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Validity of the Reynolds Adolescent Depression Scale with a Rural Sample

Julie A. Lindstrom
Eastern Illinois University

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Julie A. Lindstrom

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DEPARTMENT HEAD

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Abstract

The problem that was investigated in the current study was that the norms of the Reynolds Adolescent Depression Scale (RADS) (Reynolds, 1987) may have had limited generalizability to students attending Paris High School and Mayo Middle School in rural Paris, Illinois because it was normed on "normal" subjects in only one urban/suburban school district in Wisconsin. The purposes of the current study were to establish Paris norms for the RADS and to fulfill Paris' need for an instrument to efficiently and inexpensively assess students suspected of having depression. This investigator hypothesized that the norms on the RADS would differ between Paris and the standardization sample and that female students would, as a whole, score higher than males. Results indicated that as a whole, female students scored 5.72 points higher than male students, although not significantly higher. It appears that the Paris and the standardization norm tables for the entire samples, that is not divided by gender, grade, or age, appear roughly equivalent. It is concluded that the Paris sample does not accurately represent the population of Paris adolescents and that the applicability of both the total standardization and Paris norm tables is unknown for students who were not in the sample. Due to the fact that standard scores based on Paris raw data and Paris descriptive statistics differ significantly from standard scores based on Paris raw data and standardization descriptive statistics, more research is needed to determine whether either norm table is applicable for Paris as a whole. Suggestions for future research and limitations of the current study are discussed.

Validity of the Reynolds Adolescent Depression Scale with a Rural Sample

The problem that was investigated in the current study was that the norms of the Reynolds Adolescent Depression Scale (RADS) (Reynolds, 1987) may have had limited generalizability to students attending Paris High School and Mayo Middle School in rural Paris, Illinois as it was normed on "normal" subjects in only one urban/suburban school district in Wisconsin. It was unknown whether there would be an equivalence between Paris students, including those with mild disabilities, and the standardization sample. Numerous studies have found differing mean raw total score values on the RADS ranging from 52.19 to 73.2 depending on location of the study and the population utilized (Baron & Campbell, 1993; Campbell, Byrne, & Baron, 1992; Nieminen & Matson, 1989; Reynolds, 1987; Shain, Naylor, and Alessi 1990; Spirito, Sterling, Donaldson, & Arrigan, 1996). The RADS norms may not have generalized because students with mild disabilities were not included in the standardization sample and studies have shown that students with disabilities generally score higher (more depressed) on the RADS than "normal" students (Acker, 1991; Epkins, 1993; Nieminen & Matson, 1989; Manikam, Matson, Coe, & Hillman, 1995; Reynolds & Miller, 1985). Furthermore, Epkins (1994) found that children with low socio-economic status (SES) self-reported more depression than higher SES children. Paris, as a whole, is a low SES community. The RADS was normed on a majority of students who were in the lower middle SES range (Reynolds, 1987). Finally, the norms are over 10 years old as the RADS was normed in 1986. Generally, psychological measures tend to be renormed every 12 to 17 years in order to provide a fair

and equitable comparison among test takers (Sattler, 1992).

The Reynolds Adolescent Depression Scale

The RADS (Reynolds, 1987) is a self-report measure of depressive symptomatology in adolescents aged 13 to 18. The purpose of this scale is to screen for the severity of symptoms associated with depression, but not to clinically diagnose depression in adolescents. Clinical diagnosis requires structured diagnostic interviews in addition to self-report paper-and-pencil measures. The RADS is a single page 30-item questionnaire which uses a 4-point Likert-type response format which assesses the frequency of occurrence or duration of each symptom. Each item is written in the first-person (e.g., "I feel sad." "I feel like crying.") and the student fills in one of four circles indicating whether s/he feels that way "almost never", "hardly ever", "sometimes", or "most of the time". The scale can be administered individually or in groups and takes about 5 to 10 minutes to complete. Twenty-three items are scored 1=almost never, 2=hardly ever, 3=sometimes, 4=most of the time and the remaining seven items are scored in reverse. The sum of the item scores is the total RADS score which ranges from 30 to 120. The RADS is a continuous score measure; therefore, the higher the score on the scale, the greater the level of depressive symptomatology. According to the author, individuals who score above the cutoff of 77 should be evaluated more extensively by a trained mental health professional to determine diagnosis and therapeutic needs, if any (Reynolds, 1987). A score of 77 or above is described as a clinically relevant (i.e., of sufficient severity to be considered pathological) level of depressive symptomatology in adolescents. Six of the RADS items assess dangerous symptoms. A high score of 3 or 4

on four or more critical items indicates a need for follow-up evaluation. Total RADS Score (RS) can be converted to percentile ranks using norm tables in the manual based on the total standardization sample (Total percentile), grade, sex, or grade-by-sex .

RADS Psychometric Properties

A number of studies have investigated the psychometric properties of the RADS. Results from studies reported in the manual addressing several forms of reliability and validity indicate the RADS has acceptable psychometric properties (Reynolds, 1987). The RADS psychometric properties include high internal consistency reliability with alphas ranging from .90 to .96. In a study by Dalley, Bolocofsky, and Karlin (1994), the internal consistency of the RADS was .91. The RADS test-retest coefficient ranged from .79 to .80 after up to three months and the split-half reliability coefficient was .91 as reported by Reynolds (1987) indicating that the RADS is a reliable measure of depressive symptomatology.

The RADS also demonstrates acceptable validity as a measure of depressive symptomatology. The content validity of the RADS has been established with the RADS items relating to specific symptoms of depression using clinical and research criteria for depression such as those found in the DSM-III and RDC. The item-total correlation coefficients are generally high, with the majority of the correlations in the .50s and .60s (Reynolds, 1987).

Reynolds (1987) also reviewed numerous and varied validity studies of the RADS that collectively demonstrate solid relationships between RADS scores and other indicators of depressive symptomatology. The RADS' construct validity is based on a

high correlation with other depression measures, e.g., the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, and Erbaugh, 1961), the Self-Rating Depression Scale (Zung, 1965) and the Children's Depression Inventory (Kovacs, 1979) with coefficients ranging from .68 to .76 ($p<.0001$) (Reynolds, 1987). Atlas and DiScripio (1992) found the BDI and RADS were correlated .73 in a sample of adolescents with posttraumatic stress disorder. Nieminen and Matson (1989) found the CDI and the RADS were correlated significantly with each other ($r=.56$) in a study of conduct-disordered adolescents. And, Shain et al. (1990) found the RADS and the CDI to be highly correlated ($r=0.87$, $df=44$, $p<0.0001$) in a population of depressed adolescents. The authors state that "the high concurrent validity of self-rated depression scales for depressed adolescents supports the use of self-report measures with these subjects for clinical and research purposes" (Shain, et al., 1990, p. 795).

