the classroom, high expectations regarding standards of performance are maintained (Benard, 1997). Teachers believe that in maintaining high standards, student performance is enhanced (Benard, 1997). Teachers believe that all students are able to learn (Saleebey, 1997).

Summary

As presented in this chapter, students diagnosed with Emotional and Behavior disorders are not receiving a quality education. This lack of quality education puts students diagnosed with EBD at a higher risk of delinquency and future criminality. Certain education practices have been shown to have a positive effect on two important aspects of a quality education, student retention and student academic performance. Two perspectives, Deficit and Strengths, were presented, contrasting each perspectives view of an individual, role of professionals, and approach to education. This research will compare the Deficit perspective and Strengths perspective, using outcome variables of student retention and student academic performance, with students diagnosed with Emotional and Behavior Disorders.

CHAPTER III

Methods

The impact of educational approaches for students diagnosed with EBD is the focus of this research. This chapter discusses the research methods used in this study, including: research design, sample, variables, instrumentation, agency access, data privacy and confidentiality, data collection, data entry, data analysis, and limitations of research design. This study compares the outcomes of the Deficit perspective and the outcomes of the Strengths perspective in educational programming for student diagnosed with EBD, who participated in the Bridgeway Learning Center over a five-year period. Student retention and student academic performance are the dependent or outcome variables. The school perspective, Deficit and Strengths, was the independent variable. Each perspective governed two of the four school years studied in this research. The dependent variables were student retention and student academic performance. Each dependent variable was measured in relation to each of the independent variables during the correlating timeframe.

Research Design

An adapted quasi-experimental design was utilized in this research. This research analyzed secondary data obtained from student records. The research design compared two groups of students who attended school during timeframes when different educational perspectives guided school programming. Group one was comprised of students who attended Bridgeway Learning Center during the 1996-1997 and 1997-1998 school years, when the Deficit perspective governed. Group two was comprised of students who attended Bridgeway Learning Center during the 1999-2000 and 2000-2001

school years when the Strengths perspective was used. The 1998-1999 school year was not included in analysis, as this year served as a transitional period.

Sample

The sample population in this research consisted of students who attended Bridgeway Learning Center, a secondary school for Emotionally and Behaviorally Disturbed students. The population sample was comprised of all students who attended Bridgeway Learning Center between the years of 1996-1998 and 1999-2001. Students who left and returned to the program were counted as only one student. The students were divided into two groups for purposes of this research.

Deficit Perspective Group

Table 1, *Demographics of Students in Deficit and Strengths Groups,* presents descriptive information on the students in the Deficit and Strengths groups. The Deficit Perspective group included seventy-three students (n=73. Males represented 73% percent (n = 52), and females represented 27% percent (n = 20), of the Deficit Perspective group. Approximately 66% of the group was Caucasian (n = 48), and approximately 34% of the group was classified as members of an ethnic minority (n = 25). Particular minority groups were not analyzed separately due to the small number of students included in the classifications. The grade level of students ranged from seventh (n = 19, 20.2%) thru eleventh grade (n = 7, 7.4%). The median distribution of students was the eighth grade (n = 32, 34.0%).

Strengths Perspective Group

The Strengths Perspective group included seventy-four students (n=74). Males represented 70% (n = 52), and females represented 30% (n = 22), of the Strengths

Perspective group. Approximately 58% of the group was Caucasian (n = 43), and approximately 42% of the group was classified as members of an ethnic minority (n = 31). Students grade level ranged from sixth grade (n = 1, 1.4%) thru twelfth grade (n = 1, 1.4%). The median distribution of students was the ninth grade (n = 24, 32.4%).

Table 1.
Demographics of Students in Deficit and Strengths Groups

	Deficit		Strengths	
Variables	**Number**	**Percent**	**Number**	**Percent**
Gender				
Male	53	72.6	52	70.3
Female	20	27.4	22	29.7
Ethnicity				
Caucasian	48	65.8	43	58.1
Minority	25	34.2	31	41.9
Grade				
Sixth	0	0.00	1	01.4
Seventh	19	20.2	6	08.1
Eighth	32	34.0	17	23.0
Ninth	24	25.5	24	32.4
Tenth	12	12.8	32	43.2
Eleventh	7	07.4	14	18.9
Twelfth	0	00.0	1	01.4

Variables

Independent

School Perspective.

The key independent variable in this research was school perspective. The governing school perspective was either based upon the Deficit perspective or the Strengths perspective. Group one students (n=73) were educated in a Deficit perspective school environment. Group two students (n=74) were educated in a Strengths perspective school environment. As previously presented in the literature review, the Deficit perspective and Strengths perspective have contrasting views on fundamental issues of education.

Gender, Ethnicity, and Grade.

Independent variables included in analysis were gender, ethnicity, and grade. Gender was included to examine any difference that may exist between male and female students. Student's ethnicity was included as an independent variable to examine any possible differences in contact hours or test scores for students of an ethnic minority versus Caucasian students. Students' grade levels were included in analysis to determine if students' in different grade levels attend school at different rates, or score differently on standardized tests.

