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ABSTRACT This study isolates the variable of pre-college education to determine whether Catholic parochial school educated women have significantly different interpersonal relation orientation than do public school educated women. Fity women comprised the two final sample groups. The data was gathered through use of the Fundamental Interpersonal Relations Orientation-Behavior scales (FIFO-B Scales), measures expressed and wanted inclusion, control and affection. Findings suggest that: (1) women who have previously attended parochial schools exhibit more social inclusion than do those who attended public schools; (2) women who have attended parochial schools exhibit a greater need for social inclusion than do others; (3) little if any difference exists between the two groups in the amount of social control deemed desirable or in the amount of affection given or desired in social situations. Since this study was conducted at a small Catholic college, a broader study should be conducted in a larger setting to determine whether or not the results will generalize. Future research should also assess the importance of the inter-group differences in inclusion behavior to determine if such a difference might be responsible for fostering socio-religious segregation in society or, rather, might represent a desirable behavior that is not being learned in the public schools. (CJ)
A COMPARISON OF THE INTERPERSONAL
BEHAVIOR ORIENTATION OF COLLEGE FRESHMAN WOMEN
FROM CATHOLIC SCHOOL BACKGROUND WITH
COLLEGE FRESHMAN WOMEN FROM PUBLIC
SCHOOL BACKGROUND

by
Gregory James Wilson

A thesis submitted in partial fulfillment
of the requirements for the degree
of Master of Arts at Marquess College

May 1975
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CHAPTER I

INTRODUCTION

In the year 1884, the Roman Catholic Church passed a law calling for the establishment of parish schools for Catholic children, and urging Catholic communities to support and to send their children to such parish schools. The rationale behind establishing a Catholic private school system appears to have been threefold. First, was the desire to provide proper religious instruction to Catholic children. Second, was the ability to insulate the Catholic youth from the Protestant ideology which dominated the public schools at that time. Third, was the desire to weld the recent Catholic immigrants together as an ethnic group in society. 1

Through the first half of the twentieth century and well into the 1950's, the enrollment in Catholic parochial schools steadily climbed. In fact, during the 1950's the number of children seeking a Catholic parochial education was so great that facilities could not be found to accommodate all of them.

However, the decade of the 1960's has brought into focus questions of great importance concerning Catholic parochial schools. The most important question is still unanswered—"What should be the future of Catholic education?" Since the public schools have become more and more secular, the influence of the ecumenical movement is now being strongly felt; and since the Catholic population is no longer at the bottom of the occupational and economic levels, thus losing much of its ethnic flavor, what reasons can be given for educating Catholic students separately from the public school children?2

Today's proponents for maintaining a separate Catholic school system stress the professional help it provides students in religious education, the prevention of an undesirable monopoly in the field of education by the states, and the opportunity provided for fostering Christian values in students of the parochial schools.3 But, a statement made in 1963 by Mary Perkins Ryan, in her book Are Parochial Schools the Answer, brought out a point that has not been given enough emphasis in the field of educational research. The following is from Mrs. Ryan's book:

2Ibid., p. 36.

3Sr. Marie Michelle Schiffgens, A Study of the Attitude and Perceptions of Catholic Parents Toward Catholic Education in Metropolitan Des Moines, Iowa (University of Iowa, 1969).
... the Catholic school system, although it is not in the least "divisive" in the sense of alienating young Catholics from American ideals or the American way of life, does tend to foster a kind of socio-religious segregation and the idea that such segregation is a desirable thing.¹

In light of the controversy over the need and purpose of Catholic parochial schools, more facts have to be obtained. To attempt to determine whether Catholic parochial schools are actually filling a need in today's society, we must first look at the effects such a school system has on its students. Secondly, we must try to determine the effects such a school system has on the community where it is located, both by its mere presence and through its training of community members.

Due to the need for extensive research into the effects of today's Catholic parochial education and an existing interest in the social development of the students of Catholic parochial schools, this present study was initiated.

STATEMENT OF PROBLEM

The problem in this study involved isolating the variable of pre-college education for selected freshman women with Catholic parochial school backgrounds and selected women with public school backgrounds at Marycrest College in Davenport, Iowa. Then, it was attempted to identify any differences in actual and wanted types of social behavior between the two groups as measured by the six FUNDAMENTAL INTERPERSONAL RELATIONS ORIENTATION-BEHAVIOR SCALES. (FIRO-B SCALES)

The six FIRO-B Scales were:

1. The Expressed Inclusion Scale (eA), designed to measure the frequency of actual participation in group activities or organizations.

2. The Wanted Inclusion Scale (WI), designed to measure both the frequency of wanted participation and the number of people with whom a person wishes to participate in group activities or organizations.