Depression among Children and Adolescents

Depression is a major mental health problem among 13 to 18 year olds as many young people experience some form of depression during adolescence. One out of every six high school students has symptoms warranting clinical assessment of depression (Reynolds, 1987). Depression is equally common in prepubertal males and females; however, as age increases it becomes twice as common in females (APA, 1994). The lifetime risk for major depressive disorder in community samples has varied from 10% to 25% for females and 5% to 12% for males (APA, 1994). Epidemiological studies have documented the presence of depressive disorders at a prevalence between .4% and 8.3% in adolescent samples (Fleming & Offord, 1990). More recently, the prevalence in

adolescents has been reported at about 6%: 2.6% in boys and 10.2% in girls (Sattler, 1998). The prevalence rate in 1995 for adolescents in high school was between 10% and 12% (Baker, 1995).

Major depressive disorder may be classified as either single episode, in which only a single major depressive episode is present, or recurrent, in which two or more episodes are present (APA, 1994). Some adolescents have isolated episodes that are separated by many years without any depressive symptoms, other adolescents have clusters of episodes, while others have increasingly frequent episodes as they grow older. Episodes often follow a severe psychosocial stressor, such as death of a loved one or divorce.

According to DSM-IV (APA, 1994), major depressive disorder may begin at any age, but the average age of onset is in the mid-20's. The core symptoms of a major depressive episode are the same for children, adolescents, and adults (APA, 1994). Symptoms usually develop over days to weeks and an untreated episode typically lasts six months or longer, regardless of age of onset. Depression is marked by a cluster of symptoms rather than a single symptom. Clinical diagnosis of major depressive disorder requires five or more of the following symptoms which have been present during the same two-week period; at least one of the symptoms is either depressed mood or loss of interest or pleasure:

1. Depressed mood (or irritable mood in children) most of the day, nearly every day for two weeks
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
3. Weight change or appetite change nearly every day or failure to make age appropriate weight gain in children
4. Insomnia or hypersomnia nearly every day

5. Psychomotor agitation or retardation nearly every day
6. Fatigue or loss of energy nearly every day
7. Feelings of worthlessness or excessive or inappropriate guilt nearly every day
8. Difficulty in ability to think or concentrate, or indecisiveness nearly every day
9. Recurrent thoughts of death or suicide, or suicidal attempts or plans (APA, 1994)

Certain symptoms such as somatic complaints, irritability, and social withdrawal are particularly common in children, whereas motor retardation, hypersomnia, and delusions are less common in prepuberty than in adolescence and adulthood. Common adolescent symptoms include loss of feelings of pleasure and interest, low self-esteem, excessive fatigue and loss of energy, inability to tolerate routines, overinvolvement with pets, aggressive behavior, somatic complaints, restlessness, loneliness, irritability, running away, stealing, guilt feelings, feelings of worthlessness, weight loss or gain, and suicidal preoccupation (Sattler, 1998).

Many research studies have focused on childhood and adolescent depression. Acker (1991) compared depression in 4th and 5th grade learning disabled and regular education students in a public school. He found that there tends to be differences in the severity of symptoms between learning disabled and normal children with the learning disabled children being more likely to exhibit mild to moderate symptoms of depression. Similarly, Epkins (1993) found that 3rd to 5th grade inpatient children reported more depression than regular education children. However, this did not always appear to be the case. Although Epkins (1993) found that younger inpatient students (3rd to 5th grade) reported more depression than younger elementary school students, within the older (6th to 7th grade) elementary school grades, regular education children reported greater levels of depression than inpatient children.

It appears that adolescents with disabilities may be at risk for depression. A study by Manikam et al. (1995) found that adolescents with mental retardation reported more depression and general psychopathology symptoms than those with intellectual ability ranging up to above average. Similarly, in preliminary investigations with the RADS Reynolds and Miller (1985) found that the mean RADS score for mentally retarded students was significantly higher than that found in the general adolescent population.

A study by Hagborg (1990) suggests that a score on the RADS must be interpreted very cautiously with severely emotionally disturbed adolescents who are enrolled in therapeutic educational programs because it is possible that a high score could be an indication of therapeutic progress, whereas a low score may indicate student resistance to therapeutic involvement. A later study by Hagborg (1992) found that seriously emotionally disturbed adolescents as a whole tended to answer self-report questionnaires in a socially desirable manner, resulting in a possible under-reporting of depressive symptoms. Despite this, one-third of the disturbed adolescents exceeded the raw cut-off score of 77 on the RADS.

Gifted students, on the other hand, do not appear to be at high risk for depression as students with disabilities may be. A study by Pearson and Beer (1990) that found that gifted students as a group did not exhibit depression. Baker's (1995) study suggests that academically gifted adolescents, even exceptionally gifted students, are not more at risk for depression than adolescents average in academic performance. However, neither are they less depressed.

Depression and Suicide

Nonetheless, depression can have potential life-threatening consequences for all students if not identified and treated. According to the DSM-IV (APA, 1994) the most serious consequence of a major depressive episode is attempted or completed suicide. One of the clinical symptoms of depression is recurrent thoughts of death or suicide and likewise, one of the risk factors for adolescent suicide is depression (Brent, 1995; Eggert, Thompson, Herting, & Nicholas, 1995). The RADS manual reports a correlation of .59 to .61 between RADS total score and suicidal ideation as measured by the Suicidal Ideation Questionnaire (Reynolds, 1986). Suicidal ideation has been shown to be related to depression in young adults (Schotte & Clum, 1982).

A study by Spirito et al. (1996) in which the RADS was given to adolescents within 36 hours of a suicide attempt found a mean total score of 78.7. This mean score is almost 20 points higher than the mean total score of the standardization sample. Despite the fact that the measure was given after a suicide attempt rather than prior to, it appears that many suicidal teens will score high on the RADS should it be given as a screening measure. A study by Ladson (1990) found a significantly higher mean total score on the RADS for junior and high school students who had attempted suicide than for those who had not. Ladson (1990) suggests that the RADS may be a useful screening measure for identifying potentially suicidal students if used in conjunction with other information. Research has shown that adolescents who commit suicide or engage in suicidal behavior frequently suffer from psychopathology, such as depression (Brent, Perper, Goldstein, Kolko, Allan, Allman, & Zelenak, 1988; Brent, Perper, Moritz, Allman, Friend, Roth,

Schweers, Balach, & Baugher, 1993; Marttunen et al., 1991; Shafii et al., 1988).

The determination of suicidal risk should not, however, be based solely on the results of a depression measure. In studies of depression and suicidal ideation conducted by the author of the RADS, a subgroup of suicidal adolescents who are not clinically depressed has been identified (Reynolds, 1987). Likewise, not all adolescents who are depressed are suicidal. However, one of the risk factors on the SAD PERSONS (Patterson, Dohn, Bird, and Patterson, 1983), a suicidal potential measure, is depression. The SAD PERSONS (Patterson et al., 1983) rates individuals on ten risk factors as either present or not present. A depressed adolescent automatically scores on two of the ten risk factors and requires follow-up intervention before any other risk factors are even considered. Ramsey (1994) believes that this is evidence of the critical relationship between student depression and suicide potential.

Depression Assessment

It is now widely accepted that depression in adolescents represents a problem of sufficient magnitude and prevalence to warrant active involvement by mental health professionals. Because depression is a major mental health problem affecting middle and high school students, schools can and should help in the identification and treatment referral of depressed adolescents. A number of methods can be used in the schools and by school personnel for assessing depression in students. Because depression involves both internalizing and overt symptoms, comprehensive evaluation will involve obtaining information from the child, parents, teacher, and possibly peers (Sattler, 1998).