Dependent

Student Retention.

The first dependent variable analyzed in this research was student retention. Student retention was operationally defined as contact hours, the number of hours of actual face-to-face contact between students and teachers. This operational definition is the definition used by the school. Contact hours are periods of time when students receive a rating on their performance. There are ten periods of time that students are rated during each day, thus there are ten possible contact hours per day of school. A ratio variable was calculated by dividing the total number of days a student was enrolled at Bridgeway, during a specific school year, by the total number of contact hours during the correlating school year. This ratio variable could then be used for analysis as it controlled for length of time a student attended Bridgeway Learning Center.

Student Academic Performance.

The second dependent variable analyzed in this research was student academic performance. Student academic performance was operationally defined as the number of

correct responses on the Minnesota Graduate Standards Test for the respective years. In accordance with Minnesota State Rule 3501, all students in the state of Minnesota must perform at a set level on the tests prior to being awarded a high school diploma. The Bridgeway Learning Center staff administers the tests on a set day during the school year. Scores from the math and reading tests were utilized in the analysis. Only students enrolled and present on the day a test was administered were included in analysis.

Instruments

The Minnesota Graduate Standards Test was utilized as an instrument in order to determine student academic success in the Bridgeway Learning Center program. The number of correct responses, as determined by the state test scorers, was used as a measure of student academic success. Every student is required to pass the Minnesota Graduate Standards test prior to being awarded a high school diploma from any school in the state of Minnesota (State rule 3501).

To measure student attendance the total number of student/teacher contact hours, as recorded in each student's file, was used. Contact hours include only hours where the student and teacher had actual contact.

Administration

Written permission to use the data was first obtained from the director of Willmar Public Schools Alternative Program, Dr. Edward Downey. Written permission to conduct the research was then obtained from the University Committee on Research Involving Human Subjects, at Michigan State University. Arrangements were then made to have access to the data. The researcher was given a spreadsheet with school records data on it. The researcher transformed the spreadsheet from Excel to SPSS format.

Access to the school files with the students test scores was also granted. The test scores were recorded from official scoring sheets for each individual student. The test scores were then entered into SPSS. The researcher administered no instrument. Information on instrument administration through the school program was used.

Data Privacy

Confidentiality of individual's represented in the data was strictly maintained. Names were not used, as each individual's data was coded with identification specific to only this research project. The data is kept in a locked file cabinet in the researchers home, with only the researcher having access to it. The data will be kept for three years beyond completion of the research, at which time it will be shredded.

Limitations

Threats to internal validity exist within this research design. One such threat is history. This threat arises from the fact that events in the subjects' environments, other than the manipulated independent variable school perspective, may affect the outcome. Another threat to the research design is maturation. The students were studied in blocks of school years. Psychological or physical changes, taking place within the subjects, that occurred with the passing of time may have affected on the outcome of the research.

A third possible threat to internal validity is testing effects. Some of the students took the Minnesota Graduate Test more than one time. This effect refers to the changes in test score that are brought about by reactions to having taken the test previously. Similar, yet different, formats of the test are administered, but such testing effects have been shown to exist even in the given situation.

The selection of subjects is a limitation of the research design as well. There are possible systematic differences in the composition of the two experimental groups. Such selection bias is quite likely, as naturally occurring groups were studied. An attrition threat also exists in the research design. The loss of subjects occurs in the research; therefore, it is possible that those who remain differ from those who dropped out in some way. Non-probability sampling was utilized in the research. The target population is students diagnosed with EBD who attend secondary, self-contained school programs.

Data Entry and Analysis

The majority of the data was given to the researcher in excel spreadsheet form. The test scores were accessed by the researcher on the official scoring sheets from the Minnesota testing offices. In order to assure data accuracy, double entry was completed. Scanning for outliers was also done, and any outliers were re-checked to ensure accuracy of entry. Data was entered in raw scores based on the information given to the researcher.

Transformation of data using SPSS programming was done for purposes of the research. The number of days a student was enrolled in Bridgeway Learning Center was divided by the total number of contact hours for purposes of obtaining a ratio variable for use in analysis. This ratio variable is contact hours per day.

Missing data was coded, inserted in SPSS programming, and labeled as missing. Not all subjects included in the contact hours per day data are included in the test score data. Only students in attendance on the day the test is administered take the test; therefore, only those students who took the test are included in analysis. Not each student takes both the reading and math test each year. For example, a student may pass

the reading test in eighth grade, so in ninth grade that student would only take the math test.

As outlined in the literature review, student retention and academic performance in school are predictors of delinquency and subsequent criminality. This research examined student attendance and academic performance under the Deficit perspective and the Strengths perspective.

