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Incidence of adolescent depression in a parochial high school

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INCIDENCE OF ADOLESCENT DEPRESSION IN A PAROCHIAL HIGH SCHOOL

An Abstract of a Thesis

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Specialist in Education

Silvio R. Encinas

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ABSTRACT

In recent years the problem of depression among children and adolescents has become increasingly important to educators and mental health professionals such as school psychologists. Documented increases in depressive symptoms among school-age youth may be reflected in an increase in acting out behaviors in the school settings which, in turn may adversely affect academic performance, teacher expectations, and peer relationships.

This study investigated the incidence of depression in a parochial high school using a self-report procedure and compared with non-parochial studies. Differences between male and female students were analyzed, it was expected to find also an inverse correlation between the Beck Depression Inventory (BDI) scores and the Iowa Test of Educational Development (ITED) scores.

Original data from 240 parochial high school students ninth through twelfth graders from a Midwestern region were analyzed on the 21-item version of the Beck Depression Inventory and a demographic questionnaire. On the basis of the cutoffs for level of severity established by Albert and Beck (Journal of Youth and Adolescence, 4, 301-307, 1975), 21.2% scored within the moderate range, and 5.8% scored within the severe range of depression.

No significant differences in the BDI scores were observed between male and female adolescents and none of the variables included in the demographic questionnaire had a different effect

on the BDI scores. The expected inverse correlation of depression and academic performance was not supported by this study.

The implications of the high rate of reported depressive symptoms among parochial and non-parochial students are discussed in relation to school psychology practice and intervention.

This is to certify that

Silvio R. Encinas

✓ satisfactorily completed the comprehensive oral examination

___ did not satisfactorily complete the comprehensive oral examination

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CHAPTER I

THE PROBLEM

Introduction

In recent years the problem of depression among children and adolescents has become increasingly important to educators and mental health professionals such as school psychologists. Specifically, research conducted during the last decade suggests that the incidence of depression among American adolescents is alarmingly high (Simons & Miller, 1987). Teri (1982), for example, administered the Beck Depression Inventory (BDI) to 568 high school students and concluded that 5% were severely depressed, while another 27% were moderately depressed. Sullivan and Engin (1986) also concluded that the prevalence of depression among high school adolescents constitutes a growing problem in American school systems. In another study, Rutter, Graham, Chadwick, and Yule (1976) reported that 21% of the boys and 23% of the girls in their sample of more than 2,000 14 to 15 year old students were depressed. All of these findings indicate that alarmingly high numbers of American adolescents are being admitted or referred to clinical programs for treatment of depression.

With respect to this problem, Epstein and Cullinan (1986) identify four major conceptualizations of childhood depression. First, there is the psychoanalytic position which argues that it is impossible for depression to exist in childhood simply because

children do not possess the requisite qualities of an adequately developed superego structure. A second view is that depression exists in children, but is typically "masked" by the symptoms of other concomitant problems (e.g., learning disabilities, hyperactivity, truancy, conduct disorder).

A third conceptualization is that depressive feelings and behaviors frequently occur, but are transitory in children. From this perspective, depression constitutes a phenomenon of normal development that requires no specific treatment. In fact, treatment intervention would be viewed as harmful. The fourth view indicated that childhood depression is essentially analogous to depression in adults. In this perspective, the criteria used to diagnose depression in adults can be appropriately used with children with only minor variations. According to Epstein and Cullinan (1986), this view is rapidly gaining acceptance among researchers and practitioners.

The present study was conceived within the theoretical parameters of this last perspective, and draws specifically on Aaron Beck's (1973) theory of depression. In this perspective, depression is seen as a consequence of negative beliefs about oneself, the world, and the future. These beliefs presumably influence depressive individuals to process and perceive everyday situations from a negative perspective which may lead to dysphoria, apathy, and withdrawal (Simons & Miller, 1987). Depression, then sustains itself through the effects of a negative belief set which

operates to distort information through such processes as generalization and selective perception.

Given that Beck's conceptualization of depression is valid, one would expect that it would be manifested in the school setting. For example, children who experience depression should fall behind academically and withdraw from peers and extracurricular activities (e.g., DenHouter, 1981; Grueling & DeBlassie, 1980; Petzel & Riddle, 1981).

Recently, documented increases in depressive symptoms among school-age youth may be reflected in an increase in acting out behaviors in the school settings which, in turn, may adversely affect academic performance, teacher expectations, and peer relationships. School is a place of considerable stress for many youth under the best of circumstances. As such, the school setting may be the breaking point for some depressed adolescents.

Research conducted by McCoy (1982) indicated that depression in adolescents leads to a variety of problems at school. Among the most frequent negative behaviors he cites are: (a) lack of motivation, (b) school phobias, (c) serious truancy, and (d) behavioral problems with teachers, peers and school authorities.

Wodarski and Harris (1987) report that stress has a debilitating effect physically and psychologically on the human body, especially for growing adolescents. Americans traditionally place themselves under great stress, and this is particularly true for those adolescents whose parents live vicariously through their children's

achievements (Madison, 1978). Such parents may impose overly high expectations on their children, not realizing that this may affect their youngster's self-esteem and may lead to the development of depressive symptoms.

School failure contributes to feelings of low self-esteem which is typical of adolescents who have a history of making poor grades. White males in particular are susceptible to performance pressures (Hollinger & Offer, 1981). Testing and grading procedures in the American school system tend to label children at an early age according to a failure-success model, and this may influence academic self-expectations for adolescents who are academic risks. In Japan for example, a high suicide rate among adolescents has been linked to the stress created by a highly competitive school examination system, which is used to identify those who will be admitted into prestigious colleges (Farber, 1968).

Statement of the Problem

This study investigated the incidence of depression in a selected parochial high school population using a self-report procedure and comparing it with non-parochial school studies. The data were used to analyze different depression rates of male and female students and to correlate depression measured by the Beck Depression Inventory (BDI) scores with academic performance as measured by a standardized test, the Iowa Test of Educational Development (ITED). The general expectation is that there will be no substantial difference in the incidence of depression reported

in adolescents between parochial and non-parochial schools, although there may be differences in depression of male and female students; also there may be an inverse correlation between BDI scores and the ITED academic performance scores.