One commonly used method for the assessment of depression is the use of self-

report scales. Self-report scales have been found to be useful for assessing a myrad of problem areas. Self-report is particularly important in assessing depression, given that the key symptoms such as sadness, feelings of worthlessness, and loss of interest in activities reflect subjective feelings and self-perceptions. The major issue in the use of self-report measures is the extent to which children are capable of or willing to report on their depressive symptoms. According to Kazdin (1990), research has clearly established that both clinic and non-clinic samples can report on their depressive symptoms.

Studies utilizing the self-report method have consistently found females to be more depressed than males (Baron & Campbell, 1993; Campbell et al., 1992; Nieminen & Matson, 1989; Reynolds, 1987; Shain et al., 1990; Spirito et al., 1996). On the RADS a consistent sex difference has been demonstrated, with females scoring 5 to 7 points higher than males (Reynolds, 1987). Therefore, due to the fact that the 77 point cut-off is utilized for both males and females, more females score above the cut-off score than males.

Besides the RADS there are a number of other self-report scales used to assess depression in adolescents. The most widely used self-report measure of depression in children is the Children's Depression Inventory (CDI) (Kovacs, 1979). The CDI is a 27-item self-report questionnaire that assesses cognitive, affective, and somatic components of depression in home, school, and peer settings for children aged 8-17. Each item assesses a symptom of depression by presenting three choices which are scored from zero to two. The total score is the sum of the separate item scores. The total score can range from zero to 54. High scores indicate high levels of depression. According to

Kovacs (1979) a score of thirteen would designate a child as having a major depressive disorder.

The Beck Depression Inventory (BDI) (Beck, 1978) is another commonly used self-report measure of depression. The BDI is a 21-item multiple choice inventory. The questions range in scope from feelings of sadness to suicidal thinking. Each question assesses a symptom of depression by presenting four choices which are scored from zero to three. The total score is the sum of the separate item scores and ranges from zero to 63. The higher the score the more severe the depression. A score of 17 to 20 indicates borderline clinical depression; scores above 20 indicate clinical depression (Beck, 1978). Atlas and DiScipio (1992) found that the BDI identified depression more effectively than the RADS did in samples of posttraumatic stress, conduct disordered, and control adolescents. The authors concluded that the Beck scale is a more sensitive self-report screening device for depression among adolescents than the RADS.

Another widely used assessment technique for adolescent depression is the use of teacher rating scales in which teachers rate each of their students on a number of criteria. However, a concern about this type of assessment is whether teacher ratings correspond with students' self-ratings. Due to the complexity of the symptomatology of depression it is difficult for a teacher to identify students unless s/he has had specific training. This is compounded by the large number of students that teachers see and the limited amount of contact time between them. Ines (1990) reports that earlier studies found poor correspondence with very low and typically nonsignificant correlations. In a study by Nieminen and Matson (1989), conduct-disordered students and their teachers each

completed the CDI and the RADS on student behavior. The measures completed by the teachers did not differentiate between students who scored high (above the cut-offs) and those who scored low on either measure. The authors suggest that the nonsignificant results were attributable to "rater effect," the different points of view of the raters.

Recent researchers believe that correspondence might be greater if teachers rate each specific symptom of depression and if these symptoms are the same as those rated by the student (Epkins, 1993, 1994; Ines & Sacco, 1992). Using this methodology, Ines (1990) found, in a study of 4th, 5th, and 6th-grade teachers and their students, that teachers' ratings on both the CDI and on a global measure of depression corresponded significantly with their students' self-reported levels of depressive symptoms. He further found that level of correspondence increased if the teacher was more familiar with the student and was more confident in his/her ratings. Ines and Sacco (1992) also found that teachers' CDI ratings were significantly related to students' CDI ratings and that familiarity was related to correspondence; however, confidence was found to be unrelated to correspondence. These finding are important despite the fact the study was conducted on pre-adolescents. Teachers are a valuable source of information for identifying depression in their students, especially since current research has found that teachers' and students' ratings of depression correspond. Based on the evidence that correspondence increases as the teacher becomes more familiar with the student, it seems to suggest that teacher ratings should not be given as much weight if they were done near the beginning of the school year as opposed to the middle or especially the end.

A third widely used method for assessing depression in adolescents is the peer

nomination method in which students rate peers in their class on a number of criteria. However, rating scale errors and response biases have been recognized as problem areas with using these rating scales. Epkins (1994) studied the correspondence between peer ratings and students' self-ratings with a group of 3rd to 7th-graders. Results showed a significant halo bias, that is, students' self- reports on depression were significantly related to their peer ratings on depression. For example, students who rated themselves as high on depression rated their peers significantly higher on depression than students who rated themselves as medium or low; those who rated themselves as medium rated their peers significantly higher on depression than those who rated themselves as low.

A fourth, though not as widely used, method for assessing depression in adolescents is through parents' reports. Children often report fewer symptoms than do their parents. Children are likely to be better reporters of symptoms related to private or internal experience, whereas parents (and teachers) are better informants in relation to the children's overt behavior (Kazdin, 1990). Wright and Watson (1992) found no significant correlation between parents' reports and their children's self-reports of depression in a sample of 3rd to 6th-grade learning disabled children. According to Kazdin (1990), despite the lack of correspondence between sources, evidence points to the validity of information about the child from self- and parent reports.

RADS Mean Scores

Other studies have investigated the difference in mean RADS scores based on population and area under study. Shain et al. (1990) reported a RADS mean total score of 73.2 with a standard deviation of 19 points in a sample of inpatient depressed adolescents.

There were no significant differences in mean scores between males and females. In a number of studies reported in the RADS manual, Reynolds (1987) himself found that RADS total mean score ranged from 58.7 to 62.4 in normal adolescent populations. Baron and Campbell (1993) in a study of French-Canadian high school students obtained a mean score of 52.19 with standard deviation of 13.67. In a similar study Campbell et al. (1992) obtained a mean score of 55.09 with a standard deviation of 16.18. Finally, a study of conduct-disordered adolescents resulted in a total mean score of 63.3 with a standard deviation of 13.5 on the RADS (Nieminen & Matson, 1989).

Depression is a major mental health problem among adolescents. The most recent studies have found the prevalence in adolescents at about 3% of boys and 10% of girls (Sattler, 1998). Depression is marked by a cluster of symptoms rather than a single symptom. Common adolescent symptoms include low self-esteem, loss of energy, aggressive behavior, loneliness, feelings of worthlessness, and suicidal preoccupation. Based on research, it appears that adolescents with disabilities may be at risk for depression. Depressed adolescents may also be at risk for suicide.

Because depression is a major mental health problem affecting middle and high school students, schools can and should help in the identification and treatment referral of depressed adolescents. School personnel have a number of methods for assessment available to them: self-report scales, teacher rating scales, peer nomination, and parent reports.

A number of studies have been conducted utilizing the RADS. Results from studies addressing several forms of reliability and validity indicate the RADS has

acceptable psychometric properties. However, the mean score on the RADS has been found to differ depending on the population and geographic area studied.