CHAPTER IV

Results

This research examines the school retention and the academic performance of Emotionally and Behaviorally Disturbed students under two contrasting perspectives. The research seeks to assess any differences in either school retention or academic performance related to a governing educational perspective. This chapter presents the findings of the statistical analysis of the data through comparisons of two groups of students. The first section of this chapter addresses research question #1, which states: "Is there a difference in student contact hours in school, when either the deficit or the strengths perspective is the governing educational approach?" The second section of this chapter addresses research question #2, which states: Is there a difference in student test scores when either the deficit or the strengths perspective is the governing educational approach?

Test of Research Question #1: Is there a Difference in Student Contact Hours in School when either the Deficit or the Strengths Perspective is the Governing Educational Approach?

This study proposes that there may be a difference in the number of contact hours that students spend in school based upon the educational perspective of the school during the differing timeframes that students were enrolled in school. As data in Table 2, *Comparison of contact hours between the Deficit perspective and Strengths perspective groups,* suggest, the mean number of contact hours per day for students in the Deficit group is 8.09, with a standard deviation is 1.64. The Strengths group of students has a mean number of contact hours per day of 7.91 and a standard deviation of 1.61.

The comparison of the mean contact hours per day between the two groups employed a two-tailed *t*-test. A two-tailed *t*-test was used because insufficient research exists to predict a direction for comparison between the groups. The calculated value of *t* falls between the critical values of –3.18 and 3.18, and the mean number of contact hours per day for the Deficit group is not significantly different than the mean number of contact hours per day of the Strengths group ($t = .67$). Based on this result, the data do not indicate that there is a difference between the average contact hours per day for students enrolled in school during the Deficit timeframe versus students enrolled during the Strengths perspective timeframe.

Table 2.
Comparison of Contact Hours Between the Deficit Perspective and Strengths Perspective Groups

Variable	Mean	Standard Deviation	Number
Deficit group	8.09	1.64	73
Strengths group	7.91	1.61	74

Calculated t = .67; Calculated df = 3; Significance of t = .05

In order to explore whether or not gender, ethnicity, or grade level might account for the absence of differences between groups, the following analysis examines differences in contact hours based on gender, ethnicity, and grade level. The mean number of contact hours for females in the Deficit group, 8.15, was compared to the mean number of contact hours for females in the Strengths group, 8.34. As indicated by Table 3, there is no significant difference between the mean numbers of contact hours per day for females in the Deficit group versus females in the Strengths group. The mean number of contact hours per day for males in the deficit group, 8.06, was compared to the mean number of contact hours per day for males in the Strengths group, 7.73. No significantly difference in mean number of contact hours per day was indicated for males

in the Deficit group versus males in the Strengths group. These findings reveal that female and male attendance at school does not vary based on the use of Deficit or Strength approach to education.

Table 3.
Average Contact Hours per Day by Gender and Ethnicity

	Females			Males		
Variable	**Mean**	**Std Dev**	**number**	**Mean**	**Std Dev**	**number**
Group						
Deficit	8.15	1.34	20	8.06	1.75	53
Strengths	8.34	1.03	22	7.73	1.79	52
	Minority			**Caucasian**		
Group						
Deficit	7.60	1.79	25	8.34*	1.51	48
Strenths	8.42	1.06	31	7.55	1.85	43

**Significant <.05; Female Calculated t = -.50; Female df = 1; Male Calculated t = 1.2; Male df = 6 Minority Calculated t = 2.05; Minority df = 27; Caucasian Calculated t = 2.22; Caucasian df = 40*

Students belonging to a minority ethnic group have a mean of 7.60 contact hours per day in the Deficit group and a mean of 8.42 contact hours per day in the Strengths group. As shown in Table 3, this difference is not significant, indicating that minority contact hours per day do not change based on the governing educational perspective. Caucasian students have a mean of 8.34 contact hours per day in the Deficit group, while Caucasian students in the Strengths group have a mean of 7.55 contact hours per day. This difference is significant ($t = 2.22$, critical value $\pm$ 2.021), with Caucasian students having fewer contact hours in the Strengths perspective timeframe than in the deficit perspective timeframe.

In further addressing research question #1, contact hours per day and grade level are analyzed. As indicated in Table 4, grade level was found to have no significant correlation with contact hours per day for the Deficit group. Analysis on the Strengths group also indicated no significant correlation between contact hours per day and grade

level. Such results suggest that student attendance at school does not increase or decrease as grade levels change.

Table 4.
Correlation of Contact Hours per Day and Grade

	Deficit N=73	Strengths N=74
Grade in 1996-1997	.28	
Grade in 1997-1998	.05	
Grade in 1999-2000		-.05
Grade in 2000-2001		.20

Is there a Difference in Student Academic Performance when either the Deficit or the Strengths Perspective is the Governing Educational Approach?