Hypotheses

1. The incidence of self-reported depression in adolescents who attend a parochial high school will be comparable to the incidence of self-report for adolescents who attend non-parochial high schools.

2. The incidence of self-reported depression will be expected to be higher for female students than for male students, at the .05 level of significance.

3. Students who are less successful academically as measured by the ITED, will have higher depression scores as measured by the BDI.

Limitations

1. The student population for this study represented less than 50% of the students who were asked to return signed parental consent forms. Additionally, the validity of self-report measures of depression can be questioned because the extent to which adolescents reliably portray their depression is unknown (Kazdin & Petti, 1982). Therefore, the current study using a self-report depression questionnaire, could yield either inflated or deflated depression scores.

2. Due to situational restrictions, it was not possible to form two experimental groups (control and experimental) when measuring depression and academic performance.

Significance of the Study

In recent years, relatively few studies concerned with adolescent depression have appeared in psychology or education journals. Additional data are needed to help school health professionals such as school psychologists recognize depression among school children in order to implement appropriate prevention measures.

Definition of Terms

Adolescent Depression

As with adult disorders, the main diagnostic criterion for major depression in children is a "dysphoric mood," that is, a loss of interest or pleasure in almost all activities. Additionally, the definition of depression is centered upon identification of at least four of the following symptoms, for a period of at least two weeks: (a) change in appetite or weight, (b) sleep disturbance, (c) psychomotor agitation or retardation, (d) loss of interest in usual activities, (e) loss of energy, (f) feelings of worthlessness or sense of guilt, (g) complaints of difficulty to concentrate, and (h) thoughts of death or suicide (American Psychiatric Association, 1988).

Beck Depression Inventory (BDI)

The BDI is a 21-item instrument developed by Beck, Rush, Shaw and Emery (1979), which is designed to assess the severity of depression in children and adults (see Appendix A). During the last 30 years, the BDI has become one of the most widely used instruments for assessing the intensity of depression in psychiatric patients (Piotrowski, Sherry, & Keller, 1985), and for detecting possible depression in normal populations (Steer, Beck, & Garrison, 1985).

Iowa Test of Educational Development (ITED)

The ITED is an achievement test routinely given to Iowa High School students to measure academic performance across several scholastic areas.

Older Adolescent

For purposes of this study older adolescents are defined as youth between the ages 15 and 18. Most of the literature on children's depression does not make the distinction between younger and older adolescents (Cohen, Burt, & Bjorck, 1987).

Severe Depression

According to Beck and Beamesderfer (1974) guidelines, and for the purpose of this study, students with BDI scores 30 or higher would be considered severely depressed (see Table 2). In severely depressed individuals, it is typical to find dichotomous thinking in which everything is perceived as extremely positive or negative.

Younger Adolescents

Young adolescents are ages 13 to 14 years old. This period seems to be extremely important with respect to studying the effects of stressful life events. This period is characterized by experiences associated with the many physical, social and cognitive changes that occur with the onset of the teenage years (Cohen, Burt, & Bjorck, 1978).

Literature

Few publications have focused on the topic of adolescent depression. In fact, this topic has been largely ignored for many years. McCoy (1982) is one of the few authors who has written on this subject. Also, Weller and Weller (1984) have partially summarized contemporary views about adolescent depression. The bulk of the literature reviewed for this study had to be collected from contemporary psychological journals.

Aaron Beck (1973) has developed a cognitive model of depression based on a concept he calls "negative triad of expectations." This concept describes a negative view of the self, the world, and the future, all of which support a condition of depression. Essentially, these negative percepts are validated by the depressed individual through faulty cognitions, which, in turn, lead to overt patterns of depressed behavior (Epstein & Cullinan, 1986). Utilizing this conceptualization, Beck, Rush, Shaw, and Emery (1979) designed the BDI to assess the severity of depression in adolescents and adults. During the last 30 years, the BDI has become one of the most widely

accepted instruments in clinical psychology and psychiatry for assessing the intensity of depression in psychiatric patients. The Beck scale has been used extensively with both adults and adolescents.

Summary

This study investigated the incidence of depression in selected parochial high school adolescents as measured by the BDI and a related demographic questionnaire. Differences in self-report depression between male and female students were analyzed. Additionally, the relationship between depression level (as measured by the BDI) and subjects' academic performance (as measured by the Iowa Test of Educational Development) was examined. Review of the literature will be reported in Chapter Two and the development of the questionnaire, the procedural details and strategies for data analysis will be reported in Chapter Three.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter reviews the contemporary research literature on childhood and adolescent depression. The review is concerned with depression in "younger" and "older" adolescents and focuses on three issues related to the independent and dependent variables of the study: (a) empirical methodology in measuring adolescent depression, (b) current prevalence of depression in school-age children, and (c) sex differences in the incidence of adolescent depression.

Methods of Measuring Adolescent Depression

During the last 6 years, several attempts have been made to develop objective measurement scales for assessing depression in children. A lack of reliable and valid evaluation tools for measuring this trait may explain why so few studies of childhood depression have been published (Reynolds, Anderson, & Bartell, 1985). The DSM-III-R (American Psychiatric Association, 1988) indicates that, whereas the essential features of a Major Depression Episode are similar in children, adolescents and adults, and therefore some critical differences should be given consideration.

Among the published studies, many have successfully used modified adult self-report questionnaires to assess childhood depression. Reynolds, Anderson and Bartell (1985) evaluated

available measures that assess depressive symptomatology in children, and reviewed measures for two related constructs (i.e., self-esteem and anxiety). This study included two self-report depression measures, "The Children's Depression Inventory" (CDI) and "The Child Depression Scale." Parents in this study evaluated their children on depression and used anxiety scales from the Personality Inventory for Children (PIC), while teachers provided global ratings of depression and academic performance (Teacher Depression Rating). The findings revealed that, generally, both depression measure instruments have satisfactory reliability. However, the data from parents were suspect as to validity. Teacher's global ratings, on the other hand, were considered a valid source of depression relevant information.