Purpose of the Current Study

The purpose of the current study was to establish Paris norms for the RADS. This would allow individual Paris High School and Mayo Middle School students to be compared to their peers in their schools. With established Paris norms, the RADS may become widely used by Paris guidance counselors, psychologists, and social workers when assessing adolescents suspected of being depressed. Because depression is a major mental health problem affecting high school students, schools can and should help in the identification and treatment referral of depressed adolescents. Identifying depression early on is important because if left untreated other problems may occur and symptoms may interfere with learning and academic performance. Generally, students are not referred due to "depression." Something else, such as dropping grades, substance abuse, or having difficulties with teachers, becomes apparent to parents or school personnel. Thus, depression often disrupts the adolescent's cognitive, academic, and interpersonal functioning (Sattler, 1998). If caught in the early stages depression may not have such a devastating impact on various areas of the adolescent's functioning.

A second purpose of this study was to fulfill Paris' need for an instrument to efficiently and inexpensively assess students suspected of having depression. The high school has been plagued with a number of student suicides in past years. This instrument would be useful for these purposes as the constructs of depression and suicide are often linked (Schotte & Clum, 1982). The RADS manual reports a correlation of .59 to .61

between RADS total score and suicidal ideation (Reynolds, 1987). The Paris norms for the RADS could be used to identify students who need further assessment for depression. The RADS can be quite useful in identifying students who may need psychological services (Reynolds, 1987).

Key Terms Utilized in this Study

Clinically relevant: a score of 77 or above on the RADS, a level of symptom severity that results in impairment in the individual's daily functioning and distinguishes between "depressed" and "normal" adolescents (Reynolds, 1987). This is not a formal diagnosis but a term to describe a qualitative estimate of the seriousness of depressive symptomatology in adolescents.

Depressive symptomatology: the 30 RADS items associated with depression. Item selection was based on symptoms of depression in DSM-III criteria (APA, 1980), Research Diagnostic Criteria (RDC) (Endicott & Spitzer, 1978; Puig-Antich, Orvaschel, Tabrizi, & Chambers, 1980), Weinberg criteria (Cytryn, McKnew, & Bunny, 1980; Weinberg, Rutman, Sullivan, Penick, & Dietz, 1973), and the Hamilton Depression Rating Scale (Hamilton, 1960, 1967).

Mayo Middle School (MMS): A public middle school serving 6th to 8th graders located in East Central Illinois: Edgar county - A primarily rural part of Illinois. The following statistics were taken from Mayo Middle School's 1997 School Report Card and September 1997 Housing Report. MMS is in a Unit district meaning that the district is comprised of grades kindergarten through twelve. Out of a total enrollment of 342 students 98.8% were white, 0.9% were black, and 0.3% were Asian. Female students

comprised 47.1% of total enrollment, male students comprised 52.9%, and from 33% to 47.1% of students were estimated to be from low-income families.

Norms: Percentile rank of raw total RADS score

Paris High School (PHS): Located in East Central Illinois: Edgar county - A primarily rural part of Illinois. The following statistics were taken from PHS's 1997 School Report Card and September 1997 Housing Report. PHS is in a Unit district. Out of a total enrollment of 793 students 99.1% were white, 0.4% were black, 0.3% were Hispanic, 0.1% were Asian, and 0.1% were Native American. Female students comprised 50.9% of total enrollment, male students comprised 49.1%, and from 10.7% to 30.2% of students were considered to be from low-income families.

Paris Students: adolescents in regular and special education (learning disabilities, behavior/emotional disorders, mild mental impairment) classes in 7^{th} - 12^{th} grade at Mayo Middle School and Paris High School in Paris, Illinois

Hypotheses

This investigator hypothesized that the norms on the RADS would differ between Paris and the standardization sample because the Paris sample would include students with mild disabilities. Studies have found that students with disabilities (learning disabilities, mental retardation, and emotionally disturbed) generally score higher on the RADS than "normal" students (Acker, 1991; Epkins, 1993; Manikam et al., 1995; Nieminen & Matson, 1989; Reynolds & Miller, 1985). It was also hypothesized that the norms on the RADS would differ between Paris and the standardization sample because numerous studies have found differing mean total score values on the RADS, from 52.19 to 73.2

depending on location of the study and the population utilized (Baron & Campbell, 1993; Campbell et al., 1992; Nieminen & Matson, 1989; Reynolds, 1987; Shain et al., 1990; Spirito et al., 1996). Furthermore, Epkins (1994) found that children with low socio-economic status (SES) self-reported more depression than higher SES children. Paris, as a whole, is a low SES community. The RADS was normed on students of whose the majority of parents were in the lower middle SES range (Reynolds, 1987). Finally, it was hypothesized that mean RADS total score would be higher in female students than males as a number of studies have found this to be true (Baron & Campbell, 1993; Campbell et al., 1992; Reynolds, 1987).

Method

Participants

Seventy-six 7th through 12th grade students (20 males and 56 females, m =16.4, sd=1.5 years) at MMS and PHS were given permission to participate in the study. Table 1 displays the demographics of the Paris sample. Of the 76 students, 13 participated in special education. Participants were treated in accordance with Eastern Illinois University's ethics committee and Paris Union School District #95's research committee guidelines for the treatment of human subjects.

Materials

An introductory letter was given to teachers who taught a class during the 3rd class period (see Appendix A). This letter introduced the investigator and the study. It included instructions for distributing permission slips to students and briefly explained the study's procedures. The parent permission form (see Appendix B) introduced the

investigator and the study to parents and briefly explained the procedures. The permission form included a space for the student's name, the parent/guardian's signature, date, and whether or not permission was given. The form also asked for the highest level of parent education in order for the investigator to describe the demographics of Paris.

The third form utilized in the present study was a teacher direction sheet for the administration of materials to students who were given permission to participate in the study (see Appendix C). This sheet provided a list of participating students and six steps for administering questionnaires. The next form was a student consent form which explained to students what the study was about, informed them that they had the right to withdraw at any time, stated what participation entailed, and asked for a signature from those choosing to participate (see Appendix D).

The fifth form utilized in this study was the Reynolds Adolescent Depression Scale questionnaire. The next form was a 5-item demographic questionnaire asking for grade, gender, race, age, and categories of special education under which services are received (see Appendix E). The final form utilized in the present study was a debriefing form given to parents and students which listed resources available to anyone who felt the need to discuss any concerns arising form participation in the study (see Appendix F).

Procedure

An appointment was made with the superintendent of Paris Schools and the principals of PHS and MMS to ask for permission to conduct research in the schools. The current study was explained and copies of the proposal and all study materials were provided. A research committee consisting of the superintendent, principals, and school

board members approved the study and wrote a letter of support to be included with parent permission slips.

After permission was granted, the investigator obtained demographic information on the Paris schools and surrounding area from the school staff, the 1997 PHS & MMS School Report Cards, and the September 1997 Paris Housing Report for stratification. Demographic information included number enrolled, number of males/females, number in each grade level, percent of low-income families. This information was used to describe the characteristics of Paris, Illinois and its schools. A list of teachers and class rosters for PHS's A Day Block 3 class and MMS's 3rd class period was also collected.

