DEPRESSION AND BEHAVIORAL PROBLEMS IN ELEMENTARY SCHOOL CHILDREN

by

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A Research Paper

Submitted in Partial Fulfillment of the
Requirements for the
Master of Science Degree
With a Major in

Guidance and Counseling

Approved: 2 Semester Credits

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The Graduate School
University of Wisconsin-Stout
August, 2001

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ABSTRACT

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DEPRESSION AND BEHAVIORAL PROBLEMS IN ELEMENTARY SCHOOL CHILDREN
(Title)

M.S. GUIDANCE AND COUNSELING MR. ROD CRIST
(Graduate Major) (Research Advisor)

AUGUST, 2001 43 PAGES
(Month/Year) (No. of Pages)

AMERICAN PSYCHOLOGICAL ASSOCIATION PUBLICATION MANUAL
(Name of Style Manual Used in this Study)

In the United States alone, as many as six million children and adolescents suffer from an invisible illness called depression. This study examined the relationship between level of depression and student misbehavior for 49 students in grades 3-6 in a small, Midwest elementary school. Students were given a self-rated test, the Children's Depression Inventory (CDI), to test for level of depression.

This study found that there was no statistically significant difference in the number of detentions received by elementary students who experienced a high level of depression, as indicated by the T-score on the CDI, as compared to those students who experienced a lower level of depression. An unexpected factor in these results was the low number of detentions received overall by the 49 students. Only 49 total detentions were recorded for the 49 students, with 28 of the grades 3-6 students receiving zero detentions. The remaining 21 students received detentions in the range from 1 to 7 over a five-month period. It was discovered that detentions are one of several ways of measuring misbehavior of elementary aged children.

The results of the data collection showed that six students, 12.2%, met the definition of depressed with a CDI T-score of 65 or higher. Forty-three students, 87.85%, did not meet the CDI definition of depression. The mean T-score was 49.16, with a standard deviation of 11.10. The median T-score was 47.00, and the mode was 37.00.

Parents were informed by letter of their child's test results. It was noted if the score indicated that their child could or could not be experiencing depression at that point in time. If depression was indicated by a T-score of 65 or higher, parents were told that further assessment

and intervention was indicated. A school team of the child's teacher, the school psychologist, and the school guidance counselor was offered to parents of children with high T-scores so possible alternatives and resources could be explored.

ACKNOWLEDGMENTS

I would like to thank my husband, Jonathan D. Stone, for his love and support while I worked on master's degree at the University of Wisconsin-Stout.

I would like to thank my parents, Carl E. and Dolores V. Erickson, for their love and support during the three years that I attended UW-Stout. It is the support of family and friends that makes a difference in one's life.

I would like to express my appreciation to the Osseo-Fairchild School District Board of Education, District Administrator, Dr. Kerry Jacobson, and Principal, Mrs. Lori Ploederer, for allowing me to conduct this research in their school district.

A special thanks to my research advisor, Mr. Rod Crist, for sharing his knowledge and helping me with this study.

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CHAPTER ONE

INTRODUCTION TO THE PROBLEM

It has been called the number one public health problem in the world. Many professionals refer to it as the common cold of mental illness. It is a medical illness that has been documented throughout history with many sufferers locked up in mental hospitals or prisons, discarded and stigmatized by the so-called normal members of civilization. We no longer physically punish people for it, yet they must still deal with the stigma. There is no cure for it, no single, concrete explanation for its occurrence and no absolute medical test for it. It is believed to be caused by some combination of biological, environmental and personality influences. Certain personality types can increase the propensity toward the condition, but there is no foolproof personality test to diagnose it. Individuals are often held personally responsible for and blamed by uninformed people for having it. One is told to ✌snap out of it✍ and ✌pull yourself together" and ✌but, you have no reason to feel that way.✍ Yet it is no one's fault. It can strike a person of any race, gender, nationality, age, ethnic group, or social group at any time in his/her life. There are no boundaries and it knows no limitations.

This crippling condition is called depression. In the United States alone, as many as six million children and adolescents suffer from this invisible illness. And yet, less than a third of children under age eighteen receive any mental health services (Dubuque, 1998). Much of this service is too little too late. Depression is called an invisible illness because it often remains hidden from view and one cannot always tell from appearances if someone is depressed or not. As recently as twenty-five years ago, medical professionals believed childhood depression was not possible for several reasons. One, they believed that a child was passing through so many developmental changes and that made it impossible. Two, professionals thought that children did not undergo high enough levels of stress to trigger a depression. Third, the psychiatric profession followed Sigmund Freud's belief in the full development of the Id, Ego, and Superego as necessary before one could experience such a complex mental illness. It was thought depression only developed in adults and older adolescents on the verge of adulthood.

Now professionals have documented depression in preschool, elementary, as well as adolescent children. It has even been shown that babies can feel despair. Children experience the same emotions as adults such as sadness, anger, unhappiness, anxiety, hopelessness/despair, and

irritability. These emotions may be expressed differently in children than in adults though. Negative emotions such as these are usually of short-term duration for children and adults. It is when these negative feelings are constant, daily and seemingly never ending and actually last beyond two to three weeks that red flags are raised and we become concerned that something serious is going on. Depression is one illness that should be considered with this presentation of symptoms.

In fact, there are several types of depression including dysthymia, unipolar, bipolar, and seasonal affective disorder. The primary condition focused on in this study is unipolar. Unipolar depression is a major disorder of mood that is characterized by symptoms of depression only-no mania. Children with unipolar depression often feel so hopeless and despondent that, to them, life isn't worth living (Black, 1995). As children, many can remember being told dozens of times by parents that "these are the best years of your life." In America, childhood is supposed to be a fun time with few, if any, responsibilities and lots of time for play. Yet for children in the grip of a depression life is anything but fun and carefree.

