

1963

A Comparative Study of Basic Concerns of Eighth and Tenth Grade Students

Paul S. Yeend
Central Washington University

Follow this and additional works at: <https://digitalcommons.cwu.edu/etd>



Part of the [Educational Assessment, Evaluation, and Research Commons](#), and the [Educational Psychology Commons](#)

Recommended Citation

Yeend, Paul S., "A Comparative Study of Basic Concerns of Eighth and Tenth Grade Students" (1963). *All Master's Theses*. 365.

<https://digitalcommons.cwu.edu/etd/365>

This Thesis is brought to you for free and open access by the Master's Theses at ScholarWorks@CWU. It has been accepted for inclusion in All Master's Theses by an authorized administrator of ScholarWorks@CWU. For more information, please contact scholarworks@cwu.edu.

A COMPARATIVE STUDY OF BASIC CONCERNS
OF EIGHTH AND TENTH GRADE STUDENTS

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Paul S. Yeend
August 1963

~~SECRET~~
LD
5771.3
442c

SPECIAL
COLLECTION

122180

APPROVED FOR THE GRADUATE FACULTY

Eldon E. Jacobsen, COMMITTEE CHAIRMAN

Gerald Gage

Maurice L. Pettit

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION AND STATEMENT OF PROBLEM . . .	1
The Problem	1
Justification	2
Hypotheses	2
II. REVIEW OF THE LITERATURE	4
The Sentence Completion Blank	4
The Mooney Problem Check List	9
Adolescent Concerns	13
III. METHODS AND PROCEDURES	18
Norms and Research Setting	18
Instruments used in gathering data	19
The Mooney Problem Check List	19
The Sentence Completion Blank	20
Test Administration	21
The Sentence Completion Blank	22
The Mooney Problem Check List	23
Scoring	23
The Sentence Completion Blank	23

CHAPTER	PAGE
The Mooney Problem Check List	29
Statistical Approach	29
The Study of the Sentence Completion Blank . . .	30
The Study of Judges' Decisions	31
Determining Significance of Difference on the Mooney Problem Check List.	33
Determining Significance of Difference on Sentence Completion Blank	34
Comparisons of a Non-Statistical Nature	35
Sentence Completion Comparisons.	35
Mooney Problem Check List Comparisons	36
IV. RESULTS	37
Results of the Sentence Completion Study	37
The Results of Sentence Completion Judgments . . .	39
Differences Between 8th and 10th Graders on the Mooney Problem Check List	43
Results of Sentence Completion Significance of Difference Study.	44
Results of Comparisons of a Non-Statistical Nature .	48
Comparisons on the Sentence Completion Blank .	48
Comparisons on the Mooney Problem Check List.	56
Summary of Results	56

CHAPTER	PAGE
V. IMPLICATIONS	59
Common Problems and Concerns	59
Counseling Implications	61
Concerns About School	62
Implications for Further Research	64
VI. SUMMARY AND CONCLUSIONS	66
The Problem	66
Approach to the Problem	67
Conclusions	67
BIBLIOGRAPHY	69
APPENDIX A. Sentence Completion Blank	72
APPENDIX B. Formula--Standard Error of Proportion	75
APPENDIX C. Computation Illustration	77

LIST OF TABLES

TABLE	PAGE
I. A Study Showing the Degree of Similarity of Responses for the 1st and 2nd Administrations of the Sentence Completion Blank for Grade Ten	38
II A Study Showing the Degree of Similarity of Responses for the 1st and 2nd Administration of the Sentence Completion Blank for Grade Eight.	40
III. A Study Showing a Proportion of Similar and Dissimilar Judgments Between the Two Judges for Both Administrations of the Sentence Completion Blank .	42
IV. A Comparison of Concerns of 8th and 10th Grade Students As Revealed by the Mooney Problem Check List . .	45
V. A Comparison of Concerns as Revealed by the Sentence Completion Blank	47
VI. A Comparative Study of Areas of Concern Between Eighth and Tenth Grade Students for the First and Second Administration of the Sentence Completion Blank	49

TABLE

PAGE

VII.	A Comparative Study of Areas of Concern Between Eighth and Tenth Grade Students by Sex for the First and Second Administration of the Sentence Completion Blank	50
VIII.	A Bar Graph Comparison of 8th and 10th Grade Students on the First Administration of the Sentence Completion Blank	51
IX.	A Bar Graph Comparison of 8th and 10th Grade Students on the Second Administration of the Sentence Completion Blank	53
X.	A Bar Graph Comparison Showing Five or More Concerns for Each Set of 30 Questions per Problem Area on the Mooney Check List	57

CHAPTER I

INTRODUCTION AND STATEMENT OF PROBLEM

The problem. At times many teachers and parents have stated that students of a particular adolescent age level were "so different" from students at a different level. The writer was concerned about the authenticity of the statement. It has always been rather apparent there were marked physical differences between two given grade levels; but more verification seemed needed in other areas of consideration, particularly as related to adolescent attitudes, concerns, and anxieties. It was known there were individual differences between children at any given age; but the problem in the study was concerned with how an adolescent group as a whole at a particular grade level was similar or different from another group of adolescents at a different grade level. In order to refine the problem further, it was decided to make a comparative study of some basic areas of concern which might be important to adolescents, particularly eighth and tenth grade students. It was assumed these two levels were sufficiently separated from one another to provide evidence for or against the hypothesis that students' attitudes

and concerns are significantly different at different grade levels.

Justification. One of the necessary ingredients of any successful counselor is to have a basic understanding and knowledge of the needs and concerns of the students with whom he is working. One of the purposes of this study was to gain insight into the concerns and anxieties of adolescents. Although the goal was to compare one group (eighth graders) with another group (tenth graders), the processes involved in arriving at conclusions of necessity involved evaluating the problems of individuals. The information and understanding gained from this experience proved to be invaluable to the counselor concerned. It was also believed the conclusions of the study would be meaningful and of special interest to teachers and administrators in Longview.

Hypotheses. It was hypothesized there were no significant differences in the concerns of the eighth grade and tenth grade students. Although the tenth graders and eighth graders as separate groups would no doubt be different in some ways, there would be more areas in which they were alike than different. If this hypothesis is true, differences in teacher or parent attitudes toward students at different levels might be differences which are superimposed upon the students by the teacher or parent rather than differences in the students themselves.

Two secondary hypotheses were also considered. First, eighth grade students are more concerned about their physical development than the tenth graders. Since greater changes are taking place in the bodies of eighth grade youngsters, they are more apprehensive and concerned about these changes. Second, tenth grade students express greater concern about school. This seemed reasonable since they are closer to the completion of high school with all its vocational and educational implications. Being more immature, the students in the eighth grade as a whole would not look upon school with the same degree of seriousness.

CHAPTER II

REVIEW OF THE LITERATURE

A great deal of material has been written about the adolescent stages of physical and psychological development; but the following discourse relates more specifically to characteristics elicited by three assessment devices. They are as follows: The Sentence Completion Blank, The Mooney Problem Check List, and Adolescent Concerns.

I. THE SENTENCE COMPLETION BLANK

The Sentence Completion or Incomplete Sentence Blank is a projective technique in which the subject is asked to finish a sentence of which the first word or few words are given by the examiner. The beginning one or more words are called stems. The stems are designed to allow the subject to reflect his own concerns, attitudes, fears, desires, or wishes in the sentences he composes.

A major advantage of the sentence completion type test is the suitability for group administration. It can be tailored to fit any particular situation with language which is familiar to the group of

individuals taking the test. It is also easily administered in group form. In contrast to many projective instruments, the sentence completion method has the distinct advantage of providing freedom of response. Instead of forcing the subject to accept one or more stated answers or choices, he may respond to the stems in any way he sees fit.

In a study of projective techniques relating to a comparison between the sentence completion and the word association method, Bell (2:45-53) found the sentence completion to be a superior technique in providing more material that is easier to interpret than the single-word response. The study also revealed the reliability of responses and scoring, while not high, was within the limits of acceptability.

Another reliability study was carried on by Rohde (11:169-181) in which six hundred and seventy ninth-grade students averaging fifteen years of age were the subjects. Five raters were used in establishing reliability of scoring. Retest consistency after eight months gave corrected coefficients when using the Spearman-Brown formula of .82 with girls and .76 with boys. In still another study Rotter and Willerman (12:43-48) found a split-half reliability of .85 (Spearman-Brown formula) when using the sentence completion technique.

This technique seems well adapted to an analysis of problem

areas and on occasion perhaps could be used by a skilled counselor as a means of making informal hypotheses about the nature of a subject's problems. In this writer's study the main function of the Sentence Completion Blank was to assess group attitudes or concerns, but the technique also has been used with success as an aid to counseling in school and clinical settings. For many clinicians this method might be useful for giving him an orientation toward a subject so that he might structure his first interview in advance. In this way it is used as a means of providing information regarding the content of the subject's inner thoughts and feelings, or at least for cautious clinicians it provides an additional assessment dimension or basis for initial hypotheses making.