Each teacher received in their mailbox an envelope with the introductory letter describing the study and parent permission slips with debriefing form attached. Debriefing forms were attached to ensure that parents received a copy in the event that their student did not keep his/hers. This investigator briefly described the procedure as teachers took their envelopes from their mailboxes. Teachers who did not pick up their mail had their envelopes delivered to them at the beginning of the 3rd class period. The investigator briefly described the procedure at that time. Signed permission slips were collected by the 3rd hour teachers and placed in an envelope. The envelopes were returned to a specified box in the office. The investigator requested envelopes from those teachers who did not return them to the box. All consent forms returned with a signature were entered into a drawing for a $50 U.S. Savings Bond, whether or not the parent gave consent. The bond was used as an incentive for returning signed permission slips. A person who was blind to the purpose of the lottery drew one permission slip out of a box. The student who won

was sent the bond in the mail directly from a local bank.

The week after consent forms were collected, teachers received in their mailboxes a list of students with permission to participate in the study, a set of directions for administration, and two envelopes: one containing the student consent form and debriefing forms and one containing the demographic questionnaire and the RADS stapled together. It was written on each teacher instruction form that additional students who returned signed consent forms during the week of administration should be allowed to participate and that students aged 18 and older could provide consent for themselves.

Again, teachers who did not pick up their mail had their envelopes delivered to them at the beginning of the 3rd class period. Teachers were asked to administer all materials during their A Day Block 3 class at PHS and 3rd class period at MMS any time during the week. Although each test was estimated to take 10-15 minutes to complete, there was no time limit for completion of the scale. Students were instructed not to write their names on the RADS to maintain anonymity. Teachers gave each student who was given consent to participate a student consent form and questionnaire consisting of (a) the instruction sheet for students which included the demographic data items below the instructions and (b) the 30-item depression scale. It was explained to each student that participation was voluntary and that they could decide to withdraw or "drop out" at any time. Mildly mentally impaired, emotionally disturbed, and behavior disordered adolescents were included in this study as the RADS has demonstrated utility with these special populations (Reynolds, 1987).

When students finished the questionnaire they were given a debriefing form which

listed a number of resources available to them should they feel the need to discuss any concerns arising from participation in the study. The completed student consent forms and questionnaires were placed back in their envelopes by the teacher. Sealed envelopes were returned to a specified box in the main office. Again, the investigator requested envelopes from those teachers who did not return them to the box. Boxes were collected by the investigator at the end of the week of material administration. Thank you letters were then given to all participating teachers and principals. As participation was anonymous, students and their parents were not told the outcomes of the student's participation when the study was completed.

Scoring

Each protocol was examined for apparent signs of invalidity. A protocol must have had at least 24 of the items completed to be considered valid (Reynolds, 1987). Protocols with less than 24 items completed would not be used. As required by the author (Reynolds, 1987) protocols with one to six items left blank were prorated to obtain a rough estimate of the score with the formula: (RADS obtained score X 30) / number of items completed. Protocols were also examined for unusual patterns of responding, such as endorsing the same response to all items or endorsing items in a pattern such as 1, 2, 3, 4, 1, 2, 3, 4. Finally, protocols were checked for invalid responses to the pairs of items 1 and 7, and 9 and 12. These items are opposites and should not logically have had responses at opposite ends of the scale, as one item in each pair is reverse scored.

To ensure accurate data entry, the responses to the questionnaires were entered into two separate data files. These two files were then compared using SPSS for

Windows Release 8.0. Once both files were found to be exactly the same, one of the files was discarded to avoid confusion. Statistical analysis was conducted using SPSS for Windows Release 8.0. Number of males and females, number in each age group, each grade 7-12, and each ethnic group, and number of students in special education were computed in order to describe sample characteristics.

Total raw score mean and standard deviation were computed for the sample as a whole, for males and females, and for disabled and non-disabled students. Independent samples t-tests were used to compare these scores for significant differences. Standard scores were computed for each RADS protocol based on the Paris mean and standard deviation and that of the standardization sample. The difference in standard scores for each RADS protocol was computed and compared by use of a paired t-test in order to determine whether significant differences existed. Percentile tables based on Paris total RADS raw scores from 30 to 120 were also computed. Finally, internal consistency reliability was computed using Cronbach's (1951) coefficient alpha. Coefficient alpha was utilized as it is the most appropriate estimate of internal consistency for a measure such as the RADS (Reynolds, 1987).

Results

In order to describe characteristics of Paris, Illinois parents were asked to report their highest level of educational achievement on the parent permission slip. Six parents did not report this information. Of parents who reported their highest level of education attained, using only the highest level by either parent, 37% reported graduating from high school, 34% from a two-year college, 18% from a four-year college, and 11% from

Graduate School. Population statistics on education level were not available for comparison.

When protocols were examined none were found to be invalid and there were no patterns of unusual responding. Only one questionnaire had to be prorated. This particular questionnaire was missing a response to question 14: I feel like hurting myself.

Of the 76 students who participated in the study 26.3% (n=20) were male, 73.7% (n=56) were female, and 17.1% (n=13) participated in special education. Paris' Director of Special Services estimated that between 15 and 20 percent of Paris students participate in special education (Personal communication, June 7, 1998). The population of students in 7th through 12th grade from which this sample came was 51% male and 49% female. From a population consisting of 1.4% minority students, 0% of students who participated were minorities. A comparison of percentages of students in each grade 7th through 12th between the population and sample is found in Table 2.

Mean total RADS score for the Paris sample was 58.34 with a standard deviation of 14.09 with kurtosis of -.28 and skewness of .30. Scores ranged from 33 to 93. Percentile ranks can be found in Table 3. The average score for students who reported receiving no special education was 58.40 (SD=14.42) and was 58.04 (SD=12.89) for those who reported receiving some special education. A t-test for independent samples found that the .36 difference in mean RADS score between students who did and did not receive special education was not significant, $t(74)=.08$, $p>.05$.

The mean RADS score for males in the Paris sample was 54.12 (SD=11.16) while the mean for females was 59.84 (SD=14.79). Table 4 presents the means and standard

deviations of the comparison groups. A t-test for independent samples found that the 5.72 mean difference was also not significant, $t(74)=-1.57$, $p>.05$. The effect size for gender was .03. Therefore, 3% of the variance in RADS score was accounted for by gender.

Paris total RADS scores were converted to standard scores using both the Paris and standardization mean and standard deviations. A paired samples t-test was utilized to determine whether the total difference was significant. The difference was found to be significant, $t(75) = 80.23$, $p<.001$).

Internal consistency reliability of the RADS for the Paris sample was .91 which was consistent with alphas reported in the Manual (Reynolds, 1987).