Burbach, Farha and Thorpe (1986) also examined how mental health clinicians perceive children referred from average community backgrounds who have no pervious clinical diagnosis, but whose scores on self-report depression inventories indicate severe depressive or suicidal tendencies. Their findings suggest that clinicians vary considerably in the extent to which they anticipate finding depressed children, yet they are prepared to treat that type of child. A majority of the clinicians did not have any specific plan for responding to potentially depressed or suicidal children.

The literature on childhood depression includes over thirty studies published since 1975 which have used self-report inventories (Burbach, Farha, & Thorpe, 1986). Some of these studies have

employed the CDI (Worchel, Nolan, & Wilson, 1987; Reynolds, Anderson, & Bartell, 1985). However, the most often used self report instrument is the BDI (Baron & Perron, 1986; Sullivan & Engin, 1986; Reynolds & Coats, 1986; Cole & Rehm, 1986; Stehouwer, Bultsmans, & Blackford, 1985; Carey, Kelley, & Buss, 1986; Forehand & Smith, 1986; Barrera & Garrison-Jones, 1988). Barrera and Garrison-Jones (1988) concluded that the BDI is an excellent screening measure for studying non-hospitalized students.

Prevalence of Depression on School-Age Children

As noted earlier, the study of depression in children and adolescents has recently received increased attention. Before 1984, only one relevant study appeared in journals related to the field of psychology. Since then, a number of journal articles and books have been concerned with this topic, but still more empirical research is needed concerning childhood depression.

In a summary of the effects of depression on school age children, McCoy (1982) stated that depressed teenagers encounter a variety of problems in the school setting. Among the most common of these problem behaviors are: lack of motivation (loss of interest in school yielding falling grades); school phobia (avoid school using excuses); truancy (failure to attend classes); and serious problems with teachers, peers and school authorities.

Sullivan and Engin (1986) performed a study to determine the prevalence of adolescent depression in high school students. Tenth and eleventh graders from an urban school in South Carolina were

given a modified BDI. According to the cutoffs for level of severity established by Albert and Beck (1975), 26% scored within the moderate range and 6% scored within the severe range of depression. Other studies performed by Teri (1982); Albert and Beck (1975); Worchel, Nolan, and Wilson (1987) suggest that about 6% to 7% of adolescents in regular school report severe levels of depression in most of the related studies on adolescents.

In another adolescent depression study, Simons and Miller (1987) assessed the impact of negative cognition and socio-environmental problems by administering a depression questionnaire to 423 high school students from two small communities in the Midwest (255 males and 168 females). Most of the subjects were White, Protestant, or Catholic and lower-middle or middle class. The researchers reported that self-esteem was the only cognitive variable that showed a significant relationship to depression. This particular study is one of the few that measured depression in adolescents that included a parochial student population.

Few studies in professional journals have assessed the relationship between depression and academic performance. A review of the existing research on the prevalence, classification, assessment and treatment of childhood depression, as presented by Epstein and Cullinan (1986), concluded that present knowledge permits no conclusive statements on the sources of childhood depression. They cited contemporary viewpoints as to the cause of childhood

depression that include behavioral and biological explanations. They further concluded that the diagnosis of depression should not rely solely on a single source of information, but information should be sought from several sources: parents, teachers and the child himself/herself can provide important information on the inner states of depression.

Epstein and Cullinan (1986) concluded that school health professionals need to become familiar with contemporary approaches to treating childhood depression. Medication, social skills training and cognitive therapy represent the most promising strategies. They indicated that school health professionals need to know how depression is manifested among school children. It is necessary for professionals in this field to ask related questions, such as, "Under what conditions are hyperactivity, social withdrawal, aggression, substance abuse, suicide attempts or emotional problems related to depression?" "What special services will be available for depressed students?" The authors concluded that more empirical research is needed so that more effective services may be provided to depressed students.

Depression is a state of mind that is common to all mankind which is marked by sadness, a feeling of worthlessness and a conviction that nothing one can do matters. In some situations depression can be just a human reaction or emotion, however depressive symptoms if prolonged, may lead to potential mental

disorders. Depression in children can be a devastating experience according to the literature (McKnew, Cyntryn & Yahraes, 1983).

Sex Differences and Adolescent Depression

Studies on clinical depressive adolescents and adult depressive populations indicate the existence of sex differences in depression (Benfield, Palmer, Pfefferbaum, & Stowe, 1988). According to Baron and Perron (1986), the rate of hospitalization for major depression and the life-time risk of developing this disorder are greater among the female population than the male population. Their study evaluated the potential differences in the BDI scores of female and male adolescents in relation to some demographic variables and actual living conditions. The authors' results replicated sex differences often observed in non-clinical adolescent samples. However, they do not identify specific variables that may determine such gender differences in adolescents.

Two main perspectives explain the differences between male and female depression levels (Baron & Perron, 1986). First, some endocranial factors related to either postpartum, premenstrual stress, use of oral contraceptives or menopause, contribute toward making women more vulnerable to major depression. Second, learned social roles for females may influence their vulnerability to depression. There is no empirical evidence to support either possibility.

In the last few years, sex differences in the incidence of childhood depression have been documented by researchers through

a variety of measurement methods (e.g., self-report, interviews, or a combination of both). Furthermore, these differences have been observed across different age levels which have reported differences between genders at different age levels (e.g., Baron & Laplante, 1984; Teri, 1982; Baron & Perron, 1986; Baron & Joly, 1988; Sullivan & Egin, 1986; Reynolds, Anderson, & Bartell, 1985; Rierdan, Koff, & Stubbs, 1987). It is important to consider that some studies on adults and adolescent populations that analyzed gender differences have yielded equivocal results (e.g., King & Buchwald, 1982), by reporting significant and non-significant sex differences in respect to the incidence of depression.

Baron and Joly (1988) examined patterns of depression in four Canadian high schools, affiliated with the Western Quebec Regional School Board (grades 7-12). Two hundred and forty-nine subjects (152 female and 97 males) were chosen to participate in this study. Although the results of this study did not show significant sex differences, they clearly revealed different patterns for male and female expressions of depression. Male symptoms were characterized by irritability, work inhibition, social withdrawal and sleep disturbance. Female symptoms were characterized by body image distortion, loss of appetite, weight loss, mood changes and lack of satisfaction.

