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A Comparison of the
Degree of Adjustment
of Catholic Students
in Catholic Schools
and Catholic Students
in Non-Catholic
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THE UNIVERSITY OF DETROIT

A COMPARISON OF THE DEGREE OF ADJUSTMENT OF
CATHOLIC STUDENTS IN CATHOLIC SCHOOLS AND
CATHOLIC STUDENTS IN NON-CATHOLIC SCHOOLS

A THESIS
SUBMITTED TO THE GRADUATE FACULTY
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

DEPARTMENT OF PSYCHOLOGY

BY

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CHAPTER I
INTRODUCTION

It is a well known fact in psychology and education that the period of adolescence is frequently one of much strife and difficulty which manifests itself in personality maladjustment. Among the many possible sources of adjustment problems is one of special importance to the Catholic educator: religion. The manner in which religion might be the occasion of maladjustment to the adolescent has been indicated by Hurlock:

Heightened emotionality, which is characteristic of early adolescence, is intensified by an awakening interest in religion. . . . Even though orthodox religious explanations are accepted by the adolescent at confirmation, the growth of his ability to reason, the increase of his knowledge from advanced study, and discussion with members of other faiths may gradually give rise to doubt about his own beliefs. Should he feel he is no longer able to accept his former beliefs, which he feels honor bound to continue to accept, painful emotional conflicts result. . . . Feelings of guilt, which accompany his emotional tension, are intensified by reproofs from adults who regard doubts about religion as a sin. When the adolescent is made to feel wicked because of his doubts, he becomes gloomy, morbid, and cynical. In time he feels disillusioned, let down and resentful. . . . The emotional stress may even reach the point where the adolescent thinks of suicide.

The severity of emotional tensions may be relieved by preliminary preparation. . . .¹

1. E. B. Hurlock, Adolescent Development, New York: McGraw-Hill, 1949, pp. 252-53.

It seems logical to assume that some of the "preliminary preparation" to which Hurlock has reference may be found in the study of religion made by the students in Catholic schools. If her postulate is correct, the children attending these schools should be better equipped to cope with the problem of maladjustment arising out of religious interests or questions. The value of religion and religious training for adjustment is pointed out by Sadler when he says:

Religion helps to unify the contradictory elements in our personalities and so to lessen our mental and spiritual conflicts that we are better able to meet the day-by-day demands of living without experiencing emotional upheavals. It strengthens the will and stimulates discussion and harmonizes experience and feeling. . . .²

It seems then that religion can have a dual influence; it can be the source of tension-producing conflicts, or it can help the adolescent toward better adjustment.

While the literature of psychology contains studies of the various aspects of religious training and its influence on the adolescent, the studies have not been systematic or too conclusive.³ Very little material is available on studies that have been made exclusively with Catholic children in an effort to secure data relative to their personality adjustment. The present author hopes to contribute some evidence relative to differences between

2. W. S. Sadler, A Doctor Talks to Teen-Agers, St. Louis: Mosby, 1948, p. 356.

3. Cf. A. T. Jersild, Child Psychology, New York: Prentice-Hall, 1946, p. 419.

personality adjustment of Catholic high school students in Catholic schools and Catholic students in public high schools.

The specific purpose of the present investigation is to determine if there exist differences between the personality adjustment of Catholic children presently attending Catholic high schools and Catholic children now in public high schools as shown by the Heston Personality Adjustment Inventory. This problem is of general interest to Catholic educators and psychologists; but it has special reason for consideration in this particular area (Detroit, Michigan) in view of the present difficulty of placing all of the Catholic high school students in Catholic schools. The implications of the problem are obvious. If we find that there are significant differences between the degrees of adjustment of the two groups in favor of the Catholic children in Catholic schools it will indicate the necessity of providing adequate facilities for the religious training of those Catholic children who are attending public schools. If we find that Catholic children who are attending public schools are better adjusted than those in Catholic schools we shall have grounds for investigating the programs of the Catholic schools in an effort to determine the reason or reasons for the deficiency in personality adjustment. If no significant differences are found in this investigation we shall know that, at least in so far as personality adjustment is concerned, the present arrangement of weekly religious instruction is adequate. The author further hopes that a study of this kind may contribute to the

general knowledge of the role of formal religious training in the personality adjustment of adolescents. Since the curricula of both groups are basically the same, it is conceivable that if any differences in adjustment are found they may be attributable to the religious training superimposed upon the general academic work of the children who are attending Catholic schools, as well as to the over-all religious environment of these schools. The problem will be pursued in terms of the following hypotheses:

- 1) Catholic students attending Catholic high schools are generally better adjusted than Catholic students attending public high schools.
- 2) Catholic students attending public high schools are generally better adjusted than Catholic students attending Catholic high schools.
- 3) Catholic students attending Catholic high schools are better adjusted in some areas, while Catholic students attending public schools are better adjusted in other areas.
- 4) There is no significant difference between the adjustment of Catholic students in Catholic high schools and Catholic students attending public high schools.

Definitions

All of the children included in this study are Catholic. This term does not have any reference to their actual religious practices or the lack thereof. It means simply that they have been baptized into the Catholic Faith.

The major difference between the two groups being studied is the degree of formal religious education to which

the subjects constituting each group have been exposed. The term "formal religious education" as used here means simply the number of hours per week spent in organized religion classes under the direction of a religious or priest.

The phrase "degree of adjustment" as used here means the adequacy or efficiency which the individual has achieved in meeting the demands, conflicts and difficulties which arise from sources in his environment as well as from within himself.

When reference is made to "general adjustment," we mean adjustment in terms of all of the areas of adjustment as a whole. The specific areas which will be investigated will be discussed in Chapter III.