Discussion

This investigator hypothesized that mean RADS total score would be higher in female students than males as a number of studies have found this to be true (Baron & Campbell, 1993; Campbell et al., 1992; Reynolds, 1987; Reynolds & Miller, 1985). This hypothesis was supported. As a whole, female students scored 5.72 points higher than male students. According to Reynolds (1987), there is a consistent sex difference demonstrated across samples, with females scoring 5 to 7 points higher than males. In most samples this sex difference is significant (Baron & Campbell, 1993; Campbell et al., 1992; Reynolds, 1987; Reynolds & Miller, 1985). In the Paris sample, however, the 5.72 point difference was not significant. This is most likely due to the small sample size (n=76) because Reynolds (1987) reports a study finding significance with a smaller mean score difference that utilized a sample of over 600 students.

Lack of relevant score differences suggests that norm tables divided by sex are not

necessary for the Paris sample. This is also supported by Reynolds (1987) himself who suggests that the total sample norm table be utilized but acknowledges that fact that the tables broken down by gender, age, and grade allow the user maximum flexibility in choosing a comparison group. Due to the small number of participants (n=76) in the Paris sample, norms tables by gender, age, and grade should not be reported.

It was also hypothesized that the norms on the RADS would differ between Paris and the standardization sample because the Paris sample would include students with mild disabilities and because differing mean total score values on the RADS have been found depending on location of the study and the population utilized. It appears that the Paris and the standardization norm tables for the entire samples, that is not divided by gender, grade, or age, are roughly equivalent. Standardization and Paris raw scores at the 85th, 90th, 95th, and 99th percentiles range from zero to two points different. Raw score differences at lower percentiles are similar. Reynolds' (1987) 77-point cut-off score occurs at the 88th percentile for the standardization sample as a whole and at the 89th to 90th percentile for the Paris sample as a whole. Therefore, the second hypothesis was disputed. However, it is unknown whether this would be true had the Paris sample been representative of Paris adolescents as a whole.

It does not appear that the Paris sample utilized in this study is representative of the population of Paris adolescents. Of parents who reported their highest level of education attained on the parent permission slip, using only the highest level by either parent, 37% reported graduating from high school, 34% from a two-year college, 18% from a four-year college, and 11% from Graduate School. Therefore, all of the parents

reported graduating from high school. Based on this examiner's experience working in the community and the fact that approximately 38% of students are from low-income families, based on the 1997 Paris School Report Cards and September 1997 Paris Housing Report, a significant percent of Paris parents have not graduated high school. It appears that the most educated parents in Paris gave permission for their children to participate in the study.

Of the 76 students who participated in the study 26.3% (n=20) were male, 73.7% (n=56) were female, and 17.1% (n=13) participated in special education. The population of students in 7th through 12th grade from which this sample came was 51% male and 49% female. From a population consisting of 1.4% minority students, 0% of students who participated were minorities. A comparison of percentages of students in each grade 7th through 12th between the population and sample is found in Table 1. It is likely that 41% of students in the sample were in the 12th grade due to the fact that students of the age of majority were able to consent for themselves and did not require a parent's signature to participate in the study. Therefore, the Paris sample is comprised of an over representation of 12th grade, white females from educated parents who were responsible enough to bring permission slips home to their parents and return them to school.

Although the standardization and Paris norm tables appear to be roughly equivalent, it was hypothesized that they would differ because the Paris sample would include students with mild disabilities. Other research studies have found that students with disabilities generally score higher on the RADS than "normal" students (Acker, 1991; Epkins, 1993; Manikam et al., 1995; Nieminen & Matson, 1989; Reynolds & Miller,

1985). The Paris sample was comprised of 17.1% special education students who had learning or cognitive disabilities. Ten of the participating students indicated a learning disability, three indicated a mild mental impairment, and none indicated a behavior/ emotional disability. It is possible that the small number of special education students is not representative of the whole group because students with behavior/emotional disorders were not represented. The average score for students who reported receiving no special education was 58.40 (SD=14.42) and was 58.04 (SD=12.89) for those who reported receiving some special education. A t-test for independent samples found that the .36 difference in mean RADS score between students who did and did not receive special education was not significant. It is possible that Paris special education students do not feel particularly different than their non-disabled peers. This could be due to the fact that these students are mainstreamed into regular education classes as much as possible.

It was also hypothesized that the standardization sample and Paris norms would differ because studies have found differing mean total score values on the RADS, from 52.19 to 73.2 depending on location of the study and the sample examined (Baron & Campbell, 1993; Campbell et al., 1992; Nieminen & Matson, 1989; Reynolds, 1987; Shain et al., 1990; Spirito et al., 1996). Furthermore, Epkins (1994) found that children with low socio-economic status (SES) self-reported more depression than higher SES children. Paris, as a whole, is a low SES community and the RADS was normed on students of whose the majority of parents were in the lower middle SES range (Reynolds, 1987). The Paris sample appears to represent students from Paris' middle class parents.

Descriptive statistical testing found the mean total RADS score for the Paris

sample to be 58.34 with a standard deviation of 14.09. The mean total RADS score for the standardization sample was 60.18 with a standard deviation of 14.29. (Reynolds, 1987). The total RADS scores of the three students who were over the age of 18 were included the sample mean as Reynolds (1987) states that the RADS is reliable with students in grades 7 through 12 who are outside the age range of 13 to 18. The average self-report scores for all subjects on the RADS were within the range of means reported elsewhere in the literature for nondepressed populations. The RADS mean of 58.34 found in this study falls above that of Campbell et al.'s (1992) group of French-Canadian students, but is slightly lower than Reynolds' (1987) reports of means for large samples of normal students, ranging from 58.89 to 62.45. As a whole, therefore, this sample of Paris students reported less depressive symptomatology than samples of all "normal" students.

Why this was true is difficult to say. It could have been due to the fact that the study was conducted at the end of the school year and the students, as a whole, were looking forward to a vacation. Or, it could have been due to the sample answering RADS items in a socially acceptable manner. Students who complete the RADS are supposed to be blind to the fact that the scale measures depression. Students may have known the scale measured depression if they read the letter to their parents which, in order to gain active parent consent, stated that the scale measured depressive symptomatology. Students may also have read in the Paris newspaper that the investigator planned to complete a study on student depression which was reported after the study was approved by the board of education. It is also possible that Paris' responsible students with somewhat educated parents simply are less depressed that other samples of students.

However, it is also possible, based on Epkins'(1994) results, that a more representative sample of Paris, particularly matched on the variable of SES, would score higher (more depressed) on the RADS.

The Paris sample raw scores ranged from 33 to 93. Percentile rank for each score, 33 to 93, can be found in Table 3. Due to the fact that less than 100 students participated in the current study some raw RADS total scores have a range of percentile ranks rather than a single rank. For example, a raw score of 83 or 84 falls somewhere between the 94th and 95th percentiles and a raw score of 65 falls somewhere between the 67th and 72nd percentile.

Despite the fact the total sample norm tables for the standardization and Paris samples appear similar, that is, percentiles at each raw score range from zero to two points different, when Paris total RADS scores were converted to standard scores using both the Paris and standardization mean and standard deviations and a paired samples t-test was utilized, the total difference was found to be significant, $t(75) = 80.23$, $p<.001$). Therefore, comparing standard scores based on Paris raw data and Paris descriptive statistics differs significantly from standard scores based on Paris raw data and standardization descriptive statistics. This suggests that the Paris sample mean and standard deviations may differ significantly from those of the standardization sample. However, further research is necessary to make this a solid conclusion. Although there appears to be no practical difference in the scores, statistically there is a difference.