There are many professionals interested in the problems of children, including behavioral and depression, such as physicians,

educators, school counselors, school psychologists, and marriage and family therapists. These professionals are sought out by parents, social workers and teachers to help children with mood and/or behavioral disorders. This study will provide beneficial information to them on the connection between depression and behavior problems in elementary children. Children with depression may experience behavioral symptoms along with emotional symptoms at home and at school. In fact, a child is often first identified as having behavioral problems by his/her classroom teacher. Each child's depression is an individual one. Some children portray the classic withdrawn, sad, overly quiet, good behavior picture. Other children may not appear sad at all, but are constantly irritable, fighting with others, angry all the time, and are hyperactive. The main thing to remember with true depression is change from the usual behavior and change in mood from happy to sad or angry (Deren, 1997).

Depression has been demonstrated in studies to be associated with and the possible cause of school failure, conduct disorder and delinquency, anorexia and Bulimia, school phobia, and panic attacks (Weinberg, 1995). Depression is often co-morbid with Attention Deficit Hyperactivity Disorder (ADHD) and anxiety disorders. This mood disorder can result in suicide attempts and/or completions. It is becoming more

apparent why the problem of childhood depression is and should be a concern to professionals, parents, and to society at large. This has become a societal problem that begs for national attention. ✌The true tragedy is that America refuses to recognize that there are millions of teens and children with psychological illnesses, which are as real as physical illnesses (Bronner, 1999).✍ There is little money available for assessment and even less money for treatment. Mental illness often carries a stigma resulting in reluctance to seek help when the condition is known. Instead of crisis management, experts urge spending money on the front end for early diagnosis and treatment and for prevention efforts. The public school system in the United States is in a position to provide early diagnosis and prevention. There are several questions that will be addressed in this study of elementary children, their behavior problems and depression.

Is depression a factor in the manifestation of behavior problems at school? Is depression related to chronic recurring negative behaviors or to single isolated events? Does depression affect the number of punishments/consequences a child receives at school? If children were evaluated for depression and treated would this reduce the number of behavior problems for them? Is a different explanation available for the

increasing amount of behavior problems in American schools?

This study will provide information to those readers unfamiliar with the medical illness called depression; it will increase awareness of the role childhood depression plays in behavioral problems; it will document actual cases of depression co-morbid with behavior problems in a small, rural, Midwestern village; it will provide information to professionals working with children on the results of early depression screening for children in elementary school, and it will give all of us who work with children the opportunity to effectively help students who may be at the mercy of a medical illness they cannot control or change on their own. This study is not designed to rate the effectiveness of detentions in the eradication of school behavioral problems for elementary students.

A review of the literature shows that students who engage in patterned misbehavior show elevated scores of hopelessness (Hintz, 1997). Hopelessness/despair is one of the hallmark features of depression. Studies have also shown that the Penn Prevention Program, designed to prevent depressive symptoms among at-risk 10-13 year-old children, combats the deficits associated with depression in children, such as lowered academic achievement, poor peer relations, lowered self-esteem, and in particular, behavioral problems. As many as one-third of

children with a depressive disorder also develop a comorbid conduct disorder (Jaycox, Reivich, Gillham, and Seligman, 1994). Therefore, the research hypothesis for this study is that the higher frequency of student behavior problems in a public elementary school will be associated with higher scores on the Child Depression Inventory (CDI) for elementary school students from Fairchild Elementary School in west-central Wisconsin.

Statement of the Problem

The purpose of the study is to determine the level of difference in the number of detentions as indicated by school records for elementary school students who differ in depression as measured by the Child Depression Inventory (CDI).

Null Hypothesis

There is no statistically significant difference between the number of detentions for elementary school students who experience a high level of depression as compared to those who experience a lower level of depression.

CHAPTER TWO

REVIEW OF LITERATURE

Background

Ask any teacher today in any of America's public schools what is one of their top concerns and chances are they will say student behavioral problems. Nothing is more frustrating to a teacher who is trying to teach only to be constantly interrupted by the socially unacceptable behavior of one or more students in his/her classroom. The author has witnessed this firsthand in her nine years of employment in a public high school and a public elementary school. Old and new strategies alike are utilized in an attempt to maintain school discipline by eliminating misbehavior.

But it is highly possible, as will be shown in this review of literature, that there is a connection between some student misbehavior and the underlying mental illness depression. It is important not to skip the question-why do students misbehave; what causes it?-and jump right to intervention strategies. By analyzing the problem of student misbehavior, one may arrive at new conclusions and therefore completely different strategies for eradication of it.

Gathering data through a proven assessment device, The

Children's Depression Inventory (Kovacs, 1992), will show what the children describe as their feelings over the last two week period under the categories negative mood, interpersonal problems, ineffectiveness, Anhedonia (inability to feel pleasure or happiness) and negative self-esteem. This data will be compared to the frequency of detentions received. The results of this linkage will allow us to develop effective intervention strategies to assist those students suffering from depression and the despair for the future that accompanies it.

Depression Symptoms

People frequently inquire how to tell the difference between depression, the mental illness, and a depressed mood. The first consideration is duration and intensity of the episode. A child who shows signs of a depressed mood longer than two weeks, or in the case of a loss, longer than six months, needs to be evaluated for a depressive disorder. An adult should monitor the child to see if s/he resumes their normal, daily routine after this period of time.