Scope

An investigation into the relationship between formal religious training and adjustment presents a difficult problem in design and control. Among the primary variables which must be considered are the following:

- 1) Age of the subjects used in the study;
- 2) The sex of the subjects;
- 3) The intelligence of the subjects;
- 4) The socio-economic background of the subjects;
- 5) The relative length of time spent by the subjects in Catholic and public schools where both types have been attended;

- 6) The amount of religious training received by the children while attending public schools;
- 7) The influence of religious training and practices in the home;
- 8) The influence of the general Catholic environment of the Catholic schools.

Perfect control of these variables is impossible, but the present author believes that some degree of control will be achieved by the method of selection of the subjects.

The variations in age of the subjects will be those normally found in grades nine through twelve. The sex of the children will be considered in the analysis of the results, where differences between the girls and the boys will be computed as well as differences between the two groups taken as a whole. The intelligence of the subjects can be accepted as at least that required for the adequate performance at the high school level. The socio-economic level of both groups will be approximately the same, since the subjects are being selected from within a radius of two miles; all are from St. Clair Shores, Michigan, a suburb of Detroit.

The extent to which the subjects have been exposed to formal religious education presents a real difficulty. Some of the subjects will have had the greatest part of their schooling in Catholic schools but will, at the time of testing, be registered in public schools and therefore subject to classification with the public school group.

The converse holds true for students only recently registered with the Catholic schools. An attempted solution of this problem has been to set arbitrary limits to the amount of formal religious training received during the course of the subject's schooling. The group attending Catholic schools (hereafter referred to as Group C) will be limited to those students who have had a maximum of two years in a public school, during which time they received a minimum of one hour per week of formal religious instruction. The group designated as public school students (hereafter referred to as Group P) will be limited to those who have had a maximum of 50 percent of their education in a Catholic school and a maximum of one hour per week of formal religious training while attending public schools.

The extent of religious training received in the home by either group is not so readily controlled. It cannot be assumed that, because a child is in attendance at a public school, the child's home environment is less Catholic in nature than that of a child now in a Catholic school. The waiting lists for admission to Catholic schools are extensive at the present time. Many of the parents desire their children to attend Catholic schools but cannot send them to these schools simply because they cannot be accommodated. Thus we are forced to admit a variable which has not been controlled in any way in this investigation.

Finally, we must recognize the unmeasurable difference of religious influence upon Group C which is traceable to

the Catholic environment of the Catholic school where the child is exposed to daily contact with religious and priests as well as daily attendance at Mass.

In general it must be noted that this investigation will not be able to show the efficacy or causal influence of religious training and a religious atmosphere upon the personality adjustment of the subjects; the limitations of control and the nature of the problem make this impossible. A study such as the present one can at best indicate a relationship between formal religious training and the personality adjustment of high school children.

CHAPTER II

RELATED STUDIES

A search of the literature in adolescent psychology indicates that practically all of the authors of texts in this field tend to make dogmatic statements of the significance of religion and religious training for personality development and adjustment. One might assume from their statements that much experimental or investigational data have been accumulated to substantiate the affirmative claims made by the authors. It is true that, insofar as attitudes, ideals, opinions and beliefs are concerned, data were available which point out the relationship between these various factors and religious training; but the relationship between religious training and personality adjustment has not been extensively investigated.

This chapter will present a review of those studies which have been found to deal with the relationship of religion to personality adjustment. The presentation is in the order of similarity to the present study, rather than in chronological order.

In 1928 Howells investigated the personalities of 542 students in elementary courses in psychology in terms of their acceptance and rejection of religious authority.¹

1. T. H. Howells, "A Comparative Study of Those Who Accept as Against Those Who Reject Religious Authority," University of Iowa Studies in Character, II (1928), No. 2, pp. 80.

He found that there was no apparent relationship between emotional stability and the degree of radicalism or conservatism expressed by his subjects. Howells could not, on the basis of his results, make any confident statement about the relationship between social attitudes and radicalism or conservatism. On the positive side this investigator found the following:

- 1) There is a slight tendency for the conservative to be extrovertive;
- 2) Religious training and participation in religious activity leads to conservatism;
- 3) The conservative group was inclined toward pessimism and feelings of inferiority;
- 4) Of the conservative group, 85 percent were Catholic.

Dimock, in 1941, reported a study of the relationship between moral knowledge of adolescent boys and their personality adjustment.² He made a systematic study over a period of two years of two hundred boys ranging in age from 12 years to 14 years and 2 months. He devised a questionnaire which was designed to yield a "Moral Knowledge Score" and a Religious Thinking Score." He found that there existed a significant difference between the moral knowledge and religious thinking scores and the degree of adjustment of his subjects. The results of his study indicated that the mean moral knowledge score for the well-adjusted boys

2. H. S. Dimock, Rediscovering the Adolescent, New York: Association Press, 1941.

was 92, while that for the poorly adjusted boys was 84. The chances that the difference of 8 points was dependable were (according to Dimock's Table V) one hundred times in one hundred. The religious thinking score for the well-adjusted boys was 132, while that for the poorly adjusted boys was 121. The chances that the difference of 11 points was dependable were 96 times in 100. Dimock concluded that moral knowledge and religious thinking are found more prominent among well-adjusted boys than among poorly adjusted boys.³

Franzblau made an extensive study of the factors which bear a relationship to the personality adjustment of a group of 701 Jewish children.⁴ The subjects had an average age of 13 years and 2.9 months with a sigma of 1 year and 3.5 months. The average grade in public school for his subjects was Grade 8B. The boys constituted 43.4 percent and the girls 56.6 percent of the total group. Among the instruments used were the Sweet Personal Attitudes Test for Boys, which was restandardized for use with the girls, and the Maller Attitudes for Jewish Students Test. The latter test is designed to indicate general personality adjustment as well as adjustment in terms of specifically Jewish aspects.