Math Test Scores

This study proposes that there may be a difference in students test scores based upon the educational perspective of the school during the differing timeframes that students were enrolled in school. As data in Table 7, *Test Score Statistics by Group* present, the mean math test score for students in the Deficit group is 28.29, with a standard deviation of 10.92. The Strengths group of students has a mean math test score of 37.91 and a standard deviation of 10.76. The comparison of the mean math test scores between the two groups employed a two-tailed *t*-test. A two-tailed *t*-test was used because insufficient research exists to predict a direction for comparison between the groups. The calculated value of *t* does not fall between the critical values of ± 2.056. Thus, the mean math test scores are significantly different ($t = -3.23$). Data suggest that students who participated in the group under the Strengths approach to education receive higher scores in math than students who participated in the group under the Deficit perspective.

Table 5.
Test Score Descriptive Statistics by Group

Variable	number	Mean	Standard Deviation
Math test score			
Deficit	26	28.29**	10.92
Strengths	29	37.91	10.76
Reading test score			
Deficit	25	19.86*	7.14
Strengths	28	25.64	8.73

**Significant at .05; **Significant at .01; Math Calculated t = -3.23; Math Calculated df = 26; Math Critical value of t = ±2.056; Reading Calculated t = -2.6; Reading Calculated df = 26; Reading Critical value of t = ±2.056*

To further explore the significant differences in the mean math test scores of the Deficit group and Strengths group, analysis was done to examine differences in test scores based on gender, ethnicity, and grade level. The mean math test score for females in the Deficit group, 27.59, was compared to the mean math test score for females in the Strengths group, 37.42. A two-tail t-test was used to test for significance of the difference between means. No significant difference was found ($t = 1.80$, critical value = 2.447). The mean math test score of males in the Deficit group, 28.80 and the mean math test score of males in the Strengths group, 38.04, were compared. Using a two-tailed t-test, a significant difference was established between the mean math test score for males in the Deficit group compared to the mean math test score for males in the Strengths group ($t = -2.20$, critical value = ±2.12). The mean math score for students of an ethnic minority group in the Deficit perspective is 25.08, while minority students in the Strengths group have a mean math test score of 34.80. As shown in Table 6, this difference is significant ($t = -2.126$, critical value = 2.120), with minority students scoring significantly higher on the math tests given during the Strengths perspective timeframe than during the Deficit perspective timeframe. Caucasian students in the Deficit timeframe have a mean math score of 31.04, while Caucasian students in the Strengths

group have a mean math score of 41.25. This difference is significant ($t = 2.57$, critical value = $\pm$ 2.16), with Caucasian students scoring higher in math during the Strengths timeframe than during the Deficit perspective timeframe.

Table 6.
Average Test Score by Gender and Ethnicity

	Gender					
	Female			Male		
	Mean	Std Dev	number	Mean	Std Dev	Number
Math Test Score						
Deficit	27.59	7.64	11	28.80*	13.07	15
Strengths	37.42	10.96	6	38.04	10.96	23
Reading Test Score						
Deficit	20.06	6.92	8	19.77	7.64	17
Strengths	26.75	8.46	8	25.20	9.01	20

	Ethnicity					
	Minority			Caucasian		
	Mean	Std Dev	number	Mean	Std Dev	number
Math Test Score						
Deficit	25.08*	12.32	12	31.04*	9.34	14
Strengths	34.80	9.99	15	41.25	10.90	14
Reading Test Score						
Deficit	20.78	8.67	9	19.50**	6.30	16
Strengths	24.10	9.69	15	28.00	7.61	15

**Significant at .05; **Significant at .01*

Reading Test Scores

The mean reading test score for students in the Deficit group is 19.86. Students in the Strengths group have a mean reading test score of 25.64. A two-tailed *t*-test was used to compare the mean reading score of the two groups. The calculated value of *t* does not fall within the critical range of $\pm$2.056; thus, the mean reading test score of each group is significantly different ($t = -2.60$). Based on the result of the *t*-test, the data show that students scored significantly higher on the reading tests under the Strengths perspective than under the Deficit perspective.

To further explore the significant difference in the mean reading scores of the Deficit group and the Strengths group, analysis was done to examine differences in test

scores based on gender, ethnicity, and grade level. The mean reading test score of females in the Deficit group is 20.06, while females in the Strengths group have a mean reading score of 26.75. This difference is not significant (t = -1.68, critical value = $\pm$2.365). Males in the Deficit group have a mean reading test score of 19.77. The mean reading test score of males in the Strengths group is 25.20. A t-test reveals a no significant difference between the two means (t = -1.413, critical value = 2.021).

The mean reading test score for students of an ethnic minority in the Deficit group is 20.78, while minority students in the Strengths group have a mean reading test score of 24.10. As shown in Table 6, this difference is not significant (t = -.828, critical value = $\pm$2.28). Caucasian students in the Deficit group have a mean reading test score of 19.34. The mean reading test score of Caucasian students in the Strengths group is 27.42. A t-test indicates a significant difference, with Caucasian students scoring higher on reading tests given during the Strengths perspective timeframe than during the Deficit perspective timeframe (t = 2.98, critical value = $\pm$ 2.16).