Worchel, Nolan, and Wilson (1987) recruited 304 subjects from four public schools (grades 3-12) in central Texas (49% females and 51% males). Using the BDI as the depression measure, they

reported that 21% of the students were mildly depressed and 7% reported severe depression. Females reported more overall depression than males. In addition, significantly more girls (12%) reported severe depression than did boys (2%).

Harlow, Newcomb, and Bentler (1986) investigated the hypothesis that depression and self-derogation in adolescents may lead to a lack of purpose in life; this in turn may lead to suicidal ideation and substance abuse. The authors reported important differences between sexes. In response to depression and self-derogation, males are more apt to turn to drugs and alcohol; whereas females consider suicide. Conversely, the situation changes in response to feelings of meaninglessness or lack of purpose in life. Here, females are more likely to turn to substance abuse; whereas the males are more likely to react with thoughts of suicide.

In a recent longitudinal study, Petersen (1987) investigated affective development during adolescence and examined the relationship of gender and normative developmental changes in early adolescence. Results revealed that in early adolescence there were usually no significant sex differences in self-image or depression. By grade 12, boys reported more positive feelings than did girls. Females were much more likely than males to report depressed moods by grade 12, suggesting that gender can become a more potent factor regarding a depressed mood for adolescence. Regardless of gender, subjects who were distressed throughout early adolescence were much more likely to report less self-image by

grade 12. This finding suggests that poor moods in early adolescence are not transient but rather quite predictive of later depressive tendencies.

The literature review on gender differences indicates that the incidence of depression is likely to be higher for females than males. However, this conclusion should be cautiously interpreted since the literature reports inconsistent results with both adult and adolescent males and females (e.g., King & Buchwald, 1982).

Summary

Research demonstrates that depression is found in a sizable proportion of adolescent children. Some studies reveal that up to 20% of the normal student population will report high levels of depression. In addition, 6% to 7% will report severe depression levels.

The majority of the studies cited in this research indicate gender differences in incidence of depression from clinical and non-clinical samples. There is no agreement concerning the basis for these differences, and the gender overlap in all categories of depression raises unresolved empirical problems.

Self-reports and interviews are the most frequently used methods to assess childhood depression. Many self-report instruments used with children were modified from adult measures. The most widely used self-reports are the CDI, Children's Depression Scale (CDS) and the BDI (i.e., the short (13-item scale) form and the long (21

item scale form). Interviews were most often used with clinical samples.

Finally, the literature shows a need for further empirical research on childhood depression, employing better diagnostic procedures. The literature also suggests that school health professionals and parents need to be able to recognize depressive symptoms and provide adequate and effective intervention and prevention techniques.

CHAPTER III

METHODS AND PROCEDURES

This chapter includes the following information: (a) an overview of the research procedure, (b) a description of the population sample, (c) a description of the research instrument, (d) data collection and analysis procedures, and (e) instrument reliability and validity information. This methodology was gained through the research goals of this study which were: (a) to determine the incidence of adolescent depression in a selected parochial high school; (b) to determine whether there are significant differences between the sexes in frequency of depression; and (c) to determine whether depression is related to academic performance.

Overview of the Research Procedures

An extended literature review was carried out, using Psychological Abstracts and the ERIC library system. Here, focus was given to identifying and drawing upon previous studies which examined adolescent depression of students attending parochial schools. Most of the relevant literature concerning adolescent depression had been published during the last ten years, and this researcher was unable to identify any studies which examined the incidence of depression in parochial school settings.

In studies of adolescent depression, many have employed the long version of the BDI, while others employed the short form of

the BDI (also known as SBDI). Usually, the long form was used with younger children, but some studies have employed SBDI, containing 13 items. A few studies have used the CDI in combination with demographic data and interview information from students, parents and teachers.

Of the various depression indices, Beck's scale seems to be the most valid. The reliability and validity of this scale has been supported by studies conducted by Barrera and Garrison-Jones (1988), Baron and Laplante (1984), and Beck et al., (1979). To obtain this instrument a request for permission was sent to the Center for Cognitive Therapy (CCT). Permission stipulated that a copy of the complete (current) study be mailed to CCT (see Appendix B).

Population Sample

The target population for this study was 578 students, all attending a parochial high school in the Midwestern region of the United States. The number of participants who actually returned a parental consent form were 244 or 42% of the population. Each of these students was given a letter describing the study.

Of these 244 students, 4 had to be removed from the sample due to omissions or mistakes made on the questionnaires. The final count was 240 participants (ages 13 to 18), of whom 72 (29.41%) were male and 168 (70.58%) were female. With respect to grade distribution, 59 (24.78%) students were in the 9th grade, 54 (22.68%) were in the 10th grade, 53 (22.26%) were in the 11th grade, and 72

(30.25%) were in the 12th grade. The ethnic distribution was as follows: Black American students, 4 males and 3 females (2.9%); White American students, 77 males, 140 females (92%); Hispanic American students, 1 male and 5 females (2.48%); and Asian students, 1 male and 4 females (2.07%).

Research Instrument

The BDI and a questionnaire (see Appendix A) designed to elicit student information about demographic variables were administered to all 240 participants, ages 13 to 18. The BDI, as previously discussed, is a scale that assesses the severity of depressive symptoms. The 21 BDI items measure affective, behavioral, cognitive and somatic symptoms commonly thought to constitute unipolar depression.

Each of the 21 BDI items elicits a response to a 4-point scale (0 to 3). Specifically, a 0 response indicates the absence of a particular depressive feeling, while a 3 rating indicates a "strong" feeling. Statistical data analysis were carried out at the University of Northern Iowa Academic Computer Center. Descriptive analyses such as *t*-test and ANOVA were used.