A second consideration is the ability of a child to function as s/he did before showing depressive symptoms. Do they show an interest in friendships, playing, hobbies, and sports? Do they complete homework; are their grades falling in school? Does the child show a loss of pleasure

in all their usual activities? Remember, we all feel depressed from time to time. It is normal to be depressed over a loss, not simply death of a family member or friend, but also moving, changing schools, losing a friend or family member and divorce or separation. These situations typically cause a depressed mood (short-term, feeling sad, low, blue) and not the medical illness clinical depression.

A third consideration would be sudden changes in sleeping and eating patterns and other physical indicators. Eating changes involve one of two extremes, either eating very little due to poor appetite or less common, overeating. Overeaters tend to crave carbohydrates and sweets. Sleep pattern disruptions include an inability to fall asleep, early morning awakenings, disrupted sleep with frequent awakenings during the night or at the other extreme sleeping too much. The child may complain of stomachaches, headaches, and other minor aches and pains. There may be bed-wetting as well.

A fourth consideration would be suicidal tendencies. This includes suicide thoughts, suicide attempts, and discussion of one's own death and funeral activities. A depressed child may start giving away prized possessions. Children often keep suicidal thoughts to themselves but will reveal their ideas upon questioning by a counselor or other caring

professional. Of course crying and sadness are another indicator, but children do not always show their depression this way as compared to adults who are openly sad and tearful. By the time a child exhibits depressive signs openly for everyone to see, s/he is then severely depressed (Cytryn, McKnew, 1996).

Causes of Depression

Researchers have been unable to pinpoint any single cause for depression in children. One must look at the interaction between environmental, biological, and psychological causes. Biological causes include genetics, heredity, hormones, as well as biochemical and neurological factors. A new development in the cause of yet another subtype of depression, labeled Seasonal Affective Disorder (SAD) is related to seasonal changes resulting in less light from the sun during late fall and winter. Environment, especially the home of the family of origin, has a huge impact on the mental health of youngsters. Abuse, anger and violence can trigger depression. Depression has been documented even in infants and preschool children. While rare, serious depression in the very young has been linked with abuse or serious neglect by the child's parents (Kashani, Carlson, 1987).

Psychological factors involve negative occurrences, including

conflictual relationships, between parent and child, death of a family member or friend, personality temperament and poor self-esteem. Self-esteem may be low due to parental rejection, abuse and depreciation. A child can be ignored by the entire family due to a physical disability or physical appearance. In dysfunctional families, we often see one child targeted as the family scapegoat and blamed for every problem, big or small, in the household.

Depression and Behavior

Among the many factors associated with depression in school-age children are poor academic achievement, dysfunctional or nonexistent peer relationships, behavior problems, and in severe cases, suicide (Worchel, Nolan, Willson, 1987). Worchel et al. administered the Children□s Depression Inventory to a group of school students in grades three to twelve from rural and urban areas. They found girls were more likely than boys to internalize problems and to report more depression. Boys were more likely than girls to externalize or act out their problems.

A depressed child may be hyperactive and/or aggressive receiving poor grades in school and receive negative reinforcement (punishment) for it from his/her teacher or principal. These children are labeled as problem children by staff and experience subtle rejection or are completely

written off as incorrigible due to their behavior. These children may have a behavior problem or they may have a hidden depression that is expressed through antisocial behavior including running away, cheating, bullying, stealing, setting fires, using drugs or alcohol, and beating up other children.

Literature on the relationship between depression and behavior problems goes back 30 years. Poznanski and Zrull (1970) found that 85% of the children seen in an outpatient clinic and given a diagnosis of depression on the basis of adult criteria also displayed aggressive behavior. Pearce (1978) noted that disobedience was a problem in 43% of the depressed children in his study (DSM-III criteria). Carlson and Cantwell (1979) found 32% of their depressed children (DSM-III criteria) displayed behavior problems severe enough to justify an additional diagnosis of conduct disorder. In yet another study, Chiles, Miller, and Cox (1980) studied 120 admissions to a facility for delinquent children and adolescents. Twenty-three percent of these students met the DSM-III criteria for a major depressive disorder. All 120 met the criteria for conduct disorder. Next, further elaboration on family influences for depressed children will be discussed.

Depression and the Family

It is now recognized that a depressed child often has one or more relatives with a mental illness. Professionals need to be aware of this when working with a child who may be at-risk for mental illness, but presents with a behavior problem instead. Depressed children, who are oppositional or defiant, or have a conduct disorder, have a positive family history of sociopathy, or alcoholism, along with depression or manic-depression. Hallucinations during depression indicate a family member with schizophrenia. It is also noteworthy that 30% to 40% of affectively ill children will have a biologic parent who is also affectively ill (most commonly depression) at the time the young person presents for initial evaluation (Weinberg, Harper, Emslie, Brumback, 1999).

When a parent is depressed a child is more at-risk due to genetic and psychosocial factors. In addition, the phenomenon of assortative mating (i.e. the tendency to marry people with the same or similar characteristics) means that there is an increased risk of an emotional illness in the spouse of a depressed parent (Cytryn, McKnew, 1996). This obviously places a child at an even greater risk for mental illness. And, with a depressed parent, there is also a greater likelihood of marital and family discord and high levels of stress in the home (Mash, Barkley, 1998).

CHAPTER THREE

METHODOLOGY

The methodology and procedures used in this study for determining the level of difference between the measured level of depression and the frequency of misbehavior will be discussed. The headings used are: subjects, instrumentation, data collection procedures and data analysis.