In continuing to address research question #2, test score and grade level were statistically analyzed by correlation matrix. As Table 7 indicates, grade level in 1997-1998 is positively correlated with math score, suggesting that students in the higher grades during this school year had higher scores on the math test during the timeframe under the Deficit perspective. Grade level in 2000-2001 is significantly correlated with reading test score, suggesting that students in higher grades obtained higher reading test scores during the timeframe under the Strengths perspective. Correlations between grade in 1996-1997 and math and reading test score, grade in 1997-1998 and reading test score,

grade in 1999-2000 and math and reading test score, and grade in 2000-2001 and math test score are not of a significant level.

Table 7.
Correlation of Test Score and Grade Level

	Deficit		Strengths	
	Math	**Reading**	**Math**	**Reading**
Grade in 1996-1997	.38	-.04		
Grade in 1997-1998	.50*	-.01		
Grade in 1999-2000			-.33	.39
Grade in 2000-2001			.02	.56**

**Significant at .05; ***Significant at .01*

Summary

The results section first addressed research question #1: Is there a difference in student contact hours in school when either the Deficit or the Strength perspective is the governing educational approach? The average contact hours per day for students were not found to differ with educational approach. Further analysis found that when the groups were compared based on ethnic group status, Caucasian students have fewer contact hours per day under the Strengths perspective than under the Deficit perspective.

Secondly, this section addressed research question #2: Is there a difference in student contact hours in school when either the Deficit or the Strengths perspective is the governing educational approach? Both math and reading test scores are higher during the Strengths perspective timeframe than during the Deficit perspective timeframe. Results indicate that male students obtain higher math scores under a Strengths perspective approach to education than during the Deficit perspective approach to education. Students of an ethnic minority were also indicated as scoring higher in math during the Strengths timeframe than during the Deficit timeframe. Caucasian students were found

to obtain higher math and reading test scores in an educational environment under the Strengths perspective than an educational environment under the Deficit perspective.

CHAPTER V

Discussion

This research examined the school retention and the academic performance of Emotionally and Behaviorally Disturbed students under two contrasting perspectives. Two questions were the basis of data analysis, first, is there a difference in student contact hours in school when either the Deficit perspective or the Strengths perspective is the governing educational approach? And second, is there a difference in student academic performance when either the Deficit perspective or Strengths perspective is the governing educational approach?

Analysis indicated that math and reading test scores were higher under the Strengths perspective than under the Deficit perspective. Student ethnicity, which was classified as Caucasian and minority, does not appear to be a factor in the increased test scores as students in ethnic minority and Caucasian classes both responded with higher math and reading test scores under the Strengths perspective.

Male students were found to score higher on math tests during the Strengths timeframe than during the Deficit timeframe. Reading test scores for males were not significantly different between the Deficit and Strengths timeframes. No difference in reading or math test score was found for females under the contrasting perspectives.

One possible explanation of the higher test scores under the Strengths perspective is that students in the Strengths group had a higher median grade level than students in the Deficit group. However, student test scores obtained from multiple testing during the Deficit and Strengths timeframes and the 7-12 grade levels were correlated significantly in only two of eight correlation analyses. This would suggest that a higher median grade

level of students in the Strengths group might only be a partial explanation of higher test scores in the Strengths group than in the Deficit group.

Another possible explanation for the differences in students' math and reading tests rest with the unique population of students who were enrolled during the study timeframes. Because a "zero tolerance for behavioral issues" policy was implemented in the broader school district during the timeframes included in the study, it is possible that the students referred to Bridgeway Learning Center from the broader school during the Deficit timeframe differ from the students referred during the Strengths timeframe. Students with behavior and academic problems that were referred to Bridgeway prior to implementation of the policy may have been directed to correctional facilities after implementation of the "zero tolerance" policy. Such occurrence would suggest that Bridgeway Learning center received students with reduced behavioral and academic problems during the latter years included in the study, which represent the Strengths perspective timeframe.

Future studies, with the use of pre-tests and post-tests or student matching on background, identified behavioral issues, and student prior academic performance, could aid in evaluating whether the increase in student math and reading test scores in the Strengths perspective are effected by factors external to the particular perspectives used in the Bridgeway program, i.e., policies impacting student enrollment in the Bridgeway program.

This study also attempted to assess whether student attendance at school, as measured through student contact hours per day, differed between timeframes when the Deficit and Strengths perspectives were used by the school. Data analysis aimed at

answering question number one revealed no difference in students contact hours per day under the different perspectives. However, further analysis of differences in attendance based on ethnic classification revealed that Caucasian students had fewer contact hours per day during the Strengths perspective timeframe than during the Deficit perspective timeframe. Data analysis did not indicate a difference in the number of contact hours per day between the two timeframes for students classified as minority. A procedural variation in school determination of student enrollment status that occurred between the Deficit and Strengths timeframes may account for some of the difference in number of contact hours per day for Caucasian students and the lack of difference for minority students.