Sentence Completion is not a new technique for as far back as 1930 Tendler (14:123) called a test of this nature, "A Test for Emotional Insight." In his test he used twenty items, for example, I feel happy when . . . , and I tell lies All of his sentences began with the word "I" except one. Tendler wanted a test that would determine "trends, fixed attitudes, conflicting desires, satisfactions, annoyances, concerns, etc." (14:123). Perhaps there were those before Tendler's time who experimented with this method; but Rabin and Haworth (10:213-224) claim Payne and Tendler were among the first to desert the simplicity of the Word Association Test with a single

word stimulus for more complex phrases which were to be completed by the subject. They found the sentence stems permitted a wider range of appropriate responses than the single words of the Word Association Test. In the task of completing sentences from the stimuli of the stems, the projective method began to take form.

Other leaders in the field who gradually began using this technique, thus giving impetus to the use of this instrument, were Lorge and Thorndike in 1941 (7:191-199); Holzberg, Teicher, Taylor (4:84-95) and Hutt (5:134-140) during the years of World War II; Rohde (11:169-181) in 1946; and Rotter and Willerman (12:43-48) in the post war years. These and many others have used the Incomplete Sentence Blank technique in various situations and found them to be useful, sound instruments for clinical, experimental, and school purposes when used appropriately. Rohde (11:169-181) in his study emphasized that the test could be quite valuable for a personality analysis in a school setting, particularly at the high school level.

This instrument, like most tests, is not without its limitations as well as its strong points. Although it is easily administered, scoring of necessity involves a degree of subjectivity which requires careful consideration of each response by qualified professional personnel. In the study to be discussed in this thesis, two and sometimes three judges were used to evaluate each subject's responses.

The purpose of the Sentence Completion test is perhaps less disguised than other projective techniques. It may upon occasion induce the sophisticated subject to reveal only what he wants the examiner to know. However, even though the subject may suspicion the intent of the test, it is still less clear to him as to what constitutes appropriate answers than most projective tests.

The possibility for uncooperative, disturbed or illiterate people to produce misleading or insufficient material may be a limitation of the Sentence Completion Test, although most tests are influenced adversely by these factors. In using this technique as a basis for comparing the concerns of tenth grade students with eighth grade students, it was noted that surprisingly few subjects appeared to be uncooperative. An exception was a boy who wrote as follows at the bottom of his Sentence Completion test, "My responses on this test are neither complete nor a true expression of my feelings, but it is all you are going to get out of me." A response of this nature suggests hostility toward the test or at least directs hostility toward the testing situation and cannot be considered valid. In general, the seriousness in which students took the test for the study was most remarkable.

The Sentence Completion Blank requires some writing skill which might be considered by some to be a limitation, particularly when administered to younger children. However, this factor did not prove

to be a disadvantage when the researcher administered the test to students thirteen years of age and over. Although some students demonstrated greater maturity and skill in written expression than others, neither the depth nor quantity of concerns and feelings appeared to be influenced by the writing skills of the individuals. The student who wrote, "My mother seem to alway pick things apart which I do," seemed to express as much concern as the pupil who stated, "My mother is a teacher and tends to be too bossy."

A summary of the Sentence Completion type test as a useful projective technique is well stated by Anderson and Anderson (1:295).

It seems a feasible method for investigation of a variety of situations, for the study of group attitudes and opinions, and for special experimental problems in the field of personality. The fact that it can be administered to a group and still retain many of the individualistic advantages of the projective tests, suggests that it can be profitably employed in many areas as yet untapped.

II. THE MOONEY PROBLEM CHECKLIST

The Mooney Problem Check List is not a test, and therein lies its strength. Psychologists, guidance workers, industrial personnel workers and educators have been searching for years for a simple way to evaluate personality, but simple ways in a complex field have a disagreeable habit of yielding little. Most of the pencil and paper tests of personality have been extremely disappointing. The Mooney Problem Check List has not been in that category because it promised little and produced much (6:133).

The Mooney Problem Check List is simply a list of some of the problems of boys and girls. The students are asked to read the list slowly, and as they come to a problem which is troubling them, to draw a line under it. Although Mooney put out a Junior High School, a Senior High School, a College, and an Adult Form of the Problem Check List, the one used in this study was the Junior High School form. This form consists of a total of two hundred and ten items of which thirty items are presented in each of seven problem areas: Health and Physical Development; School; Home and Family; Money, Work, and the Future; Boy and Girl Relations; Relations to People in General; and Self-Centered Concerns.

Gordon and Mooney (9:3) in their modest claims about the psychological instrument clearly state the Problem Check List is not a test; but rather a tool to be used primarily in counseling, whereby it serves as a faster method of analyzing the student's problems. The total number of items checked as a score can only be counted as a "census count" of each student's problems--limited by the student's awareness of his problems and his willingness to reveal them.

Gordon and Mooney elaborate further by saying,

The usefulness of the Problem Check List approach lies in its economy for appraising the major concerns of a group and for bringing into the open the problems of each student in the group. The reasons for which the Problem Check List is administered fall into five broad classes: To facilitate counseling interviews; to make group surveys leading to plans for

individualized action; as a basis for homeroom, group guidance orientation programs; to increase teacher understanding in regular classroom teaching; and to conduct research on the problems of youth (9:3).

Although any of the above appears to be a valid reason for administering the Mooney Problem Check List, the basic reason for selecting the Problem Check List for this study was for research purposes on the problems of youth. It was believed to be valuable not only because it helped to locate areas of student problems, but also because it gave the examiner an opportunity to study the similarities and differences of problem areas between groups of students of different adolescent ages, particularly between eighth and tenth grade students.

Although reliability, validity, and norms are discussed in the manual, they cannot be applied to the Problem Check List in the same way as standardized tests because the authors are clear in emphasizing their instrument is not an objective test. Mooney and Gordon (9:9) point out when data from the Problem Check List is used to implement understanding of an individual, it must be capable of reflecting changes in the circumstances or feelings of the individual. Over a period of time these changes of feelings or circumstances will cause shifts in item responses which do not invalidate the data, but rather, may facilitate the purpose for which the Problem Check List is

given. However, when the instrument is used for survey or research purposes, as was the case in this study, there must be some assurance that the concerns of the group remain reasonably stable over a period of time. Two sources of evidence concerning reliability were presented on this point.

The first source was an unpublished study by Gordon in which the College form was administered twice to 116 college students. The frequency with which each of the items was marked on the first administration was correlated with the frequency with which each of the same items was marked on the second administration. A correlation coefficient of .93 was found.

The second source was a study of four educational groups in which the Problem Check List was repeated from one to ten weeks after a first administration. The rank order of the eleven problem areas, arranged by size of mean number of problems checked in the area, remained virtually the same from one administration to the other for each of the groups. The rank order correlation coefficients varied from .90 to .98 (9:9).

Although the above information must be considered somewhat biased because its source was the Check List Manual, still the claims of the authors in general are very modest. It appears safe to conclude that when the Mooney Problem Check List is used for survey purposes, the instrument is sufficiently stable to merit its use in comparing one adolescent group with another as was done in this study.

Since the Problem Check List is not an objective test, the authors point out that a single over-all index of the validity of the instrument would be quite meaningless. However, they have carried

on a great deal of study relating to the responsiveness of students while responding to items, the attitude of students concerning the instrument, the coverage of problem areas, the attitude of educators and counselors concerning the instrument, and its usefulness in research.

The Problem Check List has been used numerous times in various research and survey studies. McIntyre (8:272) in one such study attempted to determine the validity of the High School form of the Mooney Problem Check List by computing the mean number of problems checked in particular problem areas by a large group of high school students who were classifiable into various discrete groups. The study was quite involved but their findings showed at least prima facie evidence for the validity of the Problem Check List.

In summary, the critics seem to believe the Mooney Problem Check List is a valuable aid to counseling if used in conjunction with the interview but not substituted for it. As an independent instrument its main value is for research purposes, and in this capacity it possesses great potential.

III. ADOLESCENT CONCERNS

Adolescence is far too broad a field to be covered extensively in this thesis. One need only to look under the topic "Adolescence" in

the card file of any college library to realize the breadth and magnitude of this area. Since the major concern of this thesis relates to a study made in a Longview junior and senior high school, comments from the literature about the adolescent will be relatively brief, and of necessity limited in scope.

While visiting with an eighth grade boy in a Longview junior high school one day, this writer asked the meaning of the word "adolescence." The boy replied without hesitation, "It is the age when a person is changing from a child to an adult!" The boy's definition was pretty accurate. This span between childhood and maturity is perhaps one of the most interesting and important periods in the entire life cycle. Although the adolescent is struggling for independence during this period, he is also asking for the security of boundaries. On the one hand he is clinging tenaciously to the pleasures and protection of childhood, while on the other hand he is attempting to rid himself of the restraints of childhood in an effort to grasp some of the responsibilities and privileges of adulthood.

The adolescent stage is considered the second fastest growing period in the child's life. During this time many physical, emotional, psychological, and social changes take place. These rapid changes are often responsible for a degree of concern or anxiety among adolescent children.