Subjects

The subjects in this research study are children enrolled in grades three, four, five, and six (age range 7-13) at the Fairchild Elementary School in Fairchild, Wisconsin. Fairchild is a village of 504 residents in a rural area of west-central Wisconsin. The village is located 35 miles southeast of Eau Claire, Wisconsin, the nearest large city with a population of approximately 60,000. All of the students live in the village or the surrounding countryside. Fairchild is a low-income community that survives on farm and small business income. There are many elderly retirees living here. It is quite common for adults to commute to work outside the community to the cities of Eau Claire, Neillsville, Osseo, Black River Falls, and Augusta. Approximately fifty-five percent of the student families are considered low-income based on eligibility for federal

government free and reduced meals.

Fairchild Elementary is a one-section school with an enrollment of 136 students and is classified as a Title I school. Each grade level is contained in one classroom for grades Kindergarten through six. Grade three has 19 students with eight boys and eleven girls. Grade four has 16 students with twelve boys and four girls. Grade five has 16 students with nine boys and seven girls. Grade six has 26 students with fourteen boys and twelve girls. The total population sample pool is 77 students, 43 boys and 34 girls.

Instrumentation

The Child Depression Inventory was chosen to measure the level of depression in the subjects. It is a 27-item self-rated symptom scale suitable for school-aged children and adolescents aged 7-17 years. Each item has three possible choices to check and is scored 0 for absence of symptom, 1 for mild symptom, and 2 for definite symptom. The child uses the options to rate the degree to which each statement describes him or her for the last two weeks. This scale can be administered in groups or individually. The Child Depression Inventory was initially developed in 1977 by Maria Kovacs, Ph.D. and was designed to be completed in 15 minutes or less.

Total raw scores range from 0 to 54 with higher scores indicating a higher level of depressive symptoms. In addition to an overall CDI score, there are five subscale scores in these areas: negative mood, interpersonal problems, ineffectiveness, Anhedonia, and negative self-esteem.

The Child Depression Inventory was normed on a population of 1,266 Florida public school students in grades two through eight. 592 boys ages 7-15 and 674 girls ages 7 to 16 were included. The population was primarily middle-class, but did include a range of socioeconomic backgrounds. Approximately 77% of the students were white, 23% were African American, Hispanic, or American Indian. Separate norms were developed for two groups of children: those ages 7 to 12 and those ages 13 to 17. Next, we will address the reliability of the CDI test instrument.

Alpha coefficients of reliability reported for the Child Depression Inventory in various samples range from .71 to .89 indicating good internal consistency of the instrument (Kovacs, 1992). The Child Depression Inventory has been used in hundreds of clinical and experimental research studies since its initial development by Maria Kovacs in 1977 and the validity has been well established. Test/retest reliability coefficients range from .38 to .87 with a median test/retest coefficient of .68. A finding

related to test/retest reliability is significant. It has been shown that repeated administrations over time are associated with a drop in Child Depression Inventory scores from the first testing to the second. This actually is a common occurrence in many psychological assessment tools. Dr. Kovacs cautions care not to overinterpret lower CDI scores after an interval of several weeks. It is suggested that multiple baselines be established first.

Data Collection Procedures

The Child Depression Inventory was administered to volunteer students enrolled in grades three, four, five, and six at Fairchild Elementary School in January and February of 2001. A letter explaining the research project and asking for permission to test students was sent home from school with every student in grades 3-6. The same letter was mailed a second time to all parents who did not respond one way or the other to the first letter. At the end of a three week period, forty-nine parents and students had given their written consent for testing. Therefore, the CDI was administered to 49 students out of a possible pool of 77 students.

The CDI was administered to one group of students, by grade level, at a time by the author, a graduate student in the Master's program of

Guidance and Counseling, K-12 at the University of Wisconsin-Stout. The test was administered during the regularly scheduled time for guidance so that students would not miss class time in any of the core subjects. Student subjects were encouraged to ask any questions at any time and were given the opportunity to talk to the school guidance counselor for any in-depth discussion of the test or feelings related to the subject of depression. Each of the 27 test items was read out loud to the students. The students then selected the answer that best fit how they felt over the past two weeks.

Test booklets were collected by the administrator and scored by hand. The test booklet contains a scoring sheet, where the raw score was tabulated, by the graduate student, for each of the five subscales: negative mood, interpersonal problems, ineffectiveness, Anhedonia and negative self esteem. Raw scores were totaled to receive the total CDI score. These raw scores were then transferred to the test booklet profile form. Results were tabulated and converted to the T-score listed on the profile form for each subject. Results were kept confidential.

Parents were able to contact the author with questions and received individual letters with their child's results as well. If the test score indicated that depression was probable, options were outlined for

the parents to select from.

Data Analysis

There are two variables in this study: number of detentions received and depression level. In this study, detentions involve the temporary removal from the classroom or the school setting due to behavioral problems. Detentions can be assigned by any staff member for student misbehavior. A teacher's aide compiled data on student detentions at Fairchild Elementary. Detentions were totaled for a five-month period for the 49 students participating in the study.

Data from this study is broken down by grade level, gender, race, age, and disability. Race is broken down by Caucasian, Hispanic, and American Indian because this is the present racial makeup at Fairchild Elementary School.

Forty-eight of the students participating in the study were Caucasian and one student was American Indian.

Of the 49 students participating in the study, 10 or 20.4%, were third graders; 12 or 24.5%, were fourth graders; 11 or 22.4%, were fifth graders; and 16 or 32.7%, were sixth graders.

There were 31 males and 18 females participating, which constitutes 63.3% and 36.7% of the total tested respectively.