Among the numerous results of Franzblau's study we may indicate the following which are pertinent to the present

3. Dimock, op. cit., p. 75.

4. A. N. Franzblau, "Religious Belief and Character among Jewish Adolescents," Teachers College Contributions to Education, 1934, No. 634. Pp. viii+80.

investigation:

- 1) There is no relationship between the degree of emotional stability or temperament and the extent to which religious beliefs are accepted.
- 2) The results of the study do not indicate that acceptance of theological dogmas is accompanied by superior character responses.
- 3) Length of attendance at religious schools and character and personality scores were positively correlated, but not to a statistically significant degree.
- 4) Knowledge of Jewish history and character and personality test scores correlated near zero.
- 5) Character and personality scores showed no relationship to the extent of the observance of religious ceremonials.
- 6) No relationship was found between the degree of pride or intensity of Jewish feeling and personality and character test scores.
- 7) Children not wholly adjusted as Jews to their environment tended to have lower character test scores.

Franzblau points out that his study of the relationship between maladjustment and affirmation of religious beliefs yielded correlations which were all close to zero.

This is a positive finding to the extent that it gives some measure of denial to the assertion frequently made that it is only those who suffer from a deficiency of personality or a maladjustment to the social environment who turn to religion for compensation or escape.⁵

He says further that there is no evidence in this study to affirm the belief that acceptance "of the traditional religious dogmas is creative of superior character."⁶

5. Franzblau, op. cit., p. 76.

6. Ibid., p. 78.

A study which is similar to the present one is that made by Sward in 1931.⁷ He attempted to establish the relationship between religiousness and introversion and the inferiority complex as indicated by the Heidbreder Scales for Introversion and the Inferiority Complex. Sward's subjects were eighty divinity students in a midwestern Roman Catholic seminary. Their scores on the Heidbreder scales were compared with those of an unspecified number of college students, university teachers, and a group of business men. The following is a summary of Sward's findings:

- 1) The seminarians showed a greater tendency toward introversion.
- 2) There was a significant trend toward inferiority attitudes among the seminarians as compared with the general population.
- 3) There is not as much feeling of inferiority in the advanced seminarians as there is in the seminarians in lower grades.
- 4) The pattern of traits characterizing the seminarians can be considered symptomatic of the inferiority complex, but they are not merely stereotyped attitudes which are endorsed by the Catholic religion.

Sward concludes that his results "confirm the classic testimony of historic religious personalities described by James,^[8] Leuba,^[9] and other students of the subject."¹⁰

7. K. Sward, "Temperament and Religious Experience," Journal of Social Psychology, II (1931), 374-96.

8. W. James, The Varieties of Religious Experience, New York: Longmans, Green, 1902, pp. xii+534.

9. J. H. Leuba, The Psychology of Religious Mysticism, New York: Harcourt, Brace, 1925, pp. xii+336.

10. Sward, op. cit., p. 394.

Another investigation of the personality of seminarians is that of McCarthy.¹¹ He administered to 229 seminarians the Bernreuter Personality Inventory, the Bell Adjustment Inventory, the Otis Intelligence Test, the American Council on Education Psychological Examination, and his own scale of Faculty Rating for fitness to continue seminary life. After intercorrelating the scores made by the subjects on these instruments McCarthy found that ". . . in each seminary group--major and minor--there were two general. . . factors. The first . . . a schizoid factor. The second . . . was identified as a factor of general fitness for continuance in seminary life."¹²

A contradiction of Sward's and McCarthy's results is found in the investigation made by Bier in 1948.¹³ He used 924 subjects in comparing the scores of seminarians on the Minnesota Multiphasic Personality Inventory with those of a group of medical, dental, law, and college students.

Bier's results indicated that about one third of all of the possible differences between the seminarians and the other groups were significant at the .01 level, involving six of the nine scales of the Minnesota Multiphasic Personality Inventory. The differences found between the

11. T. J. McCarthy, "Personality Traits of Seminarians," Studies in Psychology and Psychiatry from the Catholic University, V (1942), No. 4, pp. 46.

12. Ibid., p. 38.

13. W. C. Bier, S.J., "A Comparative Study of a Seminary Group and Four Other Groups on the Minnesota Multiphasic Personality Inventory," Studies in Psychology and Psychiatry from the Catholic University, IX (1948), No. 13, pp. xi+107.

well-adjusted seminarians and the poorly adjusted seminarians were greater than those found between the well-adjusted and poorly adjusted subjects in the other groups. Bier concluded that no basic personality adjustment differences exist between the seminarians and the comparison groups.

The relationship of religion and personality as revealed by women novices was investigated by Sr. Richarda Peters.¹⁴ She used as subjects young women who had lived at least one year in various religious communities. The mean age of her subjects was 21.02 years. She administered the following instruments:

The American Council on Education Psychological Examination (1940 edition),
 The Bell Adjustment Inventory,
 The Allport-Vernon Study of Values,
 The Bernreuter Personality Inventory,
 A Faculty Rating Scale (Peters).

Peters used Spearman's method of finding groups of traits; she arrived at the following three groups:

Group I (undesirable):

Sulkiness
 Anxiety
 Depression
 Irritability

Group II (probably will-dominated):

Sense of Judgment
 Capacity to Adjust
 Emotional Control
 Punctuality

Group III (sociability):

Leadership
 Sociability

14. Sister R. Peters, O.S.B., "A Study of the Inter-correlations of Personality Traits Among a Group of Novices in Religious Communities," Studies in Psychology and Psychiatry from the Catholic University, V (1942), No. 7, pp. 38.