What are the feelings of adolescent children concerning growing up? Of course, individual differences exist among students of all ages; therefore, sweeping generalizations are out of order. Some young people no doubt experience strong anxieties while others take their growth in stride by looking on it as a gradual, uneventful process. Strang (13:172) made a rather interesting study in which she asked a number of students to write down their feelings about growing up. To these students, growing up meant a number of different things. For some, it meant greater decisions and more responsibilities; but it also meant more privileges, independence, and freedom. For others it meant acquiring a driver's license and driving a car. Some felt that it meant receiving more respect and acceptance by adults. Many girls commented that growing up meant dating, marriage, and a family, while many boys of high school age expressed thoughts along the same line. While the majority seemed to face adolescence hopefully and realistically, some appeared to be completely overwhelmed with its problems.

It was interesting to note in Strang's study that the majority of students emphasized the positive aspects of growing up rather than the negative. It may have been that in some cases the feelings of concern and anxiety were too intense and deep-seated to be analyzed or that they were deliberately unrevealed. Still it was significant in

the written statements of the groups of adolescents that the positive attitude toward growth was expressed more frequently than the resistance to change. She concluded by saying:

All we can say is that adolescents' feelings about growing up cover a wide range, that most have mixed feelings about it, and that many have feelings of positive expectancy (13:172).

The adolescent years have been characterized as an age of rapid growth, change, and concern. These concerns may be simple or they may be complex. They may be limited in scope or they may completely permeate the child's thoughts and actions. To an adult the concerns of an adolescent may appear to be trivial and insignificant, but to the teen-age boy or girl they are genuine and real. Although the concerns are often too numerous to count and are quite divergent in nature, most of them tend to fall under several general classifications. Strang in The Adolescent Views Himself devotes the major part of her book to the various concerns of the adolescent. Her chapter headings tend to characterize the different areas of adolescent concerns quite well. They are as follows:

- Concerns relating to the continuity of growth toward maturity.
- Concerns relating to achieving physical and sexual maturity.
- Concerns relating to achieving scholastic success.
- Concerns relating to building desirable social relations.
- Concerns relating to making a good adjustment to the opposite sex.
- Concerns relating to family factors in achieving independence without antagonism.
- Concerns relating to progressing toward educational and vocational goals.

Concerns relating to achieving socially responsible behavior (13:entire book).

The above summation provides a good "overview" of adolescent concerns in general. Other writers have used different terminology and have divided them somewhat differently; but in essence most of the descriptions are very similar in characterizing the broad areas of adolescent concerns.

The basic question in this study relates to whether the concerns of one adolescent age level are similar or different from those of a different level. Strang's breakdown above infers the concerns are applicable for all of adolescence, but further refinement is necessary to determine differences and similarities at different adolescent levels in the various areas of concern. Chapter III explains the procedure used in setting up the study.

CHAPTER III

METHODS AND PROCEDURES

I. NORMS AND RESEARCH SETTING

The comparative study of basic concerns between eighth and tenth grade students took place in the City of Longview, Washington. In the spring of 1962 two psychological instruments were administered to students in three Home Room groups from Monticello Junior High School and three Home Room groups from Mark Morris High School. Although approximately ninety students from each grade level took the tests originally, fewer numbers were necessarily used for the study due to some students failing to follow directions or distorting their performance to disallow use. For portions of the study requiring an equal number of eighth and tenth grade students as well as an equal number of eighth and tenth grade students as well as an equal number of boys and girls, the norm group consisted of forty eighth grade girls, forty eighth grade boys, forty tenth grade girls and forty tenth grade boys for the Mooney Problem Check List. The norm group for the Sentence Completion Form was thirty-five for each of the four groups. For areas of study not requiring perfect balance between grade level or

sex, the entire sampling was used minus the few invalidated forms. For reliability studies on the Sentence Completion Form, the norms consisted of seventy-three eighth grade students and seventy-nine tenth grade students. Additional breakdowns will be shown later.

The groups of students from both schools were considered average or typical groups of the grades they represent. Although the schools are across town from each other, there appears to be no apparent differences between the two groups as far as socio-economic backgrounds or intellectual levels.

II. INSTRUMENTS USED IN GATHERING DATA

It was decided to secure the data on adolescent concerns through the use of two instruments. The first instrument was the Mooney Problem Check List, while the second was constructed for the study in which the sentence completion technique was used.

The Mooney Problem Check List. This psychological instrument was designed to measure the concerns or problems of adolescents. It was described in greater detail in Chapter II. The examiner considered the design of the instrument to be well suited for comparing problem areas of one adolescent group with another. The Problem Check List appeared to be well thought of by the critics, and had proved to be a very useful instrument in other surveys.

The Sentence Completion Blank. In constructing the Sentence Completion Blank each sentence was begun with from one to five words followed by two blank lines which allowed the student to complete the thought. The beginning two or three words are called stems. The stems were designed to create a response indicating a feeling or a concern in a particular area. For example the stem "My brother or sister" was designed to give the subject an opportunity to express his feelings about siblings. The stem "A mother" or "My mother" was designed to allow students to indicate feelings or express concerns about relationships with mother. After much consideration, twelve different problem areas were finally developed for exploration. The areas were selected on an a priori basis by the investigator. For this study, it was believed that the twelve areas as follows would give an adequate basis for comparison of the concerns of the two levels of adolescents. The twelve areas of concern were: peer group relationships, mother, siblings, physical development, grades in school, finances, teachers, religion, dating, family, father, and opposite sex. The form used consisted of twenty-four stems or open-ended sentences. The first twelve were designed to allow the subjects to indicate one response for each of the twelve areas, while the second twelve slightly-changed stems were designed to give the students a second opportunity to express a concern in each of the given

problem areas. By using a second set of stems the possibility of greater reliability occurred. In a given area, if a student expressed a concern on only one of the two stems, it was scored as a concern in that particular problem area. However, if a student expressed a concern on both stems of a given problem area, it was still considered as one concern. The intention of the investigator was to give each student two chances to express a concern in each of the twelve areas.

An example of the items included in the Sentence Completion Blank in this study is shown in Appendix A.

III. TEST ADMINISTRATION

Both the Sentence Completion Blank and the Mooney Problem Check List were administered to students in their classrooms by their own Home Room teachers. It was assumed the responses would probably be more honest and the results more meaningful if they were administered as inconspicuously and with as little "fanfare" as possible. The classroom teacher would be able to perform the task more casually than an outsider and the students would be less likely to become apprehensive or defensive. A meeting was held with the appropriate teachers in advance and each was given written instructions to insure standardized administrative procedures.

Sentence Completion Blank. The first instrument administered to the Longview students was the Sentence Completion Blank. It was hoped that the students would respond more freely and honestly if their identity remained anonymous; therefore, the subjects were not asked to write their names on the Sentence Completion Blank. Since the instrument was to be given a second time approximately one month after the first administration, a problem concerning lack of identification was foreseen. Inasmuch as the Incomplete Sentence Blank was a self-made instrument, a test of reliability would be necessary. This reliability study made it necessary to compare each student's responses on the second administration with his responses on the first. For this reason some form of student identification became necessary. The problem was resolved by having the students draw numbers during the administration of the first test. They were asked to write the number on their test blank and to place this number in their billfold or purse for safe keeping. The students were also asked to write the number on the inside cover of their notebooks in the event the number was lost later. When students took the test the second time, each student was asked to refer to his or her number and to write it in the appropriate line on the Sentence Completion Blank.

This procedure accomplished two purposes. First, it

provided the investigator the opportunity to compare the two performances of each student. Second, it assured each pupil anonymity.

The Mooney Problem Check List. Approximately one week after the Sentence Completion Blank had been administered for the first time, the Mooney Problem Check List was given to the same students by the classroom teacher. It proved to be very easy to administer. The students were told the form was simply a list of some of the problems of boys and girls. They were asked to pick out the problems which were troubling them. The instructions indicated the students should read the list slowly, and as they came to a problem which was troubling them, to draw a line under it. For example, if they were often bothered by lack of sleep, they were asked to draw a line under that particular item, like this: 2. Don't get enough sleep.

The investigator showed principals of the two schools involved the value of the Mooney Problems Check List when used by counselors. Purchase of the blanks was then approved by the principals and financed by district funds. For value to counselors and individual pupils, names were necessarily placed on the Check List at the time of administration.

IV. SCORING

The Sentence Completion Blank. Scoring the Sentence

Completion Blank involves a great deal of subjectivity. There are no right or wrong answers since the instrument was designed to reflect the subject's own feelings, concerns, and attitudes. In attempting to determine whether the subject's responses reflected concern or not, the task of scoring of necessity became dependent upon the judgment of the scorer. At this point, the question arose as to whether the judgment of one person could be considered reliable. The assumption could not be legitimately made. In attempting to solve this problem, a board consisting of two judges was selected to examine the responses of each student and to judge whether or not the responses reflected concerns. Each judge made his judgments independent of the other. After the first judge marked the responses which he judged to be concerns, the Sentence Completion Blanks were sent to the second judge; but the markings of the first judge were concealed before the second judge made his evaluations. Mr. Charles Dennis, an instructor at Mark Morris High School with a Master's Degree emphasis in Guidance and Counseling, acted as one judge. The other judge was the investigator of this study, a counselor at Monticello Junior High School in Longview. A third judge was appointed to make judgments on all responses which the first two judges disagreed upon. Acting in this capacity was Mrs. Freda Baughman, counselor at Monticello Junior High School.