To analyze the BDI scores, a 16 point cut-off criterion was used in this study to distinguish depressed from nondepressed students. Barrera and Garrison (1988) stated that the BDI had excellent screening measure properties in a sample composed of non-hospitalized adolescent students. A cut-off of 16, which is commonly used for adult populations, emerged as an effective

indicator of major depression disorder in a nonpsychiatric adolescent population. In their study, Barrera and Garrison-Jones (1988) used a clinical sample of hospitalized adolescents (34 females and 31 males, ages 12 to 17) and a sample of non-hospitalized adolescents from a private secondary school (27 females and 22 males). For the clinical sample, the internal consistency reliability for the BDI was .86. In the school sample, the BDI showed an internal consistency reliability of .90.

Finally, the participants' ITED composite scores were analyzed and converted to standard scores to determine a possible relationship between depression and academic performance. Sex and racial distribution also were examined as related variables.

Reliability and Validity

Content Validity

Moran and Lambert (1983) assessed the content validity of the BDI by comparing the BDI items against criteria described in the DSM-III-R. They concluded that the BDI contained items relevant to 6 of the 9 DSM-III-R criteria describing affective disorders. From the remaining 3, 2 DSM-III-R criteria were partially addressed and one was not represented at all (Beck & Steer, 1987). Beck and Steer (1987) explained in the BDI Manual that 3 items (i.e., increased appetite, increased sleep, and agitation) were deliberately omitted in order to avoid a high incidence of false positives.

Reliability

Barrera and Garrison-Jones (1988) studied the properties of the BDI as a screening instrument for adolescent depression. In a clinical sample, internal consistency reliability for the instrument was .86 compound with .90.

Procedures of Data Collection and Analysis

The principal of the participating parochial high school was contacted, and an appointment was scheduled to discuss the study. A letter of introduction, a brief description of the study, and copies of the research questionnaire were presented for the principal's consideration (see Appendix C). After receiving the principal's approval, the study was discussed by this author with the school's staff. Soon thereafter, the study was carried out in this high school.

Initially, each student was given a letter describing the study and a consent form to be read and signed by the parent(s) or guardian (see Appendix D). Four days were allowed for the return of the signed form. The eligible students were given the questionnaires in their homeroom classes. Following a brief description of the study, the rationale and procedure for the study was read to each class by the homeroom teacher (see Appendix E). Responses to the questionnaires were recorded by each student on a computer answer sheet.

Each student's questionnaire was numbered and registered confidentially with the principal. This was done to help identify a student who might require a referral for treatment.

In the course of administrating the BDI, the following incidents were noticed:

1. Three male students started to answer the questionnaires, but suddenly stopped and returned their forms to the teacher.

2. Of the 31 available classrooms, at least 1 student in each classroom participated in the study (with the exception of 1 class, where no students participated).

After collecting the data, the answer sheets were sent for statistic analysis to the University of Northern Iowa's Academic Computer Services. To determine if there was a significant difference in depression between sexes, a correlated means two-tailed t-test was performed. Additionally, a series of two-way ANOVAS were conducted to evaluate the effects of sex, age, grade, and academic skill on measured depression level. The level of significance was set at the .05 confidence level, which is considered conventional for studies of this nature. The relationship between the BDI and the ITED was also examined. This detailed analysis is described in Chapter IV.

CHAPTER IV

RESEARCH ANALYSIS

This Chapter reports findings of this study including the analysis of demographic and related information, as well as the analysis of data concerned with the effects of sex, grade level and academic skill on incidence of depression in the sample student population. Implications of these findings are discussed in Chapter V.

Demographic and General Information

One purpose of this study was to describe the incidence of depression in a parochial high school population. This incidence of depression was expected to be higher for female students than for male students. Additionally, it was anticipated that there would be an inverse relationship between students' measured depression level and their level of academic performance as measured by the Iowa Test of Educational Development.

As stated in Chapter III, data were obtained from a final sample of 240 subjects, whose mean age was 15.3 years. The distribution of this sample by grade level was as follows: 20% of the students were in the 9th grade, 26% in the 10th grade, 30% in the 11th grade and 24% in the 12th grade. A considerable proportion of students, 39.5%, reported a background of parental divorce, separation, or related family circumstance. Although this study was performed in a parochial setting, 10.5% of the subjects reported that they were

not Catholic. Table 1 shows the ethnic distribution of the sample by sex.

Table 1

Ethnic Distribution

	N	%	Male	Female
Black American	7	2.94	4	3
White American	222	92.43	66	156
Hispanic American	6	2.52	1	5
Asian	5	2.10	1	4
Total	240	100.00	72	168

With respect to adolescent "classification" of the sample, 25.2% were "young adolescents" (12 to 14 years of age) and 74.8% were "older adolescents" (ages 15 to 18 years of age). Table 2 summarizes the percentage distribution of the BDI levels of depression according to the severity categories distributed by Albert and Beck (1975).

From the data in Table 2, these percentages are quite consistent with those reported in other studies (especially with respect to

Table 2

Percentage Distribution of the BDI Levels of Depression

BDI scores	Minimal 0 - 10	Mild 11 - 16	Moderate 17 - 29	Severe 30 - 63
%	45.4	27.5	21.25	5.8
N	109	66	51	14

the incidence of "severe" depression). As shown in Table 3, it typically has been reported that about 27% of the adolescent population attending school suffer moderate to severe depression, while 5 to 7% report severe depression. Worchel et al., (1987), reported that 72% of their subject population were nondepressed, while 21% had mild depression and 7% were severely depressed. These authors failed to provide a percentage for the moderate group and were not included in the comparison in Table 3.

Findings of the present investigation and other studies in non-parochial populations appeared to be consistent in reporting depression (see Table 3). These 4 studies receive additional support from the overall incidence reported by Reynolds (1984) in regular high school samples (18% in the moderate and severe range). Chiles, Miller and Cox (1980), 23%, and Kashani, et al., (1981) had

18% in the moderate and severe range with a incarcerated teenager population.

Table 3

Percentage Depressed

	Mild	Moderate	Severe
Albert and Beck (1975)	33.0	33.0	6.0
Teri (1982)	17.0	27.0	5.0
Sullivan and Engin (1986)	18.0	26.0	6.0
Encinas (1990)	27.5	21.2	5.8

Table 4 gives the average BDI scores for male and female adolescents for each age group and for the total sample. As shown in this table, the mean score for the 240 subjects was 10.37. The mean score for female adolescents was 11.66, while the mean score for males was 9.09.