Under the Deficit perspective timeframe, students who were placed in a treatment facility, a correctional facility, or left town for a period of time were immediately un-enrolled. Under the Strengths perspective, students' enrollment continued for fifteen days after the last day of attendance, and was then terminated. The school district ran into fiscal problems, and under state law, is allowed to keep students enrolled up to fifteen days after their last day of attendance. These changes in procedures meant that a student enrolled under the Deficit perspective who fully attended 100 days (10 hour days) of school prior to entering a treatment facility would have a mean of 10.00 contact hours per day during their enrollment in the school. A student enrolled under the Strengths perspective who was enrolled and fully attended 100 days of school (10 hour days) prior to entering a treatment facility would have a mean of 8.70 contact hours per day. Although students, hypothetically, attended school under the Deficit and Strengths perspectives for equal amounts of time, students who left during the Strengths timeframe

would be considered as enrolled for 115 days as opposed to 100 days. This change in procedure may have skewed the results of this analysis. Given the minimizing effect of this procedural change on differences between student attendance in this study, there may actually be an increase in the number of contact hours per day for students under the Strengths perspective. In further research, there is a need to standardize contact hours if used as a measure of student retention.

The education of students with EBD is critical to their success in society. As presented in the literature review, student academic performance and graduation from high school are significantly related to delinquency and future criminality. If students diagnosed with EBD are not adequately educated, they stand a good chance of delinquency and/or criminality. In examining possibilities to increase student academic performance and reduce student drop out, this research sought to determine if school perspective has an effect on student academic performance (test score) and student retention (contact hours per day). As discussed previously, analysis showed no difference in the number of contact hours for the Deficit timeframe versus the Strengths timeframe. However, due to procedural changes in the school district during the included timeframe, the contact hours per day finding may have significantly minimized or eliminated differences that existed.

Math and reading test scores were both higher in the Strengths perspective timeframe than in the Deficit perspective timeframe, suggesting that school perspective has some effect on student academic performance. Based on the results of analysis, the Strengths perspective is assumed to have a positive influence on student academic performance. Whether it is the perspective as a whole or certain elements of the

Strengths perspective that are influential in increased student performance cannot be determined by this research. Future research should consider identifying and isolating key elements of the Deficit perspective and Strengths perspective, and comparing these elements with regard to school retention and academic performance.

Results of this research may be incorrect, as the Deficit group and the Strengths group may have differed in various ways. Naturally occurring groups were studied, thus naturally occurring differences exist. Gender, ethnicity, and grade level were found to play a role in contact hours and test scores. Therefore, any differences in gender, ethnicity, and grade level between the groups would bias results. Future research should consider ensuring the equality of the comparison groups through matching of subjects. Multivariate analysis would also help to ensure that noted differences between the groups in contact hours and test scores were not biased due to group inequality in other factors.

This research produced uncertain conclusions. Differences in contact hours and test scores were presented, but there is reason to believe that these results are flawed. With a lack of multivariate analysis, difference in contact hours and test scores produced due to unintended independent variables are indistinguishable from differences produced by the intended key independent variable. Future research should take into consideration the suggestions about future research presented above in order to obtain more certain findings.

References

Alspaugh, J. W. (1997). Maybe schools encourage dropping out. American Secondary Education, 25, 10-17.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Apter, S. J. (1982). Troubled Children Troubled Systems. Elmsford, NY: Pergamon Press.

Bakken, T., & Kortering, L. J. (1999). The constitutional and statutory obligations of schools to prevent students with disabilities from dropping out. Remedial and Special Education, 20, 360-366.

Barr, R. D., & Parrett, W. H. (1995). Hope at last for at-risk youth. Needham Heights, MA: Allyn & Bacon.

Bates, P. T., Davis, T. C., Guin, C. C., & Long, S. W. (1992). Assessment of literacy levels of adult prisoners. Journal of Correctional Education, 43, 172-175.

Battistich, V., & Hom, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. American Journal of Public Health, 87, 1997-2001.

Bell, R., Conard, E. H., Gazze, B., Greenwood, S. C., Lutz, J. G., & Suppa, R. J. (1983). The nature and prevalence of learning deficiencies among adult inmates. National Criminal Justice Reference Service, 139805.

Benard, B. (1997). Fostering resiliency in children and youth: Promoting protective factors in the school. In D. Saleebey (Ed.), The Strengths Perspective in Social Work Practice (pp. 167-182). White Plains, NY: Longman Publishers.

Brook, J., Nomura, C., & Cohen, R. (1989). A network of influences on adolescent drug involvement: Neighborhood, school, peer, and family. Genetic, Social and General Psychology Monographs, 115, 303-321.

Brooks, B. L., & Sabatino, D. A. (1996). Personal Perspectives on Emotional Disturbance/ Behavioral Disorders. Austin, TX: Pro-Ed.

Casey, R. E. (1996). Delinquency prevention through vocational entrepreneurship: the New Smyrna Beach Employability Skill Training Model for youthful offenders. Preventing School Failure, 40, 60-62.

Cassel, R. N., Chow, P., DeMoulin, D. F., & Reiger R. C. (2000). Identifying high school freshmen with serious atypical behavior and mental health problems for delinquency prevention purposes. Education, 121, 257-263.