Obviously, before the judges could make their evaluations they had to agree on what constituted a concern. Although the choice

by each judge would be somewhat subjective, it was agreed that a concern in most cases would be reflected by a negative response. For example, to the stem "When with students my age" one boy wrote, "I feel relaxed and always have a good time." In the eyes of the judges this was a positive response which did not reflect concern. To the same stem another boy wrote, "I am shy and can't think of much to say." In the last statement one can sense the boy's concern about his relationship with his peers. Although the first part of the statement, "I am shy," was expressed in a positive way, it along with the rest of the comment, "and can't think of much to say," reflects a negative feeling as to the subject's ability to relate well with other students his own age.

For scoring purposes, it was agreed by the judges that any response which reflected strong feeling, anxiety, or uneasiness would be considered a concern. Below are a few examples which are not necessarily intended to be typical comments, but they are sentence completion samplings of students' comments which were scored as concerns by the judges. The responses include concerns of both eighth and tenth grade students in each of the twelve categories. In each area the statement of an eighth grade youngster is listed first. The sentence stems are underlined.

1. Concerns about Peer Group Relationships
 "Students my age are mostly a bunch of queers."
 "Students my age are too much like segregationists.
 Each person has his own group to go with."
2. Concerns about Mother
 "My mother don't seem to understand that I am growing up."
 "My mother works all day and comes home either a nervous wreck or a grouch."
3. Concerns about Siblings
 "A brother and sister always get in your way or start yelling when you are working or doing your homework."
 "A brother and sister are the worst things you can have."
4. Concerns about Physical Development
 "My body is not that of a bathing beauty but that of a barrel."
 "My body is OK but I wish it was shaped different."
5. Concerns about School
 "Grades in school are hard to get even when you work hard."
 "Grades in school worry me a lot. I want to get good grades so my parents will be proud of me."
6. Concerns about Finances
 "Money is hard to get. It's very hard to find jobs at my age and very hard to get money."
 "Allowances are necessary. Kids my age need some money but usually have a rough time getting it."
7. Concerns about Teachers
 "My teachers are crabs."
 "My teachers don't understand me at all."
8. Concerns about Religion
 "A religious life is hard to lead."
 "A religious life I try to lead but I just can't seem to do it."
9. Concerns about Dating
 "Dating is stupid. I hate it."
 "Dating is pretty hard if you don't know how to go about it."

10. Concerns about Family
 "Our family does not get along very well."
"Our family is boring and we never do anything together."
11. Concerns about Dad
 "My dad hates kids most of the time."
"My dad makes me sick."
12. Concerns about Opposite Sex
 "Girls my age act too old." (8th grade boy responding)
 "Boys my age place too much emphasis on sex."
 (10th grade girl responding)

As indicated previously, many of the concerns of students were reflected through an expression of negative feelings. However, in some cases students used both a positive and negative comment in response to a single stem. The judges were therefore confronted with the task of deciding whether the response constituted a concern or not. In the final analysis the decision was left to the discretion of each judge; but the mutual feeling of the judges was that in most cases when a concern was expressed, it should be scored as a concern even though it was accompanied by a positive statement. It was felt by the judges when students began a response with a positive comment followed by a negative one, the initial comment was probably intended as a "cover-up" or a "salve to guilt feelings" which in essence enabled them to more freely express their real thoughts. The negative replies more often than not revealed a concern which the judges felt should be scored as such. This type of reply occurred most often on stems relating to

teachers. Many students started their response by saying something to the effect that teachers are OK but . . . the sentence was ended with some form of criticism. One tenth grade boy expressed it as follows: "Teachers are the best inventions in history except those stupid ones who don't know anything. I can't stand them." Many other students also showed concern in a positive-negative manner, but few showed this same degree of hostility. Below are a few examples of positive-negative comments which the judges scored as concerns.

"My father usually is more than fair but I really hate to work with him because he gets mad and slugs me around."

"Most teachers are fair but right now I hate and I mean hate one certain art teacher."

"My mother is OK most of the time but sometimes I don't know. I don't think I can hack much more."

"Teachers are mostly alright although they all fake me out, really off beat."

"My mother is nice when she wants to be but she gets mad easy."

In using the sentence completion technique for this study it was realized that the instrument tended to measure only the presence or absence of concerns. Since the emphasis of the study centered on the identification of areas of student concerns and on the quantity of total concerns, no attempt was made to measure the intensity of a concern. The instrument was not designed for such use.

The Mooney Problem Check List. Scoring on the Problem Check List was quite objective and proved to be a much simpler task than for the Sentence Completion. The subjects when taking the instrument were asked to underline the problems which were troubling them. Scoring involved counting and recording the problems each student underlined in each of the seven problem areas. The scores in the seven problem areas were added to find the total score or the number of total concerns. Since Mooney did not provide standardized scoring norms for his instrument, raw scores and means were used for the statistical study.

V. STATISTICAL APPROACH

After the Sentence Completion and the Mooney Problem Check List had been scored and tabulated, comparisons were made between the eighth and tenth grade students in each of the areas of concern. Certain similarities and differences began to take shape; but in order for the results to be meaningful it became necessary to see if the differences were significant by checking the statistical significance of difference for both instruments.

It was judged that two other statistical studies were necessary also. One was a test of reliability on the first and second administration of the Sentence Completion Test, while the second was

a reliability study checking judges' decisions on the Sentence Completion Blank.

The study of the Sentence Completion Blank. In order for the results to become meaningful on this self-made instrument, it became necessary to gain some knowledge about the reliability of the instrument. For this reason the Sentence Completion Blank was administered to the same students a second time approximately one month after the first administration.

In compiling data after the scoring was completed, a master sheet was made up in which the concern of each student was recorded in each of the twelve categories for the first and second administrations of the test. A check was then made of the responses of each child (recognized only by number) to determine whether the concern or lack of concern in each area on the second administration was similar to that of the first. Totals were computed in each of the twelve areas of concern to determine the total number of students making similar responses on both tests.

The proportion of students expressing a similar concern or a similar lack of concern and the proportion of students expressing a different response on the second administration of the test was then computed in each category. For example, sixty-eight per cent of the

tenth grade students expressed a similar response on both administrations of the instrument in the area of Peer Group Relationships, while thirty-two per cent or .32 expressed a different response.

The question at this point related to how well the proportion of .68, for example, represented the student population. For the size of the sampling, what is the probability of this difference being due to chance or error rather than students' consistency of concern? Guilford (3:199) answers this question by saying the standard error of a proportion measures this variation and enables one to arrive at conclusions as to the accuracy of the obtained result.

Appendix B shows Guilford's formula for determining the standard error of a proportion and an example of calculations.

Results of the reliability study for the two administrations of the Sentence Blank may be found by referring to Table I for grade ten and Table II for grade eight. Results are discussed in the following chapter. Perhaps it is sufficient to say at this point that the standard error fell within the limits of acceptability and that the instrument appeared to be sufficiently reliable (temporal stability) to continue with the comparative study.

The study of the judges' decisions on the Sentence Completion Blank. In this study a comparison was made of the two judges' decisions on each of the items on the test. All tenth grade students

having taken the Sentence Completion Blank twice were selected as the norm group for this study. Since seventy-nine students took the test both times it was administered, the total number of tests in the sampling was one hundred and fifty-eight. No attempt was made to separate boys and girls.

In attempting to find the standard error for the study, it was first necessary for the investigator to check the judges' markings on each item of the Sentence Completion Blank for each student. In each problem area the total number of times the judges agreed and the total number of times they disagreed were tabulated in different columns labeled agreement and disagreement. From these figures proportions were computed for the areas of agreement and disagreement. For example, in the area of Opposite Sex, the judges were in agreement ninety-six per cent of the time in their decisions relating to student concern or lack of concern. They disagreed on four per cent of the items.

The same procedure for determining reliability was used for this study as for the stability measure previously described. The method suggested by Guilford (3:199) for finding the standard error of a proportion was again followed. The results of interjudge reliability are also discussed in the following chapter.

Determining significance of difference on the Mooney Problem Check List. One of the most time-consuming and challenging aspects of the entire study was the study in which the significance of difference was determined between the results of the eighth and tenth grade students on the Mooney Problem Check List. Since this instrument was divided into seven different problem areas, an attempt was made to determine the significance of difference between the two adolescent age groups in each of the seven areas.

The norm group for the study consisted of eighty eighth grade boys and girls as well as eighty tenth grade boys and girls. The total number participating was one hundred sixty students.

In setting up the problem for statistical comparison, tabulations were made of the number of problems each student underlined in each of the problem areas. The total number of items underlined by each subject was also tabulated. Actually this meant tabulations were made in eight areas rather than seven.

A formula by Guilford (3:214) was used in computing the significance of difference between the two grade levels. This formula is shown in Appendix C. A procedural example of computations for the area of Health and Physical Development is also shown in Appendix C.

Determining significance of difference on the Sentence Completion Blank. The statistical procedure for the Sentence Completion Blank was similar to that of the Mooney Problem Check List except that it was applied to the total test only rather than to each of the problem areas.