To determine whether the scores for males and females were reliably different, a *t*-test was computed for the entire data set, the resulting *t* value was not significant. Additionally, two factorial ANOVAS were computed to evaluate the relationship between demographic questionnaire variables and BDI scores. Specifically,

Table 4

Average BDI Scores of Male and Female Adolescents for Each Age Group and for the Total Sample

Ages	Males			Females			Total		
(Years)	N	Mean	SD	N	Mean	SD	N	Mean	SD
14	22	10.75	15.8	25	11.52	8.2	47	11.10	12.
15	21	9.21	7.9	40	12.32	10.1	61	10.80	9.
16	4	10.27	16.3	41	10.02	10.0	45	10.10	13.
17	13	5.69	5.6	34	9.94	7.7	47	7.80	6.
18	12	9.28	8.9	28	11.77	9.6	40	10.50	13.
All ages	72	9.09	10.5	168	11.66	8.9	240	10.37	10.

$t(1,236) = -1.79, p > .05$.

these analyses included a 2 x 5 ANOVA (sex (male and female) X age (13, 14, 15, 16, 17)) and a 2 x 4 ANOVA (sex (male, female) X grade level (9, 10, 11, 12)). There were no significant main effects and no significant interaction effects for either analysis.

Table 5 shows the distribution means of the BDI scores by sex and grade. In the tenth grade (see Table 5), females scored the highest (mean 13.47 and Standard Deviation of 10.26), followed by the 9th grade females (mean of 12.94 and Standard Deviation of 9.87).

Table 5

Means of the BDI by Sex and Grade

	Male		Female		Total Grade	
Grade	Mean	SD	Mean	SD	Mean	SD
9th	11.38	11.64	12.94	9.87	12.29	10.75
10th	9.07	11.07	13.47	10.26	12.27	10.66
11th	9.93	13.39	10.32	8.41	10.21	10.90
12th	6.41	6.43	9.98	7.85	8.89	7.14

Whereas, 12th grade males scored the lowest (mean 6.41 and Standard Deviation of 6.43).

There were no reliable correlations between BDI scores, sex and various demographic variables (including birth order, religion, existence of brothers and/or sisters). None of these analyses indicated any significant interaction between sex and any of the other variables involved.

A Pearson correlation was computed between depression scores as measured by the BDI and academic skills standard scores as measured by both the Iowa and National norms of the ITED, where $r = -.063$, $p < .34$ for the Iowa Norms and $r = -.054$, $p < .44$ for the National Norms. Here again, there were no significant effects for either analysis.

It was noticed that 55 students in this sample scored more than 16 points in the BDI, and were distributed as follows: (a) those with scores between 16 to 29 (41 students), and (b) those with scores between 29 to 63 (14 students). From the first group (n = 41), 56% had ITED scores below the 66 percentile based on the Iowa Norms. In the second group, 64% were below the 66 percentile in the ITED, using Iowa Norms. From the total sample in this study, 13.3% of the students had ITED scores below the 66 percentile.

Hypotheses Results

The data indicate that the incidence of depression in school-age adolescents is indeed present in a parochial setting. The first hypothesis predicted that self-reported depression measured by the BDI in adolescents in a parochial and non-parochial settings was expected to be comparable, and the hypothesis was confirmed, since 27% of the participants of the study reported depressive symptoms (21.2% moderate and 5.8% severe). Due to the high percentage of female participants in this study, these scores may be considered somewhat inflated. Similar percentages of depression have been reported in adolescents attending public schools (Albert & Beck, 1975; Teri, 1982; Sullivan & Engin, 1986; Worchel et al., 1987).

The second hypothesis stated that self-reported depression would by higher for female subjects than for males. The mean for females (n = 168) was 11.66, with a Standard Deviation of 9.259,

while the male mean (n = 72) was 9.09 with a Standard Deviation of 10.55. There were no significant main effects at the .05 level.

The third hypothesis stated that students who are less successful academically as measured by the ITED, will have higher depression scores as measured by the BDI. This hypothesis was not confirmed and there were no significant effects associated with the ITED and depression.

Summary

The findings of this study suggest that reported depression of adolescents using self-report questionnaires in a parochial high school is proportionate with those studies reported by non-parochial high schools. About 30% of the subjects studies in this sample population that participated in the parochial high school reported moderate to severe symptoms of depression. Standard Deviation analysis of 2 male groups (ages 14 and 16) were suspiciously large (SD = 15.8 and SD = 16.3 respectively) raising questions about reliability.

There was no significant difference between female and male students as a group in the incidence of depression. Females in the 10th grade scored the highest (mean = 13.47 and Standard Deviation of 10.26), while males in the 12th grade scored the lowest (mean = 6.41 and Standard Deviation of 6.43). Item analyses of the BDI indicated that adolescent females in a parochial high school were significantly (at the .05 level) more sensitive in weight loss, fatigability, body image change and indecisiveness. The

prediction that students with less successful academic performance will report higher depression scores, was not supported by this study.

In summary, the findings from this study show that the incidence of depression among adolescents in a parochial high school is about the same as their counterparts in non-parochial populations. There were no significant differences between male and female students as a group in the incidence of depression. Finally, the hypothesis that predicted that students who were less successful academically will have higher BDI scores was not supported by this study.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

This final chapter consists of a brief summary, discussion, and set of recommendations. The summary reviews the method of this research, the procedures, the statistical analysis, and the results, including testing of the hypotheses. The discussion contains the specific survey results of adolescence depression. Finally, some recommendations for further study are stated.

Summary

This study was conducted with 240 students at a parochial high school in the Midwestern United States. The Beck Depression Inventory, consisting of 21 items, was used to measure the incidence of depression in adolescent high school students. A demographic questionnaire was also designed for this study, and was completed by the students along with the BDI. It took about 20 minutes to complete the questionnaires. Answer sheets were collected and sent to the computer center to be analyzed by the SPSS-X21 program. A t-test and several ANOVAS were computed to proof the hypothesis proposed by this study.