Group III (cont'd)
Dominance
Social Adjustment

In correlating the "g" factors she found the coefficient of correlation for Groups II and III was .578, for Groups I and III, -.136, and for Groups I and II, -.427. Intelligence did not correlate significantly with any of the group factors. The Bernreuter Inventory revealed no significant differences between the mean scores of the subjects and the published norms for adult women. No significant correlations were found between chronological age and the various personality traits.

From her results Peters concluded that "Distribution of standard scores on desirable and undesirable traits shows a fairly normal curve of distribution for the number of subjects."¹⁵

It will be seen that the studies reviewed above are all, in some measure, comparative studies, either in terms of normative scales supplied with the instruments used, or in terms of comparisons with control groups. Evidence has been presented in these studies which indicates that some relationship exists between religious training and a variety of personality factors. It has been seen that some of the indications were favorable while others were not. None of the investigations reviewed was directly comparable to the present study.

15. Peters, op. cit., p. 28.

Now that we have presented a background of studies in the field of the significance of religion for personality adjustment, we shall review the present investigation into the relationship between the degree of religious training and religious environment and the personality adjustment of Catholic high school students.

CHAPTER III

METHOD AND RESULTS

This study has attempted to determine if there exist any differences in personality adjustment between Catholic high school students who have received a certain minimum of formal religious instruction as compared with those who have had a lesser amount. A problem such as this lends itself readily to the method of comparison. We have selected two groups of students whose personality adjustment inventory scores are to be compared. Specifically, we will compare in this study the personality adjustment of Catholic high school students attending Catholic schools with the personality adjustment of Catholic high school students attending public schools.

The Subjects

It will be recalled from the discussion of the difficulties of design inherent in such a problem as the present one that many variables are likely to influence the results.¹ In Chapter I we saw that among the variables present there might be included 1) Age, 2) Sex, 3) Intelligence, 4) Socio-economic background, 5) Amount of religious training received, 6) Religious practices in the home, and 7) the Catholic

1. Chapter I, pp. 5-8.

environment in the Catholic school. We have shown in the previous Chapter that some degree of control of these variables is possible by selecting all of the subjects from the same locale. All of the subjects used were Catholic students attending high schools in St. Clair Shores, Michigan.

In order to obtain two groups which differed in the amount of formal religious training received during the subjects' schooling, arbitrary limits were placed upon the amount of such training which a subject might have received. This limitation permitted classifying the subjects into two groups which differed, theoretically, only in religious training, thus permitting the investigator to interpret any differences in personality adjustment in terms of the differences in the degree of religious training received. The first of the two groups mentioned above received religious instruction as a regular part of their daily academic program and will be referred to as Group C. The second group received religious instructions as a weekly supplement to their regular academic program and will be referred to as Group P.

Group C was limited to those students who have had a maximum of two years of all of their school time in public schools, during which time they must have received a minimum of one hour per week of formal religious instruction. Group P was limited to those who have had a maximum of 50 percent of their education in a Catholic school and a maximum of one hour per week of formal religious instruction while attending public schools. The information required

in order to place the subjects into Group C or Group P was obtained by having all subjects fill in a General Information Sheet, a copy of which is to be found in Appendix A.

Group C was selected from all of the students of one Catholic high school. Group P was selected from the Catholic students attending two public high schools. All three schools were located within a radius of two miles. Group C consisted of forty-three boys and fifty-seven girls, totaling one hundred subjects, while Group P consisted of twenty boys and forty-four girls, totaling sixty-four subjects.

The ranges, means, and standard deviations of the ages of the various groups are presented in Table I.

TABLE I

RANGE, MEAN, AND STANDARD DEVIATION OF AGES IN YEARS AND MONTHS OF GROUP C BOYS, GROUP P BOYS, GROUP C GIRLS, GROUP P GIRLS, TOTAL GROUP C, AND TOTAL GROUP P.

	Group C Boys	Group P Boys	Group C Girls	Group P Girls	Total Group C	Total Group P
Range	4-0	4-0	5-0	5-0	5-0	5-0
Mean	15-0	16-0	16-4	16-2	16-2	16-2
S. D.	1-2	1-0	1-3	1-2	1-4	1-1

Grades nine, ten, eleven, and twelve were used in this investigation. The distribution of the population according to grade levels is presented in Table II, while the ranges, means, and standard deviations of the grade levels are presented in Table III (p. 22).

TABLE II
DISTRIBUTION OF SUBJECTS ACCORDING TO GRADE LEVEL

Grade		Boys	Girls	Total Group
9	Group C	13	17	30
	Group P	8	8	16
10	Group C	18	13	31
	Group P	2	16	18
11	Group C	4	12	16
	Group P	7	16	23
12	Group C	8	15	23
	Group P	3	4	7

TABLE III

RANGE, MEAN, AND STANDARD DEVIATION OF GRADE LEVELS
OF GROUP C BOYS, GROUP P BOYS, GROUP C GIRLS,
GROUP P GIRLS, TOTAL GROUP C, AND TOTAL GROUP P.

	Group C Boys	Group P Boys	Group C Girls	Group P Girls	Group C Total	Group P Total
Range	3	3	3	3	3	3
Mean	11.6	10.2	11.6	10.3	10.3	10.3
S. D.	1.7	1.1	1.0	1.0	1.5	1.0

The Instrument

The degree of adjustment of the subjects was determined by the use of the Heston Personality Adjustment Inventory. This inventory made it possible to obtain adjustment scores for six specific areas of adjustment: Analytical Thinking (A), Sociability (S), Emotional Stability (E), Self Confidence (C), Personal Relations (P), and Home Adjustment (H). The reliability of the various scales as reported by Heston is as shown in Table IV.² The coefficients of correlation reported in Table IV (p. 23) were obtained by the use of the split-half method. The data used were the scores of fifty men and fifty women. The raw correlations were corrected by the Spearman-Brown Prophecy formula.