Originally the investigator fully intended to compute the significance of difference in each of the twelve areas of concern; but after completing this computation for the area of Peer Group Relationships, it was realized this was attempting to refine the instrument beyond its logical limits. It was not possible to accumulate more than one concern per problem area on the Sentence Completion Blank; whereas the Mooney Problem Check List offered the subject the opportunity to indicate concern as many as thirty times per problem area. Although the Sentence Completion Blank had too few items in each of the problem areas to warrant a minute statistical breakdown, general observations could still be made in each of the areas of concern.

The norm group for this statistical study consisted of seventy eighth grade boys and girls as well as seventy tenth grade boys and girls. In each grade thirty-five of the students were boys and thirty-five were girls. The total number of students participating in the study was one hundred forty.

Since the statistical procedure for determining the significance of difference for the Sentence Completion Blank was identical to that of the Mooney Problem Check List, reference is again made to Appendix C to illustrate procedure.

The results of this study are discussed in the following chapter.

VI. COMPARISONS OF A NON-STATISTICAL NATURE

Sentence Completion Comparisons. It was decided that a study comparing the percentage of concerns only of the students in the eighth grade with those in the tenth grade would be advantageous. Although no attempt was made to check the significance of differences between the two groups, certain observations could be made from such a comparative study.

To accomplish the task, the results of the Sentence Completion Tests were first divided by sex and grade. Total concerns in each of the twelve problem areas were then counted and later converted into percentages. For example, eleven of the forty-four tenth grade boys indicated a concern in the area of finances. Thus, twenty-five per cent of them expressed a concern in this area.

Percentages were computed and comparisons were made by sex as well as grade level for both administrations of the test. Tables

and graphs of these comparisons are shown in the following chapter.

Mooney Problem Check List Comparisons. Although Mooney claimed his instrument did not measure the scope or intensity of student problems in such a way as to yield a score, the assumption was that a student underlining a greater number of problems on the Problem Check List probably showed greater concerns than the student marking few problems if any. It seemed interesting and worthwhile to illustrate how the two groups compared in the quantity of concerns, as well as the particular problem areas appearing to concern the students most.

The appraisal was made by counting the number of eighth and tenth grade students showing five or more concerns for each set of thirty questions per area and converting this number to percentages. No definite reason was used for selecting the number five other than the assumption that students underlining more problems probably had more concerns. The investigator wanted to compare the percentages of the two groups for the students expressing the greater number of concerns. Although the author had learned from a previous study the grade level expressing the greatest number of concerns in each of the problem areas, it was believed this procedure would add perspective and picture the results more graphically. The results of this comparison are illustrated in the following chapter.

CHAPTER IV

RESULTS

Since the statistical studies for this thesis seem to have logically fallen into four general areas, the results of the studies are discussed in each of these categories before attempting to discuss the comparisons of a non-statistical nature or before making a general evaluation.

I. RESULTS OF THE SENTENCE COMPLETION STUDY

The temporal stability study of this instrument involved comparing the responses of each student on the Sentence Completion Blank to determine whether a concern or lack of concern on the second administration of the instrument was similar to that of the first administration in each of the twelve problem areas. The standard error was computed after the proportion of similar responses and the proportion of different responses had been determined.

Table I shows the mean proportion of similar responses and the mean proportion of different responses on the total test as .72 and .28, respectively, for grade ten. The standard error for the

TABLE I

THE DEGREE OF SIMILARITY OF RESPONSES
FOR THE 1ST AND 2ND ADMINISTRATION,
ONE MONTH SEPARATION,
OF THE SENTENCE COMPLETION BLANK FOR GRADE TEN

N = 79

Area of Concern	Similar Response for both Adms.	Different Response on the Adms.	Proportion of Similar Responses	Proportion of Different Responses	Standard Error of a Proportion
Peer Group Rel.	54	25	.68	.32	.052
Mother	54	25	.68	.32	.052
Siblings	57	22	.72	.28	.050
Phy. Development	55	24	.70	.30	.051
Grades in School	48	31	.61	.39	.055
Finances	57	22	.72	.28	.050
Teachers	55	24	.70	.30	.051
Religion	68	11	.86	.14	.039
Dating	64	15	.81	.19	.044
Family	55	24	.70	.30	.051
Father	57	22	.72	.28	.050
Opposite Sex	59	20	.75	.25	.048
Total	683	265			
Mean			.72	.28	.050

total test was .05. The .72 means that seventy-two per cent of the tenth grade students taking the tests responded to items in a similar way during both administrations of the test. A standard error of .05 means if groups of students were to repeatedly take the test without the advantage of test familiarity, the chances are that sixty-eight per cent of the time the range of similarity of responses would not fall above a proportion of .77 nor below .67. Enlarging the confidence limits to .10 or two standard errors away from the mean, the odds are that ninety-five chances out of one hundred the proportion of students indicating similar responses would fall somewhere within the range of .82 to .62.

Table II shows the eighth grade results to be quite similar to those of grade ten, although the eighth grade mean standard error of .052 was slightly higher. The Opposite Sex area with a standard error of .058 seemed to possess somewhat less stability than the other areas, making judgments in that area somewhat more questionable than in areas with smaller standard errors. In general, the Sentence Completion Blank at both grade levels appeared sufficiently reliable to be considered an acceptable instrument for a comparative study.

II. THE RESULTS OF SENTENCE COMPLETION JUDGMENTS

This (scorer equivalence) study consisted of a comparison of the two judges' decisions of student responses on the Sentence

TABLE II

THE DEGREE OF SIMILARITY OF RESPONSES
FOR THE 1ST AND 2ND ADMINISTRATION,
ONE MONTH SEPARATION,
OF THE SENTENCE COMPLETION BLANK FOR GRADE EIGHT

N = 73

Area of Concern	Similar Response for both Adms.	Different Response on two Adms.	Proportion of Similar Responses	Proportion of Different Responses	Standard Error of a Proportion
Peer Group Rel.	55	18	.75	.25	.050
Mother	52	21	.71	.29	.053
Siblings	45	28	.62	.38	.056
Phy. Development	48	25	.66	.34	.055
Grades in School	46	27	.63	.37	.056
Finances	57	16	.78	.22	.048
Teachers	51	22	.70	.30	.053
Religion	65	8	.89	.11	.036
Dating	58	15	.79	.21	.047
Family	57	16	.78	.22	.048
Father	60	13	.82	.18	.044
Opposite Sex	41	33	.56	.44	.058
Total	635	242			
Mean			.725	.275	.052

Completion Blank. In each of the twelve divisions of the instrument, proportions were computed for areas of agreement and disagreement. The standard error of a proportion was then computed.

Table III shows the proportion of similar and dissimilar judgments between the judges for the two administrations of this instrument. The results revealed a mean proportion agreement on the total test of .974 with a mean proportion of disagreement of .026. Because of the high agreement proportion, the standard error of .013 was extremely low. At first glance the results appear to be questionable because of the high agreement between the two judges. However, one must bear in mind most of the student responses were of a positive nature reflecting no particular concern. The mean proportion of .974 indicates the judges had a high degree of agreement in judging whether the responses did or did not reflect concern on the part of the subject.

When one realizes the positive nature of so many responses, it is not difficult to understand why rater agreement was as high as it was. For example, one boy completed the stem, "My mother," by writing, "is nice." This kind of response was typical of many students as they completed the Incomplete Sentence Blank. On such responses it is not difficult to see why both judges were in agreement in indicating such responses did not reflect concern. In fact, in the majority of cases the sentence stems were completed with a positive note which in general

TABLE III

THE PROPORTION OF SIMILAR AND DISSIMILAR JUDGMENTS
 BETWEEN THE TWO JUDGES FOR BOTH ADMINISTRATIONS
 OF THE SENTENCE COMPLETION BLANK
 FOR TENTH GRADE STUDENTS

N = 158 *

Areas of Concern	Judges Agree	Judges Disagree	Proportion Agreement	Proportion Disagreement	Standard Error
Peer Group, Rel.	154	4	.97	.03	.013
Mother	156	2	.99	.01	.008
Siblings	156	2	.99	.01	.008
Phy. Development	151	7	.96	.04	.018
Grades in School	154	4	.97	.03	.013
Finances	154	4	.97	.03	.013
Teachers	154	4	.97	.03	.013
Religion	157	1	.99	.01	.008
Dating	154	4	.97	.03	.013
Family	153	5	.97	.03	.013
Father	154	4	.97	.03	.013
Opposite Sex	151	7	.96	.04	.018
Total	1848	48			
Mean			.974	.026	.012

* 79 tenth grade students took the Completion Blank twice,
 making a total of 158

apparently revealed little or no anxiety. In only two of the twelve areas did more than fifty per cent of the students indicate concerns.

Negative responses on the part of the subject allowed more room for disagreement between the judges; but even here many of the judgments were so obvious the raters had no difficulty in agreeing. For example, one student wrote, "Most mothers don't understand us. They are squares and are always made at you." The same boy completed another stem by saying, "My mother isn't too helpful for me. She always goes out drinking and is sick for about 3 or 4 days." The boy's responses very clearly reflected his concerns about his mother. The illustration suggests why judges had no difficulty in agreeing in their independently made judgments.

The positive nature of the majority of sentence completions in addition to the high percentage of obvious responses seem to account for the unusually high proportion of judgmental agreement.