Based on the above results and discussion it appears that the following conclusions can be made: First, the Paris sample does not accurately represent the population of Paris

adolescents. The Paris sample is comprised of an over representation of responsible 12th grade, white females from educated parents. Second, for this sample of Paris students, the total standardization norm table appears roughly equivalent to the total Paris norm table, that is, percentiles at each raw score range only from zero to two points different. Due to the fact that there is relatively no difference between the norm tables, the Paris total norm table should not be used in Paris at this time as the total standardization norm table describes them just as well. And third, the applicability of both the total standardization and Paris norm tables is unknown for students who were not in the sample. Due to the fact that comparing standard scores based on Paris raw data and Paris descriptive statistics differs significantly from standard scores based on Paris raw data and standardization descriptive statistics, more research is needed to determine whether either norm table is applicable for Paris as a whole.

A number of implications for additional research have become apparent by the current study. The current research must be replicated utilizing a representative sample in order to achieve the purposes for which the current study was conducted. The easiest way to gain a representative sample would be to not require active parent consent. However, in the 1990's this is required by many universities and ethics and research committees and is desirable by many researchers. Therefore, in order to ensure that students do not know the purpose of the scale, I recommend that permission slips, if necessary, be mailed to parents and include a self-addressed stamped envelope. Students would be less likely to discover that the RADS measures depressive symptomatology and permission slips would not be forgotten, lost, or thrown away by students. Permission

slips could also be given to parents at the beginning of the year when they pay fees and register their students for school.

I recommend that the researcher in further investigations of this type, particularly if permission slips are sent home via students, encourage students him/herself to participate by presenting an introduction to the study in each classroom. I do not believe that the majority of teachers encouraged students to return permission slips or adhered to some instructions with integrity. It was obvious, however, those teacher who did so as there was good participation in some classes. The majority of classrooms returned no or a few slips. The one classroom that I presented in had a majority of slips returned. An introductory presentation is desirable because it allows students to ask questions of the investigator and provides opportunity to encourage students to participate. Apparently the lottery for a $50 U.S. Savings Bond was not encouragement enough on its own. Perhaps a formal inservice to teachers that explains the benefits of depression research would increase integrity.

The current research is severely limited by two factors. The obtained sample was not representative of the population of Paris adolescents based on SES, gender, ethnicity, or grade. Therefore, the results can not be generalized to Paris as a whole and the reliability of the norm table is brought into question. Not only can the sample not be generalized to other Paris students, it can not be generalized to geographic areas similar to Paris. This is the goal of all descriptive studies and the Paris sample fails to reach it.

Further, the data only represents a small sample of Paris adolescents and therefore, the study was limited by the small number (n=76) of students who participated. These

comprised of merely 9% of eligible students. Due to the small number of participants, norms tables divided by gender, age, and grade could not be developed. This does not allow the user any flexibility in choosing a comparison group.

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Table 1

Demographics of the Paris Sample

AGE	FREQUENCY	PERCENT
13	2	2.6%
14	6	7.9%
15	17	22.4%
16	11	14.5%
17	16	21.1%
18	21	27.6%
19	2	2.6%
20	1	1.3%
GRADE		
7TH	2	2.6%
8TH	4	5.3%
9TH	14	18.4%
10TH	11	14.5%
11TH	14	18.4%
12TH	31	40.8%
ETHNICITY		
WHITE	76	100%
SPECIAL EDUCATION		
YES	13	17.1%
NO	63	82.9%

Table 2

Percentage of Students per Grade in Population and Sample

GRADE	POPULATION	SAMPLE
7TH	13%	3%
8TH	9%	5%
9TH	21%	18%
10TH	19%	15%
11TH	20%	18%
12TH	19%	41%

Table 3

Conversion of RADS Raw Scores to Percentile Ranks for Total Paris Sample

Raw Score	Percentile Rank (N=76)	Raw Score	Percentile Rank (N=76)
93	99	59	48-52
92	98	58	47
91	97	57	45-46
90	96	56	41-44
85	95	55	39-40
82	94	54	34-38
80	93	53	33
79	92	52	32
78	91	51	30-31
77	89-90	50	29
76	88	49	28
75	87	47	27
74	86	46	26
73	85	45	24-25
72	84	44	19-23
71	83	43	18
70	82	42	15-17
69	80-81	41	13-14
68	78-79	40	10-12
67	75-77	39	8-9
66	73-74	38	7
65	67-72	37	6
64	65-66	36	4-5
63	60-64	35	3
62	59	34	2
61	58	33	1
60	53-57		

Table 4

Means and Standard Deviations for Comparison Groups

	MEAN	STANDARD DEVIATION
STANDARDIZATION	60.18	14.29
PARIS - TOTAL	58.34	14.09
PARIS - MALES	54.12	11.16
PARIS - FEMALES	59.84	14.79
PARIS - DISABLED	58.04	12.89
PARIS - NON-DISABLED	58.40	14.42

Appendix A

Introductory Letter for Teachers

Dear Teacher:

My name is Julie Lindstrom. I am currently a graduate student at Eastern Illinois University doing my internship as a school psychologist at Paris Union School District #95.

I am conducting a study of 7-12 graders in Paris, Illinois to fulfill my Specialist Thesis requirements. I am interested in looking at how 7-12 graders feel about themselves.

Please distribute the enclosed parent permission slips to students in your **A Day Block 3** class (PHS) or **3rd hour** class (Mayo). Remind students that they will have the opportunity to win a U.S. Savings Bond worth $50 in a drawing should they bring back the permission slip signed by their parent or guardian in the next week. Tell students that all consent forms returned with a signature will be entered into the drawing whether parents gave consent or not. Please save the enclosed envelope and return with signed permission slips inside to the box labeled "Julie Lindstrom" in the main office on or before Friday.

On the Monday following the return of the permission slips I will be putting a direction sheet and two envelopes in your mailbox. I ask that you carefully read the direction sheet and then administer the materials in the envelopes to your students according to the directions. This will take approximately 10-15 minutes of your time. You may administer the materials to your **A Day Block 3** class (PHS) or **3rd hour** class (Mayo), at your convenience, anytime during that week. Then, return materials to their envelopes, seal the return envelopes, and place them in the box labeled "Julie Lindstrom" which is located in the main office.

At the completion of the study, I ask that you distribute a debriefing form to students which lists a number of resources available to them should they feel the need to discuss any concerns arising from participation in the study. Please encourage all students to use these resources if they have concerns. You will receive the debriefing forms when you receive the questionnaires.

Thank you for your time and cooperation. Without your help my project would not be possible.

Sincerely,

Julie Lindstrom, Intern School Psychologist

Appendix B

Parent Permission Slip

Dear student:

How would you like to win a United States savings bond worth $50? To be entered in the drawing for the $50 bond simply have your parent or guardian complete the permission slip below and return it to your A Day Block 3 (PHS) or 3rd hour (Mayo) teacher.