Cassel, R. N., Chow, P., DeMoulin, D. F., & Reiger, R. C. (2001). Comparing the cognitive dissonance of 116 Juvenile delinquent boys with that of 215 typical high school students. Education, 121, 449-453.

Cassel, R. N., Chow, P., DeMoulin, D. F., & Reiger, R. C. (2001). Comparing the cognitive dissonance of 57 juvenile delinquent girls with that of 215 typical high school students. Education, 121, 454-458.

Cassel, R. N., Chow, P., DeMoulin, D. F., & Reiger, R. C. (2001). Comparing the 'hall-marks for success in a democracy' of 116 juvenile delinquent boys with that of 461 typical high school students. Education, 121, 436-440.

Chapin, R. K. (1995). Social policy development: The strengths perspective. Social Work, 40, 506-516.

Chinien, C. A., Boutin, F., & Letteri, C. (1997). Empowering at-risk students to stay in school using a cognitive-based instructional system. Journal of Industrial Teacher Education, 34, 42-63.

Cowger, C. (1997). Assessing client strengths: Assessment for client empowerment. In D. Saleebey (Ed.), The Strengths Perspective in Social Work Practice pp. 59-73. White Plains, NY: Longman Publishers.

Cox, S. M., Davidson, W. S., & Bynum, T. S. (1995). A meta-analytic assessment of delinquency-related outcomes of alternative education programs. Crime and Delinquency, 41, 219-229.

Cullingford, C. (1999). The causes of exclusion. London: Kogan Page Limited.

Eber, L., Nelson, C. M., & Miles, P. (1997). School-based wraparound for students with emotional and behavioral challenges. Exceptional Children, 63, 539-555.

Edmonds, R. (1986). Characteristics of effective schools. In U. Neisser (Ed.), The school achievement of minority children: New perspectives (pp. 93-104). Hillsdale, NJ: Erlbaum.

Farmer, T. W., Farmer, E. M. Z., & Gut, D. M. (1999). Implications of social development research for school-based interventions for aggressive youth with EBD. Journal of Emotional and Behavioral Disorders, 7, 130-139.

Forness, S. R., & Kavale, K. A. (2001). Reflections on the future of prevention. Preventing School Failure, 45, 75-81.

Gallagher, P. A. (1998). Promoting dignity: Taking the destructive D's out of behavior disorders. In R. Whelan (Ed.), Emotional and Behavioral Disorders: A 25-Year-Focus. Denver, CO: Love Publishing Company.

Gottfredson, D. (2001). Schools and Delinquency. New York, NY: Cambridge University Press.

Gunter, P. L., & Reed, T. M. (1997). Academic instruction of children with emotional and behavioral disorders using scripted lessons. Preventing School Failure, 42, 33-37.

Gunter, P. L., Denny, R. K., & Venn, M. L. (2000). Modification of instructional materials and procedures for curricular success of students with emotional and behavioral disorders. Preventing School Failure, 44, 116-121.

Harrison, J. S., Gunter, P. L., & Reed, T. M. (1996). Teacher instructional language and negative reinforcement: a conceptual framework for working with students with emotional and behavioral disorders. Education and Treatment of Children, 19, 183-196.

Holmes, G. E. (1997). The strengths perspective and the politics of clienthood. In D. Saleebey (Ed.), The Strengths Perspective in Social Work Practice (pp. 151-164). White Plains, NY: Longman Publishers.

Janosz, M., LeBlanc, M., Boulerice, B., & Tremblay, R.E. (1997). Disentangling the weight of school dropout predictors: A test on two longitudinal samples. Journal of Youth and Adolescence, 26, 733-762.

Jarjoura, G. R. (1993). Does dropping out of school enhance delinquent involvement? Results from a large-scale national probability sample. Criminology, 31, 149-170.

Jarjoura, G. R. (1996). The conditional effect of social class on the dropout-delinquency relationship. Journal of Research in Crime and Delinquency, 33, 232-255.

Kauffman, J. M. (1999). How we prevent the prevention of emotional and behavioral disorders. Exceptional Children, 65, 448-468.

Kauffman, J. M., & Pullen, P. L. (1996). Eight myths about special education. Focus on Exceptional Children, 28, 1-15.

Kauffman, J. M., Lloyd, J. W., & Baker, J. (1995). Inclusion of all students with emotional or behavioral disorders? Let's think again. Phi Delta Kappan, 76, 542-546.

Kern, L., Delaney, B., Clarke, S., Dunlap, G., & Childs, K. (2001). Improving the classroom behavior of students with emotional and behavioral disorders using individualized curricular modification. Journal of Emotional and Behavioral Disorders, 9, 239-247.

Kisthardt, W. (1996). The strengths model of case management: Principles and helping functions. In D. Saleebey (Ed.), The Strengths Perspective in Social Work Practice (pp. 97-113). White Plains, NY: Longman Publishers.