The current literature on adolescent depression is limited as compared with adult depression studies. The review of the current literature showed an increasing incidence of adolescent depression in high schools. Several studies analyzed the prevalence of sex differences in depression, others were concerned with the

consequences of depression on academic performance. This researcher was unable to find many current studies on parochial high school depression.

Results of this review showed that there has been an increase in adolescent depression in the past decade. The data from this study are consistent with other studies which indicated that about 30 percent of adolescents in non-parochial high school reported depressive symptoms ranging from mild to severe.

Studies of clinical and non-clinic samples (Benfield et al., 1988; Baron & Perron, 1986; Baron & Laplante, 1984; Teri, 1982; Reynolds et al., 1985; Rierdan et al., 1988) showed sex differences in depression levels. The current study failed to show significant gender differences in the parochial population at the .05 significance level. For example, females in the 10th grade had the highest BDI scores as compared to the test of the sample population. Males in the 12th grade scored the lowest in the BDI, suggesting that they are better adjusted or they under-reported their true feelings. Finally, the hypothesis that predicted that students who are less successful academically will have higher depression scores as measured by the BDI, was not confirmed.

Conclusions

The primary conclusion of this study is that students in this population sample reported symptoms of depression ranging from mild to severe, which is consistent with non-parochial studies.

Approximately an additional 6% of the students in the parochial and non-parochial populations reviewed reported severe depression levels.

Before entering into specific discussion of the results, some preliminary comments and cautions seem to be necessary. The study involved a non-clinic adolescent sample; also, it is recognized that self-report measures or questionnaires such as the BDI may lend themselves to invalid scores when used with nonclinical samples (Baron & Perron, 1986). Therefore, it is concluded that data in this study be considered with some caution.

It is also concluded that assessment of depression in school age children must be used carefully, since critics point out that children do not always have the necessary language and cognitive abilities to accurately provide verbal information about their depression.

An interesting conclusion was noticed, approximately 64% of students that scored 30 to 52 points (severe depression range) in the BDI, had below average scores in the ITED Iowa and National Norms. In the same range group, there were students who scored high, some near 99 percentile in the ITED, suggesting that depressive patterns can be detected in both extremes.

Recommendations

Most treatments for childhood depression have been applied in clinical settings; however with increasing depression in adolescents, school psychologists should have the accessibility to meaningfully

participate in prevention, screening, assessment and intervention programs for depression on children. Several recommendations which deal with assessing depression in adolescents are list below:

1. School authorities should provide awareness training to faculty, staff and administrators from the depression literature including this study, by providing in-service workshops, drawing upon literature on child depression and include training in social skills, family therapy, and cognitive-behavioral therapy.

2. Social skills training could be a strong strategy to enhance the interpersonal skills of depressed children. Social skills training involves modeling the social skills, rehearsing the skill, feedback and contingent social reinforcement for skilled performance, and often self-management.

3. More empirical research in children and adolescent depression in non-clinical populations is greatly needed. School health professionals need to know how depression is manifested among children and adolescents. More data are needed on hyperactivity, social withdrawal, aggression, substance abuse, suicide attempts or other behavioral and emotional problems as related to depression. These are provocative questions that can lead to further research and an improvement in the understanding of adolescent depression.

4. This study should be given to and studied by all Iowa Area Education Agencies, School Psychology Supervisors, as well as related Iowa Department of Education officials. School service

personnel and school administrators need more research data and studies of depression from which this study has provided. Finally, as suggested it is recommended that the study be given to the Iowa Elementary and Secondary Principal Associations and the State School Board Association.

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APPENDICES

APPENDIX A

Beck Depression Inventory

Demographic Questionnaire

BECK INVENTORY

Name_____ Date_____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

2 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

3 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

4 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

5 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

8 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.

11 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.

12 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

14 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19 0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds. / I am purposely trying to lose weight
2 I have lost more than 10 pounds. by eating less. Yes____ No____
3 I have lost more than 15 pounds.

20 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems that I cannot think about anything else.

21 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

DEMOGRAPHIC QUESTIONNAIRE

This questionnaire is designed for statistical purposes only. Please fill in the blanks with the proper information. We do not require your name. Thank You.

22. Ages 12 to 14 (check one)

1. 12 ___
2. 13 ___
3. 14 ___

23. Age > 14 (check one)

1. 15 ___
2. 16 ___
3. 17 ___
4. 18 ___

24. Gender (check one)

1. Male ___ 2. Female ___

25. Ethnic Group (check one)

1. Black American ___
2. White American ___
3. Hispanic American ___
4. Asian American ___
5. Other ___

26. Parent Marital Status (check one)

1. Married ___
2. Divorced ___
3. Separated ___
4. Other ___

27. Male Siblings (check one)

1. Brother(s) ___
2. Step Brother(s) ___
3. Adopted Brother(s) ___
4. None ___

28. Female Siblings (check one)

1. Sister(s) ___
2. Step sister(s) ___
3. Adopted sister ___
4. None ___

29. Birth order (check one)

1. 1st born ___
2. 2nd born ___
3. 3rd born ___
4. Last born ___
5. Other (Please designate) ___

30. Religion (check one)

1. Catholic ___
2. Protestant ___
3. Jewish ___
4. Moslem ___
5. Other ___

APPENDIX B

Beck Depression Inventory Permission Request

November 14, 1988

Dear Dr. Beck:

Thank you for sending a sample of the Beck Depression Inventory and related information. Presently I am a graduate student at the University of Northern Iowa in Cedar Falls, Iowa, and I am working on my Thesis on Depression in High School Children in a parochial setting. As you are aware depression in children has increased greatly in the last few years and my purpose is to explore this area for possible preventive measures by teachers and parents in the school system.

In accordance with your letter I can assure you that you will receive a copy of the results of my study and any other information that may be useful to you. I would also appreciate if you have any suggestions that would enlighten my study.

I have decided to use the BDI in my study and I would appreciate if you would grant permission for reproduction of the Inventory for use in my research. I also need to know any other cost involved and the price of the comprehensive manual catalog # 8018-335.