III. DIFFERENCES BETWEEN 8th and 10th GRADERS ON THE MOONEY PROBLEM CHECK LIST

This interesting but complex portion of the study was one in which the significance of difference was determined between the eighth and tenth grade students. A comparative analysis of the differences or similarities between the two adolescent age groups was made possible in this study by computing the significance of difference in each of the

seven problem areas of the Problem Check List. Similar computations were made on the total test also.

Table IV presents a comparison of concerns of eighth and tenth grade students as shown on the Mooney Problem Check List. The results show that Health and Physical Development was the only area in which the concerns of eighth and tenth grade students were significantly different. It was interesting to note that the eighth grade students showed more concerns than the tenth graders in every division, yet the difference was significant only in the one area. The younger students averaged five more concerns per person, but the difference again was not large enough to prove significant. Both groups appeared to be more concerned with things relating to school. This, as we'll see later, was also true of the Sentence Completion Test. The Problem Check List revealed the Self-Centered Concerns as second high, with Money-Work-Future in third place. Although a greater difference existed between the two groups in Health and Physical Development, it was interesting to note there were less concerns expressed in this area than in nearly any other. Health and Physical Development along with Boy-Girl Relations were lowest in the number of problems underlined.

IV. RESULTS OF SENTENCE COMPLETION SIGNIFICANCE OF DIFFERENCE STUDY

The study for determining the statistical significance of

TABLE IV
 A COMPARISON OF CONCERNS
 OF 8TH AND 10TH GRADE STUDENTS
 AS REVEALED BY THE MOONEY PROBLEM CHECK LIST

N = 160

	8th Grade Mean	10th Grade Mean	Diff. of Mean	SE of Mean Diff.	Sign. of Diff.	Level of Confidence
Health & Phy. Dev.	3.925	2.600	1.320	.432	3.07	Significant**
School	6.812	6.087	.725	.697	1.04	Not Sign.
Home & Family	4.125	3.663	.462	.736	.63	Not Sign.
Money-Work- Future	4.838	4.000	.838	.620	1.03	Not Sign.
Boy-Girl Relations	3.525	3.200	.325	.568	.57	Not Sign.
People in General	4.662	3.662	1.000	.705	1.42	Not Sign.
Self-Centered Con.	5.412	4.512	.900	.739	1.22	Not Sign.
TOTAL	33.35	27.72	5.63	3.58	1.57	Not Sign.

** One per cent level of confidence

difference between the two age groups on the Sentence Completion Blank was similar to that of the Mooney Problem Check List except that computations were made on the entire test only. Table V presents a comparison of concerns of eighth and tenth grade students as shown by the Sentence Completion Blank.

The norm group for this study consisted of seventy eighth and tenth grade girls as well as seventy boys from the two grade levels, making a total of one hundred and forty individuals. The five per cent level of confidence for one hundred thirty-eight degrees of freedom (140 minus 2) is 1.976 (3:610). Since the significance of difference of 1.91 in this study was less than the figure just stated, the differences in concern between eighth and tenth grade students were not significant.

The significance of difference in the area of Peer Group Relationships was computed on a trial basis and turned out to be 1.6, which is not significant. Computations in the other eleven areas were not completed after it was learned that efforts to do so were probably attempts to refine the instrument beyond its logical limits.

In general, the results of the statistical study on the Sentence Completion technique were similar to the Mooney results in that both revealed little or no significant differences between the two groups.

The statistical approach supported the major hypothesis

TABLE V
 A COMPARISON OF CONCERNS
 OF 8TH AND 10TH GRADE STUDENTS
 AS REVEALED BY THE SENTENCE COMPLETION BLANK

10th Grade Mean	8th Grade Mean	Diff. of Mean	SE of Mean Diff.	Sign. of Diff.	Level of Confidence
4.714	3.814	/900	.472	1.91	Not Significant

N = 70 10th grade students
 70 8th grade students

of this study. There is no significant difference in concerns between eighth and tenth grade students except in Physical Development and Health as measured by the Mooney Problems Check List and no significant differences in concerns expressed on the Sentence Completion Blank.

V. RESULTS OF COMPARISONS OF A NON-STATISTICAL NATURE

Comparisons on the Sentence Completion Blank. Table VI shows a comparison between the eighth and tenth grade students on the first and second administration of the Sentence Completion Blank. The table shows the percentage of students expressing a concern in each of the twelve problem areas and also the actual number of students expressing a concern. The students are not separated by sex. The table gives the observer an opportunity not only to compare the two groups but also to compare variations of responses between the first and second administrations.

Table VII consists of a similar comparison except the results are divided by sex in each grade level. Totals for the entire grade level are not given. The table provides opportunity to compare the groups by sex and grade level as well as test administration.

Tables VIII and IX are bar graphs picturing the results of the study in perhaps a more meaningful way. Comparisons of the two

TABLE VI

A COMPARISON OF AREAS OF CONCERN BETWEEN EIGHTH AND TENTH GRADE STUDENTS ON THE FIRST AND SECOND ADMINISTRATION OF THE SENTENCE COMPLETION BLANK

AREA OF CONCERN	First Administration of Instrument		Second Administration of Instrument	
	8th Grade	10th Grade	8th Grade	10th Grade
	N = 73	N = 79	N = 73	N = 79
Peer Group Rel.	34%	38%	34%	29%
	25	30	25	23
Mother	34%	52%	33%	25%
	25	41	24	20
Siblings	52%	58%	49%	44%
	38	46	36	35
Phy. Development	37%	43%	36%	27%
	27	34	26	21
Grades in School	40%	56%	41%	57%
	29	44	30	45
Finances	21%	29%	23%	23%
	15	23	17	18
Teachers	55%	53%	58%	54%
	40	42	42	43
Religion	14%	9%	11%	5%
	10	7	8	4
Dating	8%	22%	15%	16%
	6	17	11	13
Family	23%	34%	12%	34%
	17	27	9	27
Father	19%	34%	20%	42%
	14	27	15	33
Opposite Sex	29%	48%	51%	40%
	21	38	37	31

The top number in each case indicates the percentage of students expressing a concern in each problem area. The lower number indicates the number of students expressing a concern in each area.

TABLE VII

A COMPARISON OF AREAS OF CONCERN BETWEEN EIGHTH AND TENTH GRADE STUDENTS BY SEX FOR THE FIRST AND SECOND ADMINISTRATION OF THE SENTENCE COMPLETION BLANK

AREA OF CONCERN	First Administration				Second Administration			
	BOYS		GIRLS		BOYS		GIRLS	
	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
	8	10	8	10	8	10	8	10
	N = 38	N = 44	N = 35	N = 35	N = 38	N = 44	N = 35	N = 35
Peers	39%	27%	29%	51%	34%	37%	34%	37%
	15	12	10	18	13	10	12	13
Mother	42%	48%	26%	57%	39%	34%	26%	14%
	16	21	9	20	15	15	9	5
Siblings	61%	55%	43%	63%	50%	43%	46%	46%
	23	24	15	22	19	19	17	16
Phy. Dev.	39%	34%	34%	54%	45%	27%	26%	26%
	15	15	12	19	17	12	9	9
Grades	47%	55%	31%	57%	42%	55%	40%	60%
	18	24	11	20	16	24	14	21
Finances	26%	25%	14%	34%	24%	18%	23%	29%
	10	11	5	12	9	8	8	10
Teachers	61%	52%	46%	54%	61%	50%	54%	60%
	23	23	17	19	23	22	19	21
Religion	16%	7%	11%	9%	13%	7%	9%	3%
	6	3	4	3	5	3	3	1
Dating	8%	16%	9%	29%	16%	14%	14%	20%
	3	7	3	10	6	6	5	7
Family	18%	34%	29%	34%	11%	34%	14%	34%
	7	15	10	12	4	15	5	12
Father	21%	34%	17%	34%	24%	41%	17%	43%
	8	15	6	12	9	18	6	15
Opp. Sex	29%	30%	29%	71%	37%	25%	66%	57%
	11	13	10	25	14	11	23	20

The top numbers indicate the percentage of students expressing a concern in each problem area. The lower numbers indicate the number of students expressing a concern in each problem area.