Dear parent/guardian:

My name is Julie Lindstrom. I am currently a graduate student at Eastern Illinois University doing my internship as a school psychologist at Paris Union School District #95. I would like to conduct a study of 7-12 graders in Paris, Illinois to fulfill my Specialist Thesis requirements. I am interested in looking at how 7-12 graders feel about themselves. I am also looking at the effect gender and participation in special education classes have on how they feel about themselves. I will be making comparisons from the data received from them according to these variables. I will demonstrate complete confidentiality, that is, I will not be able to match any student's responses to his/her name. Students will not sign their name to the demographic data sheet or the questionnaire. Students reserve the right not to complete the questionnaire.

If you give your permission and your child chooses to participate in this study s/he will be asked to complete a demographic data sheet asking for grade, age, race, gender, and whether s/he receives services as a student with a learning disability, with a behavior disorder, or with a mild mental impairment. S/he will then be asked to complete a questionnaire called "ABOUT MYSELF" which assesses depressive symptomatology by asking 30 questions about how s/he feels about him/herself. This will take approximately 10 to 15 minutes of his/her time in the 3rd hour class. Following completion of the questionnaire students will be given a list of resources available to them should they feel the need to discuss any concerns arising from participation in the study. This is the same list you have been given with this form.

If you have any questions in regard to this study you may reach me at Paris #95 Special Services Building: 463-5485 or contact Mike Havey, Ph.D, Eastern Illinois University: 581-2127.

Thank you for your time. Sincerely,

Julie Lindstrom

___I give my permission for_____ to participate in the study.
Student's name

___I do **not** give my permission

_____ _____
Parent/Guardian Signature Date

The following information will be used to describe the demographics of Paris, Illinois.

What is the highest level of education attained by the above student's mother and father?

Mother:
___8th Grade
___High School
___2-Year College
___4-Year College
___Graduate School

Father:
___8th Grade
___High School
___2-Year College
___4-Year College
___Graduate School

Appendix C

Directions for Administration

Dear Teacher:

As a reminder, I am conducting a study of how 7-12 graders in Paris, Illinois feel about themselves. A week or two ago you should have received a letter from me explaining my project. If you did not receive that letter or if you have any questions please contact me immediately. However, that letter is not needed to proceed with this administration.

You may administer these forms to your **A Day Block 3** class (PHS) or **3rd hour** class (Mayo) anytime this week. Only students whose names appear highlighted on the attached sheet may participate. It is imperative that you administer these forms to your Block 3 or 3rd hour class so that all students will participate only once. Envelopes will be picked up from the office Friday afternoon.

Directions for administration

1. Pass out student consent forms to all students highlighted on the attached sheet. Ask students to carefully read and sign the form.
2. Collect consent forms and return them to the envelop labeled "Consent."
3. Pass out demographic data and questionnaire sheets. These two sheets must remain stapled together. Ask students to carefully read and complete the forms. Remind students NOT to sign their names on these forms.
4. Collect demographic data and questionnaire sheet and return them to the envelop labeled "Questionnaire."
5. Pass out the sheet labeled "Debriefing Form" to each student. Inform students they may keep this letter. Encourage students to use any of the resources available should they feel the need to discuss any concerns arising from participation in this study.
6. Seal both envelopes and return them to the box labeled "Julie Lindstrom" in the main office.

Again, thank you for your time and cooperation with this study.

Sincerely,

Julie Lindstrom, Intern School Psychologist

I can be reached for questions regarding this study at: 463-5485 or contact Dr. Mike Havey, Eastern Illinois University, at 581-2127.

If you are interested in obtaining the results of this study please place a note with your name in a separate envelope and put it in the box labeled "Julie Lindstrom."

Appendix D

Consent Form

Dear student:

I am conducting a study of 7-12 graders in Paris, Illinois as part of my Specialist Thesis and **I need your help**. I am interested in looking at how you feel about yourself. Complete honesty and devotion by you is as necessary as you **not** putting your name on any other sheet after this. I will demonstrate complete confidentiality. You reserve the right not to complete the questionnaire and may withdraw at any time. This study is very important and I ask you to take this time seriously.

In all, I am asking three things of you, if you choose to participate in this study. The first is approximately 10 to 15 minutes of your time to complete the demographic data sheet and questionnaire as completely and honestly as possible and return that sheet to me. The second request is to ensure confidentiality and reminding you to refrain from signing your name to the demographic data sheet and/or questionnaire. Lastly, please read the questions carefully and answer all of them. There is no time limit.

Thank you for your time, cooperation, and honesty. Without your help my project would not be possible.

Sincerely,

Julie Lindstrom, Intern School Psychologist

CONSENT FORM

I, the undersigned, have read the above and agree to answer the demographic data and questionnaire honestly and completely.

_____ _____

your signature date

*REMEMBER: This consent form is the **only** place you are to sign. This page is separate from the others to make it impossible for me to match you with the information provided on the demographic data sheet and questionnaire.

Appendix E

Demographic Questionnaire

Instruction Sheet for Students

This demographic data and questionnaire sheet is part of a survey of 7-12 graders in Paris, Illinois to determine how they feel about themselves. This survey is intended for general information only and not for the purpose of identifying individual answers.

Your answers are confidential. They are for research purposes only. To help ensure privacy, **DO NOT** sign your name on the demographic data sheet or questionnaire.

Read each question carefully and select one answer from the list of possible choices for each question. Please make sure that you have answered **EVERY** question, no matter how hard you find it to make a decision. Please do not discuss the questions or answers while you are completing this survey.

DEMOGRAPHIC DATA

Directions: Circle or write in the answer that best describes you.

1. WHAT GRADE ARE YOU IN?
   a. 7th b. 8th c. 9th d. 10th e. 11th f. 12th

2. WHAT IS YOUR GENDER?
   a. Male b. Female

3. WHAT IS YOUR RACE?
   a. White b. Black c. Asian d. Hispanic e. Other (please write in)

4. WHAT IS YOUR AGE? _____

5. CIRCLE ANY CATEGORY UNDER WHICH YOU RECEIVE SPECIAL EDUCATION SERVICES.
   a. Learning Disability b. Behavior Disorder c. Mild Mental Impairment (EMH)

Directions for page 2:

Please read both Side One and Side Two Directions. **Do not** fill out the information requested above the line **ABOUT MYSELF**. **Do not** write your name on the questionnaire. You may use either pencil or pen to complete the questionnaire.

Appendix F

Debriefing Form

Dear student:

You have just completed a rating scale which asked you a number of questions regarding how you feel about yourself. The following is a list of a number of resources available to you should you feel the need to discuss any concerns arising from participation in this study. Please utilize these resources if you have any concerns.

Dan Gates
Guidance Counselor, Mayo Middle School

Tonya Dickey
Guidance Counselor, Paris High School

Mick Michaels
Guidance Counselor, Paris High School

Pamela Farr
School Psychologist serving Paris #95
463-5485

Julie Lindstrom
Intern School Psychologist serving Paris #95
463-5485

Kathryn Grimm
School Social Worker serving Paris #95
463-5485

Human Resource Center
Paris, Illinois
465-4118

If you or your parent/guardian would like to receive information about this study, contact:

Julie Lindstrom	or	Mike Havey, Ph.D
463-5485		581-2127