2. J. C. Heston, Manual: Heston Personality Adjustment Inventory, New York: World Book Company, 1949, pp. 25-32.

TABLE IV
RELIABILITY OF INVENTORY SCALES

Area	Reliability Coefficient
A	.855
S	.910
E	.862
C	.835
P	.800
H	.867

The validity of the scales was obtained by three approaches: 1) method of internal consistency, 2) psychological meaningfulness of the component items, 3) validation against independent criteria. In the first approach the items were scored according to a predetermined key and only those items which fell into the upper 27 percent of the sample and the lowest 27 percent were retained in the final form of the inventory. In the second approach the item had to have the customary meaning or connotation as judged by the author of the scale and a group of counselors working with him in the DePauw University Bureau of Testing and Research. The third approach involved: 1) faculty member judgment of the students' adjustment; 2) rating of the subject by acquaintances; 3) self-rating of the subject's adjustment; 4) correlation with the Minnesota Multiphasic Personality Inventory. The intercorrelations between the various independent measures and the inventory scores

ranged from .13 to .70. The populations for the four sets of correlations were, respectively, 269, 95, 92, and 37.

"Three years of research . . . and the analysis of over 4200 different test papers, supply appreciable evidence of the methodological care used in the construction of the Inventory."³

Separate norms in terms of percentiles are given for use with college men, college women, high school boys, and high school girls. According to Heston, ". . . all of the norms have been built upon unselected student groups, presumed typically normal in adjustment; hence all scores are in terms of comparison to high school and college population in general."⁴ The norms given in the manual for use with high school boys and high school girls were used in the present study.

Administration

The entire administration of the inventory and information sheet was carried out by the present writer. All of the sampling was done in the three schools in rooms set aside for this purpose by the principals. Except in the case of ten Group F girls, the subjects were tested during the regular school hours. The ten Group F girls filled out the inventory immediately after their last class in the afternoon.

3. Heston, op. cit., p. 1.

4. Ibid.

Explanations relative to the nature of the inventory and the purpose of the investigation were held to a minimum. Teachers and principals were requested to refrain from giving the students information about the nature of the investigation in order to preclude influencing the responses of the subjects. The administrator indicated to the subjects the necessity of answering the inventory's questions in terms of the situations as they pertained to themselves, and not in a manner that they felt might be more acceptable. Code numbers were assigned to each subject and no names were used so that the identification of the subjects would not be possible; this procedure was explained fully in the hope that it would encourage more truthful responses.

The entire testing was done in four sessions over a period of two weeks. Each session required approximately one hour.

Results

After each information sheet was examined to determine whether the accompanying answer sheet for the Heston Personality Adjustment Inventory met the group criteria, mean percentiles were found for each of the six areas of adjustment for the following groups:

- 1) Total Group C
- 2) Group C Girls
- 3) Group C Boys
- 4) Total Group P

5) Group P Girls

6) Group P Boys

Then the differences between the means for each of these groups for each category of adjustment were found. The means and differences are presented in Table V (p. 27).

An examination of the data in Table V shows that the percentile means are strikingly low for all groups; the range is from 25.82 for Analytical Thinking among Group P girls, to 42.87 for Sociability among Group P girls. Such low percentile ratings lead one to believe that the norms presented by Heston should be revised.⁵ Since the present investigation is a comparative study any over-all lowering of the percentile scores does not materially affect the results because both groups being studied will be influenced in the same manner.

In reviewing the differences of mean percentiles for the groups we find that twelve of the eighteen differences listed are in favor of Group C. Group C boys show the favorable differences for areas S and E, while Group C girls have favorable differences in areas A, E, C, P, and H. In considering the differences of the means for the total groups the differences which are favorable for Group C are in areas A, S, E, C, and P. Group P boys show the better adjustment in areas A, C, P, and H. Group P girls show better adjustment than Group C girls only in area S. The only total

5. Cf. Heston's statement in Manual, p. 19.

TABLE V

MEAN PERCENTILES AND DIFFERENCES BETWEEN MEAN
PERCENTILES FOR GROUP C BOYS, GROUP P BOYS,
GROUP C GIRLS, GROUP P GIRLS, AND TOTAL GROUPS

Area of Adjustment		Boys	Girls	Total Groups
A	Group C	31.95	27.95	29.67
	Group P	34.15	25.82	28.42
	Difference	- 2.20	2.13	1.25
S	Group C	40.88	41.26	41.10
	Group P	35.40	42.87	40.53
	Difference	5.48	- 1.61	.57
E	Group C	34.67	37.63	36.36
	Group P	32.30	28.59	29.76
	Difference	2.37	9.04	6.60
C	Group C	30.76	35.54	33.49
	Group P	37.95	30.82	33.05
	Difference	- 7.19	4.72	.44
P	Group C	29.84	34.23	32.34
	Group P	30.15	32.41	31.86
	Difference	- .31	1.82	.48
H	Group C	26.63	28.51	27.70
	Group P	26.85	28.32	27.97
	Difference	- .22	.19	- .27

group difference which favors Group P is in area H. We see then that Group P boys show better adjustment in four out of six areas; the girls of Group P, however, show the better adjustment in only one area when compared with Group C girls. When considering the two groups as wholes we find that Group C shows the better adjustment in five out of six areas.