TABLE VIII

A COMPARISON OF AREAS OF CONCERN
BETWEEN 8TH AND 10TH GRADE STUDENTS ON THE
FIRST ADMINISTRATION OF THE SENTENCE COMPLETION BLANK

AREAS OF CONCERN	10%	20%	30%	40%	50%	60%
Peers	8th grade					34%
	10th grade					38%
Mother	8th grade					34%
	10th grade					52%
Siblings	8th grade					52%
	10th grade					58%
Phy. Dev.	8th grade					37%
	10th grade					43%
Grades	8th grade					40%
	10th grade					56%
Finances	8th grade					21%
	10th grade					29%
Teachers	8th grade					55%
	10th grade					53%
Religion	8th					9%
	10					5%

TABLE VIII (Continued)

AREAS OF CONCERN		10%	20%	30%	40%	50%	60%
Dating	8th						8%
	10th grade						22%
Family	8th grade						23%
	10th grade						34%
Father	8th grade						19%
	10th grade						34%
Opposite Sex	8th grade						29%
	10th grade						48%

TABLE IX

A COMPARISON OF AREAS OF CONCERN
BETWEEN 8TH AND 10TH GRADE STUDENTS ON THE
SECOND ADMINISTRATION OF THE SENTENCE COMPLETION BLANK

AREAS OF CONCERN	10%	20%	30%	40%	50%	60%
Peers	8th grade					34%
	10th grade					29%
Mother	8th grade					33%
	10th grade					25%
Siblings	8th grade					49%
	10th grade					44%
Phy. Dev.	8th grade					36%
	10th grade					27%
Grades	8th grade					41%
	10th grade					57%
Finances	8th grade					23%
	10th grade					23%
Teachers	8th grade					58%
	10th grade					54%
Religion	8th					11%
	10					5%

TABLE IX (Continued)

AREAS OF CONCERN	10%	20%	30%	40%	50%	60%
Dating						
8th grade						15%
10th grade						16%
Family						
8th grade						12%
10th grade						34%
Father						
8th grade						20%
10th grade						42%
Opposite Sex						
8th grade						51%
10th grade						40%

groups are shown for both the first and the second administration of the instrument.

High percentages in the areas of Grades and Teachers indicate students of both levels place their school life as a point of central concern. Concerns about siblings were also expressed more often than most areas, including Mother, Father, and Family.

Both eighth and tenth graders showed little negative concern about Religion and Dating. Nearly all responses in these areas were positive in nature such as "Religion is good for us" or "Dating is fun." A number of eighth grade students (particularly boys) simply stated they weren't old enough to date yet.

Tables VI through IX are presented more for implications for future research than for meaningful results concerning the present study. They allow inspection of data that suggest either lengthening the number of sentence prefixes per area or pooling areas of concern from first, second, third, or more administrations which would allow statistical checks of significance to substantiate the relative lack of difference between age groups shown from results of the Mooney Problem Check List. Table VII suggests that analysis by sex groups might show differences to exist that have not appeared when analyzing the pooled data. Such an approach is not used in this study since the actual numbers on which percentages are based are so small in many

categories as to doubt the representative nature of the sample of students in the school district. The size of the sample is appropriate to distinguish only the totals planned for testing the original hypotheses.

Comparisons on the Mooney Problem Check List. The bar graph in Table X illustrates the percentage of eighth and tenth grade students showing five or more concerns for each set of thirty items per problem area on the Mooney Problem Check List.

Although the results are quite self-explanatory, it is interesting to note the subjects' greatest concerns related to school. It was previously shown that the two groups were significantly different only in Health and Physical Development. To tenth grade students this appears to be their area of least concern.

The bar graph illustrates what was shown statistically earlier--no significant differences in concerns between eighth and tenth grade students except in Health and Physical Development.

VI. SUMMARY OF RESULTS

Earlier in this thesis it was hypothesized there were no significant differences in the concerns of eighth and tenth grade students. This study supported the hypothesis by revealing there were no significant differences between the two groups except in one area.

TABLE X

PERCENTAGE OF 8th AND 10th GRADE STUDENTS
SHOWING 5 OR MORE CONCERNS FOR EACH SET OF 30 QUESTIONS
PER PROBLEM AREA ON THE MOONEY PROBLEM CHECK LIST

PROBLEM AREAS	10%	20%	30%	40%	50%	60%	70%	
Health & Phy. Dev.	8th grade							35% **
	10th grade							17%
School	8th grade							65%
	10th grade							61%
Home & Family	8th grade							38%
	10th grade							26%
Money-Work-Future	8th grade							41%
	10th grade							28%
Boy-Girl Relations	8th grade							32%
	10th grade							22%
People in General	8th grade							41%
	10th grade							31%
Self-Cent. Concerns	8th grade							48%
	10th grade							38%

N = 85 eighth grade and 88 tenth grade students.

** It was previously shown, using the total sample, that eighth and tenth grade groups were significantly different only in the area of Health & Physical Development.

A secondary hypothesis to the effect that eighth grade students are more concerned about their health and physical development than tenth graders was also supported by the statistical study on the Mooney Problem Check List.

A third hypothesis states that tenth grade students express greater concern about school. The study refuted this hypothesis. Differences between eighth and tenth grade pupils in their concerns about school did not prove to be statistically significant.

CHAPTER V

IMPLICATIONS

Common problems and concerns. The results of the various studies in this thesis verify the author's basic hypothesis that students in early adolescence appear to have similar concerns to students in mid-adolescence. There are considerably more areas in which they are similar than areas in which they are significantly different.

Many teachers and parents have made statements to the effect that tenth grade students are "so different" from eighth grade students in their attitudes, concerns, and anxieties. This study implies that differences in teacher or parent attitudes toward students at different levels are probably differences which are superimposed upon the students rather than real differences in the students themselves. The adults sharing the philosophy that adolescents at various levels are significantly different in their concerns, think of the students as very different and as a result probably respond to them differently.

It is the contention of this writer that students in both early and mid-adolescence have much in common. Certainly they have their

individual differences; but as groups they are very similar in their concerns, anxieties, attitudes, pleasures, and problems. In working with these young people in an effort to be of help to them, the counselor, teacher, or parent need not feel he must file away certain tools and techniques to be used only for a certain adolescent age level with the idea that other techniques are applicable only to other specific levels. The overlap of common problems and concerns is tremendous for all of adolescence.

All adolescents are growing, developing, and shaping their philosophies of life. The study showed a majority of positive responses when students were given the opportunity to express themselves about problem areas. In spite of the turmoils and problems purportedly typical of these age groups, the writer is supported by this study in his feeling that most students face life optimistically and appear to be relatively happy. The students of both early and mid-adolescence appear to share many common positive feelings as well as negative concerns.

Although most young people face life quite realistically and yet optimistically, they all have varying degrees of apprehensions and concerns. Many concerns of youth appear to be relatively insignificant to adults, but they are real to the students themselves. A person seeking to help will be more readily accepted if the concerns are treated

with respect. To alleviate some of their concerns students need to understand their development, and to take pride in their growth in stature, skills, knowledge, and human relations. To be in a position to be of service to our young people, the author believes a so-called "kit of tools and techniques" for each stage of adolescence is not the answer. Instead, it is contended that adults need to exercise basic understanding, patience, and educated common sense in leading children through this difficult stage of life. Parents and teachers should attempt to provide conditions in which students can develop their capacities. They also should attempt to provide opportunities for adolescents to become responsible, socially successful, contributing potential citizens of our modern democracy. Setting consistently good examples of attitude and conduct; accentuating good rather than bad behavior; and helping students to recognize a purpose and power greater than themselves are other suggestions for helping youth. Perhaps even more important is that of providing a stable, happy environment where the adolescent can feel accepted. He needs direction and yet frequently this guidance must be delicately passive rather than forcefully active.

Counseling implications. For the writer in his role as a counselor, the study took on additional implications. Concerns of one form or another seem to be a product of the environment in which we live, and all adolescents as well as adults seem to share in them.

Some concerns are modal in nature while others definitely are not. The study of the two administrations of the Sentence Completion Blank showed the majority of concerns in this study were not the result of moods. Concerns not modal in nature tend to be more genuine and lasting. These genuine concerns and anxieties reflect an unsettled state of mind which may be helped by proper guidance and counseling.

Concerns about school. One further implication relates to the fact that students of both grade levels in this comparative study expressed more concerns on items about school than any of the other areas. Both the Mooney and the Sentence Completion Blank revealed this trend. The author's first reaction to this discovery was that it was possibly true because the students were probably less guarded in their responses in this area. As more thought was given to the matter, other thoughts came into focus. The author feels school is a genuine concern to the majority of our young people largely because of the ever-increasing importance which our society is placing upon education. For most children, school is a key item of conversation from the earliest recollection through adolescence. The importance of grades, talk about college, discussion of vocational choices, and emphasis upon making the most of one's educational opportunities, are topics which young people are constantly hearing. As children increase in grade level the pressure for excellence mounts. They hear about

automation and the increase of unemployment. Somehow they sense the idea that in order to be successful in life they should go to college; yet they hear talk about colleges raising requirements and future crowded conditions which will force them to refuse many admissions. Many students sense they are not college material but feel their parents pushing them in that direction. Students with less ability feel the frustrations of not being able to keep up, in addition to parental disappointments over the child's failures. Many conscientious students who are doing their best are being pushed by environmental pressures to do even better. Through the adolescent stages, competition is keen and pressure mounts as students approach graduation with its many implications for momentous decisions. Far too many drop out of school during adolescence because the pressures and demands prove to be too much for them. Is it any wonder students feel that school is their key concern? It is the focal point of their lives throughout adolescence for they are led to believe their future is largely dependent upon their response to their educational opportunities.

Since society places such a high premium on education, the pressure is bound to take its toll in terms of frustrations, anxieties, fears, and concerns. Emotional problems, drop-outs, and disturbed youngsters are often the result. The schools are implicated and must do what they can to satisfy students' needs. It is the author's conviction

that public education can best answer this dilemma through greater emphasis in the two following areas: First, greater emphasis need be made to fit the curriculum to the needs of the student; and second, greater emphasis need be placed on helping students resolve their anxieties and concerns through adequate guidance and counseling programs. This study has suggested that concerns are consistent; they do not, for example, appear at the eighth grade level and disappear at the tenth simply by passage of time.