Nine students, or 18.4%, were considered either cognitively or learning disabled as defined by their Individualized Education Plans (IEP's); 40 students, or 81.6% were not disabled using the IEP as the sole criteria.

The mean age in this study was 10.06 years, with a standard deviation of 1.28. One subject, or 2.0%, was seven years old, four subjects, or 8.2%, were eight years old, eleven subjects, or 22.4%, were nine years old, sixteen subjects, or 32.7%, were ten years old, ten subjects, or 20.4%, were eleven years old, six subjects, or 12.2%, were twelve years old and one subject, or 2.0%, was thirteen years old.

Six subjects, or 12.2%, met the definition of depressed (i.e. had a T-score of 65 or higher). Forty-three subjects, or 87.8%, did not meet the definition of depression set forth by CDI T-score results.

The number of detentions per student ranged from a low of zero to a high of seven over the five month period. By far the greatest number of subjects, 28, or 57.1%, had zero detentions. Eight subjects, 16.3%, had one detention. Six subjects, 12.2%, had two detentions. Three subjects, 6.1%, had three detentions. Two subjects, 4.1%, had four detentions. One subject, 2.0%, had five detentions. One subject, 2.0%, had seven detentions.

The mean CDI T-score for the 49 subjects was 49.16, with a standard deviation of 11.10. The median CDI T-score was 47.00. The mode CDI T-score was 37.

Raw test scores were converted to T-scores in the profiling process. According to Kovacs, T-scores are standardized scores which have the useful feature that each scale will have the same mean and standard deviation. T-scores have a mean of 50 and a standard deviation of 10. Data from the Child Depression Inventory results were broken down into these guidelines set by the test author (Kovacs, 1992):

T-Score	Guideline
Above 70	Very much above average
66-70	Much above average
61-65	Above average
56-60	Slightly above average
45-55	Average
40-44	Slightly below average
35-39	Below average
30-34	Much below average
Below 30	Very much below average

It is important to use these guidelines as approximates and not absolutes.

A T-score of 65 or greater will be considered clinically significant for the purposes of this research study.

T-scores range from 35 to 100+ on the profile form. The mean T-score on the Children's Depression Inventory for the forty-nine subjects was 49.16 with a standard deviation of 11.10, which falls in the average range, according to test author Kovacs.

The T-scores ranged from a low of 35 (raw score of 0) to a high of 81 (raw score of 31). T-scores were evenly spread out along the range with the frequency of T-scores from 1 to 5.

Frequency on the five subscales is analyzed for the 49 subjects. The highest possible raw score for negative mood is 12 points; for interpersonal problems is 8 points, for ineffectiveness is 8 points, for Anhedonia is 16 points, and for negative self esteem is 10 points. For the subscale negative mood, 73.4% of the students had a raw score of 0, 1, or 2. For the subscale interpersonal problems, the scores were not well distributed as the majority, 83.7%, fell at the low end. For the subscale ineffectiveness, 57.1% of the subjects had a raw score of 0 or 1. Regarding the subscale, Anhedonia, the scores were more spread out, but still over 50% were at 0,1, or 2 points. And for the last subscale, negative self esteem, 71.4% of the subjects had raw scores of 0 or 1. Thus the

frequency of subscales indicates that in every subscale over 50% of respondents scored at the 0, 1, or 2 level on the CDI. Now that all demographic data has been analyzed, the significance of the compiled data will be analyzed.

CHAPTER FOUR

RESULTS

Introduction

This chapter includes the results from a computer analysis of the data on the Children's Depression Inventory and detentions given at Fairchild Elementary School. The headings used are item analysis and hypothesis. Tables showing number of detentions and number of depressed are included here.

Item Analysis

All appropriate descriptive statistics were run on the data. A Pearson R Correlation Coefficient was used to determine whether a relationship existed between two variables. All appropriate correlations were done. Several were found to be significant at the .05 level. Current age of the subject was correlated with ineffectiveness, a subscale of the CDI, with a correlation of r=.312, with a significance level of p=.029. The raw score of the CDI was correlated with the negative mood subscale, with a correlation of r=.825, with a significance level of p=.000. The raw score of the CDI was correlated with the interpersonal problem subscale, with a correlation of r=..702, with a significance level of p=.000. The raw

score of CDI was correlated with the ineffectiveness subscale, with a correlation of r=.864, with a significance level of p=.000. The raw score of the CDI was correlated with the Anhedonia subscale, with a correlation of .905, with a significance level of p=.000. The raw score of the CDI was correlated with the negative self esteem subscale, with a correlation of r=.769, with a significance level of .000 and; the raw score of the CDI was correlated with the T-score on the Children's Depression Inventory, with a correlation of r=.801, with a significance level of p=.000.

Negative mood subscale was correlated with interpersonal problems with a correlation of r=.426, with a significance level of .002. In addition, negative mood subscale was correlated with ineffectiveness with a correlation of r=.635, with a significance level of p=.000; with the Anhedonia subscale with a correlation of r=.662, with a significance level of p=.000; with the negative self esteem subscale with a correlation of r=.563, with a significance level of p=.000; and with the T-score on the CDI with a correlation of r=.668, with a significance level of p=.000.

Interpersonal problems subscale was correlated with ineffectiveness, Anhedonia, negative self esteem and T-score on the CDI with a correlation of r=.531, r=.576, r=.505, and r=.582 respectively, all with a significance level of p=.000.

Ineffectiveness subscale was correlated with negative self esteem, and the T-score on the CDI with a correlation of r=.690 and r=.692 respectively, both with a significance level of p=.000.

The Anhedonia subscale was correlated with negative self esteem and the T-score on the CDI with a correlation of r=.563 and r=.741 respectively, both with a significance level of p=.000.