While Table V shows differences in degrees of adjustment for the various pairs of groups we must recognize the fact that the differences are generally very small. In comparing the mean adjustment differences for the two groups of boys we see that the range of differences is from 0.22 in Home Adjustment in favor of Group P boys to 5.48 in Sociability in favor of Group C boys. Sociability (5.48) and Emotional Stability (2.37) are the only differences favorable to Group C boys. The other areas, Analytical Thinking, Self Confidence, Personal Adjustment, and Home Adjustment, show differences in favor of Group P boys.

The range of differences for the girls is from 0.19 in Home Adjustment in favor of Group C, to 9.04 in Emotional Stability, also in favor of Group C. The only area in which Group P girls have the more favorable mean is in Sociability, where there is a difference in means of 1.61.

When comparing the differences of the means for the groups taken as wholes we find a range of differences from 0.27 in Home Adjustment in favor of Group P, to 6.60 in Emotional Stability in favor of Group C. Home Adjustment

is the only area of the six in which the difference is in favor of Group P.

While we have indicated that differences in mean percentiles exist for the groups being compared we have, up to this point, no index of their significance. In order to obtain such an index the significance levels of the differences were found.⁶ These data are shown in Table VI.

TABLE VI

LEVEL OF SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEANS FOR GROUPS C AND P BOYS, GROUPS C AND P GIRLS, AND TOTAL GROUPS C AND P IN SIX AREAS OF ADJUSTMENT

Area	Boys	Girls	Total Group
A	75.66%	63.84%	74.14%
S	33.70%	67.44%	88.08%
E	74.90%	7.68%	11.18%
C	30.30%	37.88%	91.24%
P	96.80%	74.14%	90.44%
H	97.60%	96.80%	94.42%

Table VI shows that the most significant difference found in this investigation is that between the percentile scores for the two groups of girls in the area of Emotional Stability. However, if we accept the more recent practice

6. A. L. Edwards, Statistical Analysis for Students in Psychology and Education, New York: Rinehart and Company, 1946, pp. 151-62.

of utilizing the 1 percent or the 2 percent levels as significant, we are compelled to conclude that none of the differences in means indicated in Table V are significant.⁷

Even though it is not within the scope of this study to consider the changes of adjustment levels of high school students as they progress from grade to grade, we have given this data in Tables VII through IX, Appendix B. No consistent trends are evident in this grouping of the data and no further analysis is warranted, for, as will be seen from Table II, page 21, the samples of some of the grade levels are not sufficient.

7. E. F. Lindquist, A First Course in Statistics, New York: Houghton Mifflin Company, 1942, p. 132.

CHAPTER IV
SUMMARY AND CONCLUSIONS

This investigation has been an attempt to determine if there exist differences between the personality adjustment of Catholic children presently attending Catholic high schools and Catholic children in public high schools. The degrees of adjustment were measured by use of the Heston Personality Adjustment Inventory, which gave measures in terms of Analytical Thinking, Sociability, Emotional Stability, Self Confidence, Personal Relations, and Home Adjustment. The subjects consisted of one hundred children from a Catholic high school and sixty-four children from two public high schools. A questionnaire was used in order to determine the amount of religious training the child had received during his school attendance.

The problem of the study was pursued in terms of the following hypotheses:

- 1) Catholic students attending Catholic high schools are generally better adjusted than Catholic students attending public high schools.
- 2) Catholic students attending public high schools are generally better adjusted than Catholic students attending Catholic high schools.
- 3) Catholic students attending Catholic high schools are better adjusted in some areas, while Catholic students attending public high schools are better adjusted in other areas.

- 4) There is no significant difference between the adjustment of Catholic students attending Catholic high schools and Catholic students attending public high schools.

A review of the literature was presented which revealed that the relationship between religious training and personality adjustment has been previously investigated. The subjects used in these investigations ranged from adolescents to college-level seminarians.

The study by Howells using college students showed a relationship between religious conservatism and extroversion, feelings of inferiority, and religious activity. He also found that 85 percent of the conservative group was Catholic.¹

Dimock's investigation into the relationship between moral knowledge and religious thinking and personality adjustment of adolescent boys showed that moral knowledge and religious thinking were more prominent among the well-adjusted boys than among the poorly adjusted boys.²

An extensive study of Jewish adolescents by Franzblau showed that the frequent affirmation that those who turn to religion suffer from personality maladjustments, and seek in their religious practice and affiliations some measure of compensation and escape is not true.³

The personality adjustment of Roman Catholic seminarians has been the subject of several studies. One of these is

1. Howells, op. cit.

2. Dimock, op. cit.

3. Franzblau, op. cit.

that by Sward. He found a significant trend toward inferiority feelings in the personality adjustment of his subjects.⁴

A series of five instruments was used by McCarthy in a recent study of the personality adjustment of seminarians. His results indicated "a schizoid factor" to exist in the personality of the seminarians who were subjects for his investigation.⁵

Bier's investigation of the personality adjustment of a group of seminarians showed findings contradictory to those of Sward and McCarthy. Bier concluded that no basic personality adjustment differences existed between the seminarians of his study and a comparison group of lay professional students.⁶

Novices in women's religious communities were studied by Sr. Richarda Peters.⁷ Her investigation showed that there were no significant differences between the degrees of personality adjustment of the novices and those of the population used to establish the norms for the instruments used. She concluded that both desirable and undesirable personality traits of the subjects fell along the normal curve.

These earlier investigations of the relationship between religious training and personality adjustment

4. Sward, op. cit.

5. McCarthy, op. cit.

6. Bier, op. cit.

7. Peters, op. cit.

have been contradictory, and no specific conclusions can be drawn from them.