Implications for further research. This study concerned itself with the areas of student concern and the quantity of concerns in the different areas. However, there appears to be a need for further study in determining the intensity of student anxieties and concerns. Perhaps a research using more sensitive instruments on the twelve areas within the Sentence Completion Blank would yield meaningful results in detecting intensity of concerns.

On the Mooney Problem Check List it would be possible to measure intensity by asking the students to go over the problems on the instrument twice. After the students had taken the instrument once and had underlined the problems which were troubling them, they could be instructed to read the items they had underlined and check the problems which were of greater concern to them.

Additional researches which would extend the findings of this

thesis would also be desirable. Differences in concerns between eighth and tenth grade students were not apparent in this study.

Would differences of concern be found between seventh and eleventh or seventh and twelfth grade students? A longitudinal study involving students in each of the grades from seventh through the fourteenth would be meaningful and worthwhile.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The problem. The purpose of this study was to compare the basic concerns of a group of early adolescent students with those of a mid-adolescent group. The author had heard teachers remark that adolescents at one particular grade level were "so different" from those of a different grade level. Through this study an attempt was made to check the authenticity of the statement by comparing the concerns between eighth and tenth grade students. It was known there were individual differences between students at any given age; but the problem in this study was concerned with how the eighth grade group as a whole was similar or significantly different from a group of tenth grade students in the area of concerns and anxieties.

It was hypothesized there were no significant differences in the concerns of the eighth and tenth grade students. Two secondary hypotheses were also considered. First, eighth grade students are more concerned about their physical development than the tenth graders. Second, tenth grade students express greater concern about school.

Approach to the problem. The Mooney Problem Check List and the Sentence Completion Blank were selected as the instruments for comparing the two groups. The Sentence Completion Blank consisting of twenty-four stems covering twelve basic areas of concern was given twice to approximately 160 eighth and tenth grade students (80 per grade). The Mooney Problem Check List consisting of seven problem areas was given once to the same students.

Statistical comparisons were made between the two grade levels in each of the areas of concern. The significance of difference was determined for the total test and for each of the problem areas on the Mooney Problem Check List. The significance of difference between eighth and tenth grade students was also computed on the total results of the Sentence Completion Blank.

Conclusions. The studies supported the major hypothesis of this thesis which stated there are no significant differences between the concerns of eighth and tenth grade students. The concerns, except health and physical development, were not statistically significantly different when assessed by the Mooney Problems Check List and the Sentence Completion Blank.

A secondary hypothesis to the effect the eighth grade students are more concerned about their health and physical development was also supported by the statistical studies on the Mooney Problem Check

List. Of the seven problem areas on this instrument, Health and Physical Development was the only one on which the groups proved to be significantly different.

A third hypothesis relating to tenth grade students expressing greater concerns about school than the eighth grade students was refuted since the study revealed the two groups were not significantly different.

The nature of this study of necessity was somewhat limited in scope and needs to be verified by further studies and investigation. Since differences in concerns between eighth and tenth grade students were not apparent in this study, further studies are needed to determine whether differences in concern could be found between seventh and eleventh or perhaps between seventh and twelfth grade students. A longitudinal study involving students in each of the grade levels from seventh through fourteenth should prove to be extremely interesting and worthwhile.

Since this study was largely concerned with a comparison of areas of concerns between the two adolescent age groups, further study is also needed to determine the intensity of student anxieties and concerns. Further elaboration on this point was made in Chapter V.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Anderson, Harold H., and Gladys L. Anderson. An Introduction to Projective Techniques. New York: Prentice Hall, Inc., 1951.
2. Bell, John Elderkin. Projective Techniques. New York: Longmans, Green and Company, 1948.
3. Guilford, J. P. Fundamental Statistics in Psychology and Education. Second Edition. New York: McGraw-Hill Book Company, Inc., 1950.
4. Holzberg, J. D., A. Teicher, and J. L. Taylor. "Contributions of Clinical Psychology to Military Neuropsychiatry in an Army Psychiatric Hospital," Journal of Clinical Psychology, 3:84-95, January, 1947.
5. Hutt, M. L. "The Use of Projective Methods of Personality Measurement in Army Medical Installations," Journal of Clinical Psychology, 1:134-140, April, 1945.
6. Krugman, Morris. "Critique of the Mooney Problem Check List," in The Fourth Mental Measurement Yearbook by Oscar Buros. New Jersey: The Gryphon Press, 1953, 73:133.
7. Lorge, I., and E. L. Thorndike. "The Value of the Responses in a Completion Test as Indications of Personal Traits," Journal of Applied Psychology, 25:191-199, April, 1941.
8. McIntyre, Charles J. "The Validity of the Mooney Problem Check List," Journal of Applied Psychology, 37: 270-272, August, 1953.
9. Mooney, Ross L., and Leonard V. Gordon. The Mooney Problem Check List, Manual. New York: The Psychological Corporation, 1948.
10. Rabin, Albert I., and Mary R. Haworth. Projective Techniques. New York: Grune & Stratton, 1960.

11. Rohde, A. R. "Explorations in Personality by the Sentence Completion Method," Journal of Applied Psychology, 30:169-181, April, 1946.
12. Rotter, J. B., and B. Willerman. "The Incomplete Sentences Test as a Method of Studying Personality," Journal of Consulting Psychology, 11:43-48, January-February, 1947.
13. Strang, Ruth. The Adolescent Views Himself. New York: McGraw-Hill Book Company, 1957.
14. Tendler, A. D. "A Preliminary Report on a Test for Emotional Insight," Journal of Applied Psychology, 14:122-136, April, 1930.

APPENDIX A

SENTENCE COMPLETION BLANK

1. Students my age _____
2. Most mothers _____
3. A brother and sister _____
4. My physical development _____
5. Grades in school _____
6. Allowances _____
7. Teachers _____
8. God _____
9. Dating _____
10. My family _____
11. My father usually _____
12. (Girls answer here) Most boys _____
(Boys answer here) Most girls _____
13. When with students my age _____
14. My mother _____
15. My brother or sister _____
16. My body _____
17. My school work _____
18. Money _____

19. My teachers _____
20. A religious life _____
21. On a date _____
22. Our family _____
23. My dad _____
24. (Girls answer here) Boys my age _____
- (Boys answer here) Girls my age _____

Note: On the actual blank used by the subjects, two lines per number were allowed for sentence completion. A place for school, date, sex, and number was also provided at the top of the form.

APPENDIX B

APPENDIX B

GUILFORD'S FORMULA (3:199) FOR DETERMINING THE STANDARD ERROR OF A PROPORTION AND AN EXAMPLE OF CALCULATIONS

$$0_p = \frac{pq}{N} = \sqrt{\frac{(.68)(.32)}{79}} = \sqrt{\frac{.2176}{79}} = \sqrt{.002754} = .052$$

standard
error
of a
proportion

APPENDIX C

APPENDIX C

COMPUTATIONS FOR DETERMINING SIGNIFICANCE OF DIFFERENCE BETWEEN EIGHTH AND TENTH GRADE STUDENTS IN HEALTH AND PHYSICAL DEVELOPMENT FOR THE MOONEY PROBLEM CHECK LIST

GRADE EIGHT COMPUTATIONS

$$\text{Guilford's formula (3:105)} \quad \sigma = \sqrt{\frac{\sum X^2}{N} - M^2} = \sqrt{\frac{2000}{80} - 3.925^2}$$

$$= \sqrt{25 - 15.40} = \sqrt{9.6} = 3.09 \text{ standard deviation for grade 8}$$

$$\text{Guilford's formula (3:184)} \quad \sigma_M = \frac{\sigma}{\sqrt{N-1}} = \frac{3.09}{\sqrt{79}} = \frac{3.09}{8.89} =$$

$$= .348 \text{ standard error of the mean for grade 8}$$

GRADE TEN COMPUTATIONS

$$\sigma = \sqrt{\frac{\sum X^2}{N} - M^2} = \sqrt{\frac{958}{80} - 2.6^2} = \sqrt{11.98 - 6.76} = \sqrt{5.22}$$

$$= 2.28 \text{ standard deviation grade 10}$$

$$\sigma_M = \frac{\sigma}{\sqrt{N-1}} = \frac{2.28}{\sqrt{79}} = \frac{2.28}{8.89} = .256 \text{ standard error of the mean grade 10}$$

COMPOSITE COMPUTATIONS

Guilford's formula (3:213) $\sigma_{md} = \sqrt{\sigma^2_{M1} - \sigma^2_{M2}}$

$$= \sqrt{.348^2 + .256^2} = \sqrt{.121104 + .065536} = \sqrt{.186640}$$

= .432 standard error of a difference between uncorrelated means.

Guilford's formula (3:214) $t = \frac{M_1 - M_2}{\sigma_{md}} = \frac{3.925 - 2.6}{.432}$

$$= \frac{1.325}{.432} = 3.07 \text{ significance of difference}$$

Level of Confidence for 158 degrees of freedom
Guilford (3:610)

At the five per cent level of confidence. 1.976

At the one per cent level of confidence. 2.607