There was no statistically significant correlation found between depression, as indicated by the CDI T-score and detentions, as indicated by the number of detentions recorded, for third through sixth graders at Fairchild Elementary School. The correlation between these two variables was r=-.100, with a significance level of p=.496. This correlation is not considered statistically significant.

Hypothesis

The original hypothesis stated: The higher frequency of student behavior problems in a public elementary school will be associated with higher scores on the Child Depression Inventory (CDI) for elementary school students from Fairchild Elementary School in west-central Wisconsin. The original null hypothesis stated: There is no statistically significant difference between the number of detentions for elementary school students who experience a high level of depression as compared to

those who experience a lower level of depression. The data collected was analyzed to either accept or reject the null hypothesis. The correlation between the two variables, detentions and depression, was r=-.100, with a significance level of p=.496. This correlation is not considered statistically significant. The null hypothesis cannot be rejected based on the results of the statistical analysis. Therefore, this study found no significant correlation between depression, as measured by CDI T-scores, and behavior problems, as measured by number of detentions. The null hypothesis was accepted.

TABLE I:

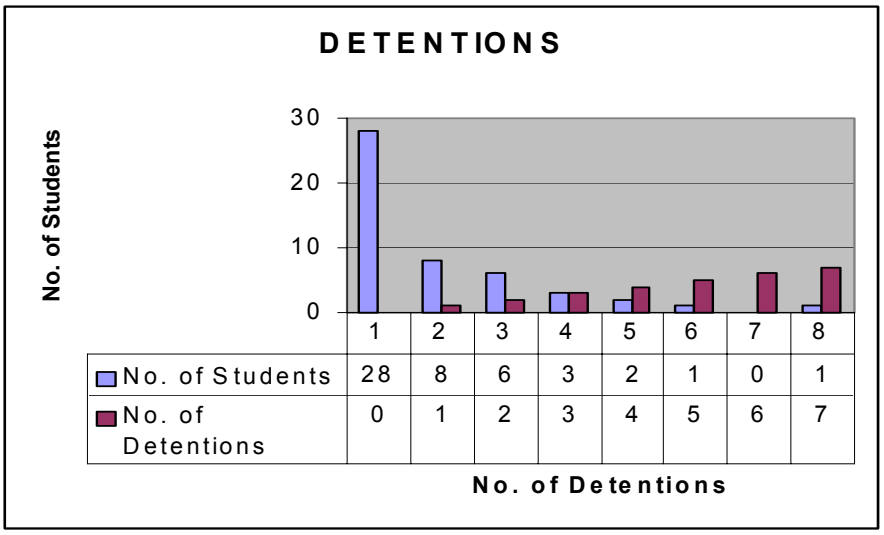
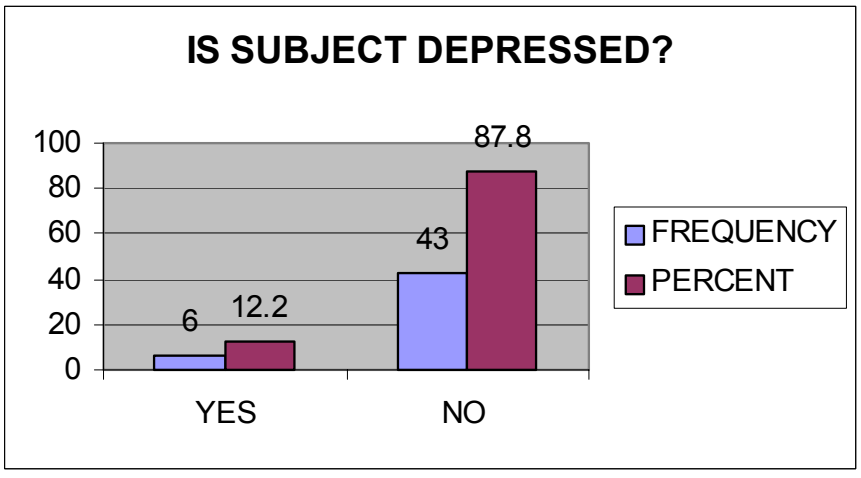


TABLE II



CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS, CONCLUSIONS

Discussion

One of the surprises in this study was the low number of detentions received overall by the student participants at Fairchild Elementary. The total number of detentions received by all 49 students combined was only 49. Twenty-eight of the forty-nine students tested, 57.1%, received zero detentions in a five-month period. Like any school, there was student misbehavior present, but perhaps number of detentions was not the most complete way of measuring student misbehavior.

There were other practices used in the place of detentions by staff members on occasion. For example, some student misbehavior was dealt with by writing apology letters, not going on field trips, loss of free time, a trip to the principal's office or loss of privileges. If detentions would have been the only punishment for misbehavior, it is highly probable that the number would have been higher than 49. That would have affected the results of this study.

Another possible explanation for the results of this study is the low sample size. While 49 out of a possible 77 students, or 63.6%,

participated in the research study, there were only 6 students who had a high enough T-score to indicate the possible presence of depression. There was no indication of depression present for 43 students. Kovacs indicated that the depression rate for a low base-rate group is going to be lower than for a high base-rate group. All children in a school setting, not identified as having behavior problems, are considered a low base-rate group. On the other hand, when the children being studied come from a clinical setting, they are considered a high base-rate group. Had this study examined the detention rate for children coming from a clinical setting, it would in all likelihood, have been higher.