Kovaleski, J. F., Gickling, E. E., & Morrow, H. (1999). High versus low implementation of instructional support teams: A case for maintaining program fidelity. Remedial and Special Education, 20, 170-183.

Kurtz, P. D. (1997). Clients as resources: Empowering school social work practice with students, families, and communities. Social Work in Education, 19, 211-218.

Leon, A. M. (1999). Family support model: Integrating service delivery in the twenty-first century. Families in Society, 80, 14-24.

Lloyd, J. W., Forness, S. R., & Kavale, K. A. (1998). Some methods are more effective than others. Intervention in School and Clinic, 33, 195-200.

Maccini, P., & Gagnon, J. C. (2000). Best practices for teaching mathematics to secondary students with special needs. Focus on Exceptional Children, 32, 1-22.

Magg, J. W., & Forness, S. R. (1998). Depression in children and adolescents: Identification, assessment, and treatment. In R. Whelan (Ed.), Emotional and Behavioral Disorders: A 25-Year-Focus. Denver, CO: Love Publishing Company.

Martens, W. H. J. (2000). Antisocial and psychopathic personality disorders: Causes, course, and remissions- A review article. International Journal of Offender Therapy and Comparative Criminology, 44, 406-430.

Martinez, P. (1988). Characteristics of the Texas prison admissions. National Criminal Justice Reference Service, 112789.

Morgan, S. R., & Reinhart, J. A. (1991). Interventions for Students with Emotional Disorders. Austin, TX: Pro-Ed.

Prater, M. A., Sileo, T. W., & Black, R. S. (2000). Preparing educators and related school personnel to work with at-risk students. Teacher Education and Special Education, 23, 51-64.

Postmus, J. L. (2000). Analysis of the family violence option: A strengths perspective. Affilia, 15, 244-258.

Rapp, R. (1997). The strengths perspective and persons with substance abuse problems. In D. Saleebey (Ed.), The Strengths Perspective in Social Work Practice (pp. 77-96). White Plains, NY: Longman Publishers.

Razeghi, J. A. (1998). A first step toward solving the problem of special education dropouts: infusing career education into the curriculum. Intervention in School and Clinic, 33, 148-156.

Reinert, H. R. (1976). Children in Emotional Conflict: Educational Strategies for the Emotionally Disturbed and Behaviorally Disordered. St. Louis, MO: C.V. Mosby.

Rosenberg, M. S., Wilson, R., Maheady, L., & Sindelar, P. T. (1992). Educating students with behavior disorders. Needham Heights, MA: Simon & Schuster Inc.

Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), Primary prevention of psychopathology, Vol. 3: Social competence in children (pp. 49-74). Hanover, NH: University Press of New England.

Saleebey, D. (1996). The strengths perspective in social work practice: Extensions and cautions. Social Work,41, 296-308.

Saleebey, D. (1997). Introduction: Power in the people. In D. Saleebey (Ed.), The strengths perspective in social work practice, (2nd ed.), (pp. 3-19). White Plains, NY: Longman Publishers.

Scanlon, D., & Mellard, D. F. (2002). Academic and participation profiles of school-age dropouts with and without disabilities. Exceptional Children, 68, 239-258.

Schmidt, W. (2002). The benefit to subject-matter knowledge. American Educator, 26, 18.

Schmidt, W., Houang, R., & Cogan, L. (2002). A coherent curriculum: The case of mathematics. American Educator, 26, 10-26.

Stephens, R. T. (1990). Educational histories of incarcerated male felons with an emphasis on perceptions of school, causes of dropping out, and participation in prison educational programs. National Criminal Justice Reference Service, 147971.

Sutherland, K. S. (2000). Promoting positive interactions between teachers and students with emotional/behavior disorders. Preventing School Failure, 44, 110-115.

Sutherland, K. S. & Wehby, J. (2001). Exploring the relationship between increased opportunities to respond to academic requests and the academic and behavioral outcomes of students with EBD. Remedial and Special Education, 22, 12-13.

Van Wormer, K. (1999). The strengths perspective: A paradigm for correctional counseling. Federal Probation, 63, 51-58.

Wagner, M. (1989). Educational Programs and Achievements on Secondary Special Education Students: Findings from the National Longitudinal Transition Study. Menlo Park, CA: SRI International.

Weick, A., Rapp, C., & Kisthardt, W. (1989). A strengths perspective for social work practice. Social Work, 350-354.

Whelan, R. J. (Ed.) (1998). Emotional and behavior disorders: A 25 year focus. Denver, CO: Love Publishing Company.

Winters, C. A. (1997). Learning disabilities, crime, delinquency, and special education placement. Adolescence, 32, 451-462.

Wood, S. & Cronin, M. (1999). Students with emotional/behavioral disorders and transition planning: What the follow-up studies tell us. Psychology in the Schools, 36, 327-345.

Zoints, P. (1985). Teaching disturbed and disturbing students: An integrative approach. Austin, TX: Pro-Ed.