The present investigation into the personality adjustment of Catholic high school students attempted to differentiate the subjects in terms of amount of religious training by limiting Group C to those students in Catholic schools who had a maximum of two years in public schools in the total period of their school attendance. During the two years in a non-Catholic school they were required to have had a minimum of one hour per week of formal religious instruction. Group P subjects were limited to those in public high schools who had a maximum of 50 percent of their schooling in Catholic schools and a maximum of one hour per week of formal religious training while attending public schools. Since other significant factors were held under reasonable control by the method of selection of the subjects it was presumed that any differences in personality adjustment might be related to the difference in religious training received by the two groups.

It was found in this study that the personality adjustment of both groups was well below the 50th percentile when compared with the published norms for high school students. The highest mean percentile for Group C was found to be the 41st (in Sociability), while the highest for Group P was the 40th (in Sociability). The lowest percentile for Group C was the 27th (in Home Adjustment), while that for Group P was also the 27th (in Home Adjustment). It would

seem then that, in general, both groups are poorly adjusted. The author of the instrument, however, states that a consistently low score in any large group may merely be indicative of a need for restandardization of the norms for the group.⁸ Such a warning by the author of the inventory leads us to extreme caution in evaluating the personality adjustment of the subjects.

It is the differences in the personality adjustment of the two groups in which the essence of the investigation lies. It was found that the greatest difference in means was in the Emotional Stability of the girls (9.04); however, this difference was significant at only the 7.68 percent level. All other differences were found to be statistically less significant.

In reviewing the hypotheses presented earlier we find that the first hypothesis must be rejected since the differences in mean adjustment, while showing differences favorable to the Catholic school children taken as a group (in all but Home Adjustment) are not statistically significant. We must remember that the differences, significant or not, are real for the groups of subjects concerned.

Hypothesis number two must also be rejected. Only one of the six areas of adjustment shows a difference favorable to Group P (in Home Adjustment). The difference of 0.27 was found to be significant at the 94.42 percent level.

8. Heston, op. cit., p. 19.

It is true that, according to the present results, the children in the Catholic schools showed more favorable adjustment in some areas, namely Analytical Thinking, Sociability, Emotional Stability, Self Confidence, and Personal Adjustment. But we are not justified in accepting the third hypothesis, which states that Catholic school children are better adjusted in some areas, in view of the levels of significance of the differences present. They ranged from 91.24 percent for the difference in Self Confidence to 11.18 percent for the difference in Emotional Stability.

It is obvious then, that the fourth hypothesis has, at least for this sample, been verified. We must conclude that there is no significant difference between the degree of adjustment in any of the six areas of personality adjustment measured when the percentile scores of Catholic students in Catholic high schools are compared with those of Catholic students in public high schools.

Although no significant relationship was found between the degree of religious training and personality adjustment in this study, it has not been conclusively proved that no such relationship exists. Whether this problem will ever be adequately solved is problematical. The study of this problem, like any other in psychology, demands adequate control. Such control is not readily possible, for the influence of religion on the personality of an individual is not strictly limited to periods of formal religious training. Perhaps it will be possible to eliminate, as we have attempted to do,

the various extraneous factors by careful selection. Perhaps many of the variables could be eliminated on the basis of chance by the use of a population much larger than that which was used in this investigation.

Many other problems are connected with that which the present writer has investigated. We might ask, "What differences in personality adjustment are to be found in comparing the various grade levels? The various ages? Socio-economic levels? Parental nativity? Is there a decline or an increase in the influence of religion on the personality as the student progresses from grade to grade?" More extensive investigation into the relationship between religious instruction and personality is definitely demanded by our limited knowledge of this area of psychology.

BIBLIOGRAPHY

Books

Dimock, H. S. Rediscovering the Adolescent. New York: Association Press, 1941. Pp. xx+287.

This is a study conducted over a period of two years in order to determine the factors which influence the personality adjustment of adolescent boys. A significant relationship between moral knowledge, religious thinking and personality adjustment was found.

Edwards, A. L. Statistical Analysis for Students in Psychology and Education. New York: Rinehart and Company, 1946. Pp. 132-191.

This source was used as a statistical reference.

Fleege, Brother U. H., S.M. Self-Revelation of the Adolescent Boy. Milwaukee: The Bruce Publishing Company, 1945. Pp. xiv+384.

This very extensive investigation, while not a comparative study, gives an excellent listing of those areas in which the majority of the adolescent's problems are to be found. Religion is one of these areas.

Heston, J. C. Manual: Heston Personality Adjustment Inventory, New York: World Book Company, 1949. Pp. v+34.

The manual was used as a guide to administration and interpretation of results of the inventory. The manual also presents the statistics related to the validity and reliability of the inventory.

Hurlock, E. B. Adolescent Development. New York: McGraw-Hill and Company, 1949. Pp. 252-53.

In her discussion of religion and the adolescent Hurlock indicates the manner in which religion may give rise to personality adjustment problems. No empirical evidence is given for her statements.

James, W. The Varieties of Religious Experience. New York: Longmans, Green, 1902. Pp. xii+534.

This classical study was used only indirectly.

Jersild, A. T. Child Psychology. Revised edition. New York: Prentice-Hall, Inc., 1946. Pp. 400-23.

Jersild, in his discussion of religion, points out the lack of systematic study of the problems involving religion and the child. He goes on to a consideration of the difficulties which arise in an attempt to conduct empirical investigations in this area.

Knoebber, Sister M. M., O.S.B. Self-Revelation of the Adolescent Girl. Milwaukee: The Bruce Publishing Company, 1937. Pp. xiii+206.

This study, like that of Fleege, reveals the areas in which the adolescent girls find sources of adjustment problems.

Leuba, J. H. The Psychology of Religious Mysticism. New York: Harcourt, Brace and Company, 1925. Pp. xii+336.

This work was used only indirectly to aid in the interpretation of Sward's study cited in Chapter II.