A third factor in the results could be the fact that every parent/student in the third through the sixth grade who volunteered was a part of the study. Are people who volunteer less likely to be depressed and less likely to exhibit unacceptable behavior than people who do not volunteer? There were at least two students who exhibited common symptoms of depression who did not participate in this study either because their parents would not allow them to or because the students themselves refused to participate. It is a fact that depression can cause a person to withdraw from social contact with others. It is also a fact that there is still a stigma associated with having the medical condition,

depression, in our society. People who have depression often hide it from others. Family members of depressed loved ones may feel embarrassed by the problem and not want others to be made aware of it. And, there is still the belief that depression is something that children do not have and it is something people do not want to think about or talk about, much less examine carefully.

Recommendations

After completing this study, there are several recommendations to discuss. If this study were to be repeated, it would be helpful to have a larger group of students to test, perhaps using the sampling process to have a more representative group. There was only one minority student in the study, with the rest being Caucasian, as Fairchild Elementary is a school with only a handful of minority students to begin with. Only 36.7% of the subjects were female. This study used all participants who volunteered in order to have enough subjects just to implement the study. This was necessary because Fairchild Elementary is a one section grade school with a small student population.

A second recommendation would be to consider using a different test instrument with more questions. The problem here is that there is a paucity of test materials to select from when searching for a valid and

reliable instrument for elementary age students. More tests are available for the adult population than for young children. It might be helpful to use a self-esteem test along with a test for depression to have more than one indicator for a mood disorder.

A third recommendation would be to create a new study to examine the link between depression and student disability. Nine out of 49 students were either cognitively or learning disabled, too small of a subgroup to draw statistical conclusions, nevertheless, a subgroup with a mean T-score of 57.2, higher than the overall mean T-score of 49.16. This indicated a need for further research. In this study, two third grade students were omitted from the pool of subjects based on the recommendation of their cognitive disabilities teacher. These students' intelligence level was such that the teacher felt they could not understand the questions asked. It is difficult to assess students with low cognitive abilities with the Children's Depression Inventory because it is not recommended for children functioning below age 7.

A fourth recommendation would be to forgo student permission when testing minors for depression. A parent has the authority to authorize testing of their child and is responsible for his/her medical care. Parents authorize testing for cognitive/learning disabilities in the I.E.P.

process. How can students with a mental health disorder be identified and helped if they just "decide" that they do not feel like being tested? When a child's health is the subject, parental permission should be acceptable.

Finally, a better way of measuring student misbehavior needs to be identified. A standardized means of recording misbehavior would be ideal. Of course the problem is that we are dealing with human behavior and that is not easily quantified. Seven teachers have seven different ways of handling student misbehavior depending upon their own personal view of what is effective in arresting unacceptable behavior.

It was also discovered that teachers use different criteria for assigning detentions. One teacher may assign a detention because the student repeatedly did not complete and return assigned homework. Another teacher may assign a detention because a student was in a physical fight with another student on the playground. Yet a third school staff member may assign several days of detention for a student who ran away from school.

All of these examples fit under the broad heading of student misbehavior, i.e. not behaving as expected in the school setting/disrupting the educational process. Yet, common sense would indicate that some misbehavior is more disturbing and disruptive than other misbehavior.

Looking at detention alone, without further definition, seemed to fall short of the expectation of a “foolproof” way of measuring misbehavior that could be explained by underlying depression.

Conclusions

This study found that there was no statistically significant difference in the number of detentions received by elementary students who experienced a high level of depression, as indicated by the T-score on the CDI, as compared to those students who experienced a lower level of depression. An unexpected factor in these results was the low number of detentions received overall by the 49 students. Only 49 total detentions were recorded for the 49 students, with 28 of the grades 3-6 students receiving zero detentions. The remaining 21 students received detentions in the range from 1 to 7 each over a five-month period. It was discovered that detentions are one of several ways of measuring misbehavior of elementary aged children.

The results of the data collection showed that six students, 12.2%, met the definition of depressed with a CDI T-score of 65 or higher. Forty-three students, 87.85%, did not meet the CDI definition of depression. The mean T-score was 49.16, with a standard deviation of 11.10. The median T-score was 47.00, and the mode was 37.00.

It should be noted that the CDI was not intended to be the sole tool of clinical assessment. Parents were informed by letter of their child's test results. It was noted if the score indicated that their child could or could not be experiencing depression at that point in time. If depression was indicated by a T-score of 65 or higher, parents were told that further assessment and intervention was indicated. A school team of the child's teacher, the school psychologist, and the school guidance counselor was offered to parents of children with high T-scores so possible alternatives and resources could be explored.

At the end of this study the question remains, what explanation is there for the increasing amount of behavior problems in American schools; and is mental health related to it? In this day and age it no longer works to tell a student to simply stop their misbehavior, like it worked forty years ago. Educators need to look at all possible reasons for misbehavior in order to arrive at effective methods of change. This is the challenge of behavior management in the 21st century.

Appendix A

Children's Depression Inventory (CDI), by Maria Kovacs

Remember, pick out the sentences that describe you best in the past two weeks.