I have admired your work and have read several of your books and it is an honor for me to be able to contact you on this matter.

Sincerely yours,

Silvio R. Encinas

CENTER FOR COGNITIVE THERAPY
AARON T. BECK, M. D., DIRECTOR
ROOM 602
133 SOUTH 36TH STREET
PHILADELPHIA, PA. 19104
TELEPHONE: (215) 898-4100

Dear Colleague:

Thank you for your recent interest in the Beck Depression Inventory. As requested, I am enclosing the most recent version of the scale.

You may wish to note that the scale has been validated as self-administered as well as interviewer-administered. Cut-off scores and validating data for the original Beck Depression Inventory are included in the chapter on the Inventory in Aaron T. Beck, Depression: Causes and Treatment (see reference list). Similar information for the current (1978) version can be found in Cognitive Therapy of Depression (Beck et al.) and in the citations asterisked on the enclosed reference list.

The Beck Depression Inventory is covered by a 1978 copyright and is available for both research and clinical use. It is my policy to grant permission for reproduction of the Inventory for research if I am informed of the nature of the contemplated study and assured of receiving a copy of the results. If you wish to use the scale for research, please submit a brief description of the proposed research along with your agreement to the above arrangements. If you application for permission is approved, you will receive a letter from me formally granting permission to reproduce the scale and use it in your study. Note that this letter does NOT grant permission to use the scale.

The Inventory is available for clinical use through The Psychological Corporation at the following address:

Order Department
The Psychological Corporation
555 Academic Court
San Antonio, TX 78204-9990

If you have any questions about the Beck Depression Inventory or about the Center for Cognitive Therapy in general, please feel free to contact the Center and one of our staff will be happy to assist you in any way they can.

Sincerely,

Aaron T. Beck

Aaron T. Beck, M.D.
University Professor of Psychiatry
Director, Center for Cognitive Therapy

ATB/ti

Enclosures

APPENDIX C

Principal's Permission Request

December 9, 1988

Dear Father Brunkan:

During the past few years school systems throughout the country have been reporting an increase in children's depression. Some research has been done on this matter, but the need for more studies concerning this subject is greatly needed.

As a graduate student in the Department of Educational Psychology and Foundations, I am currently working on a thesis project designed to investigate incidences of self-reported depression in school-age children. Researching the topic extensively, I have discovered that very few studies have been done in parochial schools and more data on this subject may be beneficial to the school and the community.

The purpose of this letter is to request your permission to allow the students of Columbus High School to participate in this study. Your cooperation is sincerely appreciated.

Respectfully,

Silvio R. Encinas
Candidate for Ed.S. Degree
University of Northern Iowa

Approved by:
Larry L. Kavich, Head
Department of Educational
Psychology and Foundations

APPENDIX D

Parental Consent Form

January 1989

Dear Parent or Guardian:

I am a graduate student at the University of Northern Iowa working on my thesis towards a Specialist in Education degree. The purpose of my research is to determine the incidence of self-reported depression patterns in High School children. In recent years the number of children affected with depression has greatly increased nationwide. This affects their daily lives, family, peer relationships and academic performance.

Studies on this subject are greatly needed in order to provide more effective preventive ways to help school-age children and the community. The participation of your child in this study is voluntary and may be discontinued any time during the project.

Two questionnaires will be given during class time by the Homeroom teacher and will take about 15 to 20 minutes to be completed. Please sign and indicate on the attached form if you DO or DO NOT want your child to participate in my study. All information collected will remain confidential.

This study will be performed under the supervision of the Educational Psychology and Foundations Department. You may contact the University of Northern Iowa Graduate College for answers to questions about the research and about the rights of research participants (273-2748).

Thank you very much for your time and cooperation. Your input can help to assure that in the future school children receive effective and useful services on this subject. Your cooperation is truly appreciated.

Sincerely,

Silvio R. Encinas
Candidate for Ed.S. Degree
Department of Educational Psychology & Foundations
Phone: 236-1653

Project Advisors:
Larry L. Kavich, Head
Department of Educational Psychology & Foundations

Prof. Ralph Scott
Department of Educational Psychology & Foundations

Prof. Charles Dedrick
Department of Educational Psychology & Foundations

I, _____, DO, DO NOT (Circle One),
(Parent's Name)

consent to allow my child _____
(Student's Name)

to participate in the study mentioned in the attached letter.

_____ _____
Parent or Guardian Signature Date

Please return to your homeroom teacher as soon as possible.

APPENDIX E

Instructions for Homeroom Teachers

Incidence of self-reported depression in adolescents

Instructions for homeroom teachers

NOTE: Each student in your classroom has been assigned a number which corresponds to the alphabetic order of your homeroom list.

1. Please read the following introductions to the class:
   "You are about to participate in a survey on depression in adolescents. Recent findings indicate that greater numbers of teenagers are reporting depressive symptoms or are suffering of depressive moods, affecting their behavior, school and personal lives. There is a great need for more information on this subject and your participation with this project may lead to better ways of preventing the increase of adolescent depression.

   The purpose of this study is to measure the occurrence of adolescent self-reported depression moods in a parochial setting. You will be answering two separate questionnaires, and choose your responses that best describe how you felt last week, including today. Your responses will remain confidential.

   Thank you for your participation in this study."

2. Please distribute questionnaires with computerized answer forms in the pre-arranged order. Unused forms should be returned to verify the total count of participants and non-participants.

3. Please instruct students
   "1. The number on the right hand corner of the questionnaire should be the same as the number on the computerized answer form.
   2. Use # 2 pencil.
   3. Do not write your name on questionnaires or answer sheet.
   4. Read instructions carefully.
   5. Mark responses on computerized form.
   6. To answer items 1 to 21 use the following sample -If your response is 0, then mark A on the answer sheet. If your response is 1, mark B, etc. (write sample on chalkboard if necessary).
   7. For items 22-30 use corresponding numbers on answering sheet."

NOTE: Please return all questionnaires including unused forms, to Father Brunkan or at the main office. Thanks again for your cooperation.