Lindquist, E. F. A First Course in Statistics. New York: Houghton Mifflin Company, 1942. Pp. 102-152.

This work was used for the interpretation of the levels of significance found in the present investigation.

Sadler, W. S. A Doctor Talks to Teen-Agers. St. Louis: C. V. Mosby Company, 1948. Pp. 356.

In the chapter on religion Sadler stresses the importance of religion as a unifier of what he calls the contradictory elements in a personality.

Journal Articles

Bhattacharyya, P. "Religion and Mental Disorder," Indian Journal of Psychology, XIV (1944), 193-95.

This source is probably indirectly pertinent to the general topic of this thesis but it was not available in the State of Michigan.

Bier, W. C., S.J. "A Comparative Study of a Seminary Group and Four Other Groups on the Minnesota Multiphasic Personality Inventory," Studies in Psychology and Psychiatry from the Catholic University, VII (1948), No. 3. Pp. xi+107.

In this study the author compared the MMPI scores of 924 Roman Catholic seminarians with those of a group of Medical, Dental, Law, and College students. He found no basic personality differences.

Franzblau, A. N. "Religious Belief and Character Among Jewish Adolescents," Teachers College Contributions to Education, 1934, No. 634. Pp. viii+80.

An excellent study of the numerous factors which are related to the personality adjustment of Jewish adolescents. The author interpreted the results of his study from many logical viewpoints. In addition to giving data relative to the Jewish aspect of his problem, Franzblau has also contributed much data which are applicable to adolescents in general.

Howells, T. H. "Comparative Study of Those Who Accept as Against Those Who Reject Religious Authority," University of Iowa Studies in Character, II (1928), No. 2. Pp. 80.

An investigation involving 542 students in elementary psychology was made by Howells who attempted to establish the relationship between religious conservatism and various personality traits.

McCarthy, T. J. "Personality Traits of Seminarians," Studies in Psychology and Psychiatry from the Catholic University, V (1942), No. 4. Pp. 46.

A number of instruments were used in an effort to find the personality traits of 229 seminarians. The scores on the various tests were intercorrelated and indicated a "schizoid factor" to be present in the group.

Peters, Sister Richarda, O.S.B. "A Study of the Inter-correlations of Personality Traits Among a Group of Novices in Religious Communities," Studies in Psychology and Psychiatry from the Catholic University, V (1942), No. 7. Pp. 38.

In this investigation 148 young women were tested with several personality tests and the scores were treated by Spearman's method for finding group factors. The author concluded that the distribution of

"undesirable traits and desirable traits" was fairly normal.

Sward, K. "Temperament and Religious Experience," Journal of Social Psychology, II (1931), 374-96.

Another study of the personality characteristics of seminarians. Eighty Roman Catholic seminarians were tested with the Heidbreder Scale for Introversion and the Inferiority Complex. Trends of introversion and feelings of inferiority were found.

Thom, D. A. "A Study of One Hundred and Twenty Well-Adjusted High School Students," Bulletin of the Massachusetts Department of Mental Disorder, XX (1936), 3-106.

This study is probably indirectly pertinent to the present thesis; however, it was not available to the present writer.

APPENDIX B

TABLE VII

MEAN PERCENTILE SCORES FOR EACH AREA OF ADJUSTMENT
OF GROUP C BOYS AND GROUP P BOYS ACCORDING TO GRADE LEVELS

Grade	Group	Area of Adjustment					
		A	S	E	C	P	H
9	C	28.31	35.62	34.15	21.80	23.00	23.77
	P	39.12	33.12	24.85	41.85	26.75	19.85
10	C	29.33	40.11	39.67	37.72	35.39	30.55
	P	14.50	17.00	76.00	57.50	61.50	38.50
11	C	63.75	30.50	22.50	34.50	30.00	27.25
	P	29.00	37.14	27.85	33.71	20.86	30.28
12	C	26.92	37.58	20.25	18.58	19.00	14.75
	P	46.00	49.66	31.33	24.33	40.00	27.66

TABLE VIII

MEAN PERCENTILE SCORES FOR EACH AREA OF ADJUSTMENT
OF GROUP C GIRLS AND GROUP P GIRLS ACCORDING TO GRADE LEVELS

Grade	Group	Area of Adjustment					
		A	S	E	C	P	H
9	C	27.00	39.88	31.00	28.59	27.65	26.00
	P	19.37	52.50	39.50	27.75	26.62	10.50
10	C	26.46	49.00	44.85	41.85	45.23	30.31
	P	26.37	37.43	33.25	32.66	39.18	38.06
11	C	18.00	28.66	36.00	23.67	23.50	23.50
	P	24.58	44.50	17.68	25.25	26.18	26.31
12	C	38.53	46.47	40.20	47.47	40.73	33.80
	P	55.33	51.66	42.33	45.66	59.00	44.00

TABLE IX

MEAN PERCENTILE SCORES FOR EACH AREA OF ADJUSTMENT
OF TOTAL GROUP C AND TOTAL GROUP P ACCORDING TO GRADE LEVELS

Grade	Group	Area of Adjustment					
		A	S	E	C	P	H
9	C	27.65	37.75	32.57	25.19	25.32	24.88
	P	29.24	42.81	32.17	34.80	26.68	15.17
10	C	27.89	44.55	42.26	39.78	35.31	30.43
	P	20.48	22.21	54.67	45.08	40.34	38.28
11	C	45.87	29.58	29.25	29.08	26.75	25.37
	P	26.79	40.82	27.76	29.48	23.87	28.29
12	C	32.72	42.02	30.22	33.02	29.86	24.27
	P	50.66	50.66	36.83	34.999	49.50	35.83