Item 1
I am sad once in a while. □
I am sad many times. □
I am sad all the time. □

Item 2

Nothing will ever work out for me.□
I am not sure if things will work out for me.□
Things will work out for me O.K. □

Item 3

I do most things O.K. □
I do many things wrong. □
I do everything wrong. □

Item 4

I have fun in many things.□
I have fun in some things.□
Nothing is fun at all. □

Item 5

I am bad all the time. □
I am bad many times. □
I am bad once in a while.□

Item 6

I think about bad things happening to me once in a while. □
I worry that bad things will happen to me.□
I am sure that terrible things will happen to me.□

Item 8
All bad things are my fault. □
Many bad things are my fault. □
Bad things are usually my fault. □

Item 9

I do not think about killing myself.□
I think about killing myself but I would not do it.□
I want to kill myself. □

Item 10

I feel like crying every day. □
I feel like crying many days. □
I feel like crying once in a while. □

Item 11

Things bother me all the time. □
Things bother me many times. □
Things bother me once in a while.□

Item 12

I like being with people.□
I do not like being with people many times.□
I do not want to be with people at all.□

Item 13

I cannot make up my mind about things.□
It is hard to make up my mind about things.□
I make up my mind about things easily.□

Children's Depression Inventory (CDI), by Maria Kovacs

Item 7
I hate myself. □
I do not like myself. □
I like myself. □

Item 14
I look O.K □
There are some bad things about my looks.□
I look ugly. □

Item 15
I have to push myself all the time to do my schoolwork. □
I have to push myself many times to do my schoolwork. □
Doing schoolwork is not a big problem. □

Item 21
I never have fun at school. □
I have fun at school only once in a while.□
I have fun at school many times.□

Item 16
I have trouble sleeping every night. □
I have trouble sleeping many nights. □
I sleep pretty well. □

Item 22
I have plenty of friends. □
I have some friends but I wish I had more.□
I do not have any friends.□

Item 17
I am tired once in a while. □
I am tired many days. □
I am tired all the time. □

Item 23
My schoolwork is alright.□
My schoolwork is not as good as before.□
I do very badly in subjects I used to be good in□

Item 18
Most days I do not feel like eating. □
Many days I do not feel like eating. □
I eat pretty well. □

Item 24
I can never be as good as other kids.□
I can be as good as other kids if I want to.□
I am just as good as other kids. □

Item 19
I do not worry about aches and pains. □
I worry about aches and pains many times.□
I worry about aches and pains all the time.□

Item 25
Nobody really loves me. □
I am not sure if anybody loves me.□
I am sure that somebody loves me.□

Item 20
I do not feel alone. □
I feel alone many times. □
I feel alone all the time. □

Item 26
I usually do what I am told. □
I do not do what I am told most times.□
I never do what I am told. □

Item 27
I get along with people. □
I get into fights many times. □
I get into fights all the time. □

(Source: Kovacs, Multi-Health Systems, Inc., 1982)

Appendix B

CDI T-Scores and Number of Detentions

Participant #	T-Score	Number of Detentions
1	53	2
2	46	0
3	56	1
4	35	4
5	39	3
6	49	0
7	44	0
8	48	0
9	63	0
10	46	0
11	49	2
12	37	2
13	53	1
14	49	2
15	42	0
16	37	0
17	37	1
18	50	0
19	58	2
20	42	0
21	46	0
22	44	0

CDI T-Scores and Number of Detentions

Participant #	T-Score	Number of Detentions
23	71	0
24	46	3
25	61	7
26	47	0
27	81	0
28	41	1
29	40	1
30	39	4
31	72	0
32	65	1
33	56	0
34	37	0
35	49	3
36	41	0
37	71	0
38	37	0
39	67	0
40	41	0
41	54	0
42	44	1
43	38	0
44	48	2
45	61	0

CDI T-Scores and Number of Detentions

Participant #	T-Score	Number of Detentions
46	35	0
47	56	1
48	38	0
49	50	5

BIBLIOGRAPHY

Black, S. (1995). Wednesday's child. The Executive Educator, 27-30.

Bronner, E. (1999, April 22). Terror in Littleton: The signs; experts urge swift action to fight depression, isolation. The New York Times, p. A27.

Carlson, G. A. & Cantwell, D. P. (1980). Unmasking masked depression in children and adolescents. American Journal of Psychiatry, 137, 445-449.

Chiles, J. A., Miller, M. L., & Cox, G. B. (1980). Depression in adolescent delinquent population. Archives of General Psychiatry, 37, 1179-1184.

Cytryn, L. & McKnew, D. H. (1996). Growing up sad: Childhood depression and its treatment. New York: W. W. Norton & Company.

Deren, D. M. (June 1997). Wing of Madness: Children and depression. http://members.aol.com/depress/children.htm.

Dubuque, S. E. (1998). Fighting childhood depression. The Education Digest, 63, 65-9.

Hintz, D. O. (1997). The effect of hopelessness on students engaged in patterned misbehavior. Thesis UW-Stout Library.

Jaycox, L. H., Reivich, K. J., Gillham, J. & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. Behavior Research Therapy. 32 (08), 801-816.

Kashani J. H. & Carlson, G. A. (1987). Seriously depressed preschoolers. American Journal of Psychiatry. 144, 348-350.

Kovacs, M. (1992). The Child Depression Inventory. North Tonawanda, New York: Multi-Health Systems, Incorporated.

Mash, E. J. & Barkley, R. A. (1998). Treatment of childhood disorders, (2nd ed.). New York: The Guilford Press.

Pearce, J. (1978). The recognition of depressive disorder in children. Journal of the Royal Society of Medicine, 71, 495-500.

Poznanski, E. O. & Zrull, J. P. (1970). Childhood depression: Clinical characteristics of overtly depressed children. Archives of General Psychiatry, 23, 8-15.

Weinberg, W., Harper, C., Emslie, G. & Brumback, R. (1999). Depression and other affective illnesses as a cause of school failure and maladaptation in learning disabled children, adolescents, and young adults. http://www.1danatl.org/articles/seab/weinberg.

Worchel, F., Nolan, B., & Willson, V. (1987). New perspectives on child and adolescent depression. The Journal of School Psychology. 25, 411-414.