3. The Expressed Control Scale (eC), designed to measure both the frequency of actually exhibited dominating behavior and the number of people over which such dominating behavior in social situations is usually exhibited.

4. The Wanted Control Scale (WC), designed to measure both the frequency of wanted domination and the number of people by whom a person would ordinarily let herself be dominated in group activities and organizations.

5. The Expressed Affection Scale (eA), designed to measure both the frequency of actual affection-type behavior (using terms such as close, personal, and friendly relationships, to get at the concept of affection) and the number of people with which such behavior is associated.
6. The Wanted Affection Scale (WA), designed to measure both the desired frequency of affection-type behavior (using terms such as close, personal, and friendly relationships, to get at the concept of affection) and the number of people with which a person would like to have such behavior associated.

The Research hypothesis for my study were the following:

H₁. There will be no significant difference in the level of expressed inclusion behavior of the two questioned groups, as measured by the e₁ scale of the FIRO-B Scales.

H₂. There will be no significant difference in the level of wanted inclusion behavior of the two questioned groups, as measured by the w₁ scale of the FIRO-B Scales.

H₃. There will be no significant difference in the level of expressed control behavior of the two questioned groups, as measured by the e₃ scale of the FIRO-B Scales.

H₄. There will be no significant difference in the level of wanted control behavior of the two questioned groups, as measured by the w₃ scale of the FIRO-B Scales.

H₅. There will be no significant difference in the level of expressed affection-type behavior of the two questioned groups, as measured by the e₅ scale of the FIRO-B Scales.

H₆. There will be a significant difference in the amounts of wanted affection-type behavior of the two questioned groups, as measured by the w₆ scale of the FIRO-B Scales.
NEED FOR THE STUDY

Catholic parochial school educators are in a very serious position today. They are faced with mounting costs in maintaining a competent school system, while at the same time, their pupil enrollments have been decreasing since the middle 1960's. Per pupil costs are rising tremendously and parish budgets are having to be used, in some cases, almost exclusively to support parish schools. Parishes across the country are finding it hard to meet the financial needs of their schools and are being forced to close some of them down.

If a way is to be found to save the Catholic school system from extinction, an investigation and identification of the benefits to society of maintaining such a system must be made and brought to the public's attention. Only when the public is made aware of the value of maintaining the Catholic school system will a concerted effort be made to meet the financial needs of the Catholic schools.

Recent research has shown that the Catholic school students are at least on a par with public school students when tested with academic achievement tests, but such results have not been sufficient to generate support for the Catholic schools continued existence. If it could be shown that Catholic schools promote a desirable social and moral behavior in their students to a greater degree than do public schools, then a
definite reason for saving the Catholic schools would be established.

The results of this study will provide information as to differences in behavior of Catholic school educated women as opposed to public school women in the areas of inclusion, control, and affection. Such information is needed if an attempt is to be made to identify the affect of Catholic education as opposed to public school education.
LIMITATIONS OF THE STUDY

The following limitations of this study should be noted:

1. The groups tested were of limited size due to the relatively small freshman class enrolled at Marycrest College. Additionally, not all of the freshman students fit the qualifications of this study. Such conditions may limit the study in terms of its generalizability.

2. A second limitation of the study is that the information the students were asked to provide may have been considered too confidential. This may have had a limiting effect on the number of questionnaires returned and may have contributed to some distortions within individual questionnaires.

3. A third limitation involves the fact that the majority of the Catholic parochial school sample group lived in school dorms, while the majority of the public school sample group lived with their parents in the Davenport area. Such a difference in living conditions may have either increased or decreased any differences in behavior between the two sample groups.
4. A final limitation of this study involves the use of a mailed questionnaire. Each student was required to interpret the directions provided with the questionnaire, as well as interpreting each question that was asked. Therefore, the representativeness of this study is somewhat dependent upon the students' abilities to interpret the directions and questions in similar ways.
CHAPTER II

RELATED LITERATURE AND RESEARCH

Introduction

This chapter presents a review of the major studies of Catholic school education, with an emphasis on recent studies that have tried to deal with the controversy over the role of Catholic school education and its effects on the Catholic student.

Review of Related Literature and Research

Major research in the area of Catholic school education began with a study by Leonard Koos in the late 1920's. He attempted to assess the achievement of students from private and public secondary schools in Minnesota. Of the fifty-three private schools in his sample, thirty-three were Roman Catholic. By administering standard achievement tests to a total of 14,000 pupils at the different private and public schools, Koos found that out of the ten types of tests administered, Catholic school students scored significantly lower on all tests except French, chemistry, and American history, even though their mean IQ scores were somewhat higher than the mean IQ scores of pupils in the
public schools. Koos concluded that Catholic secondary schools in Minnesota, at this time, were academically inferior to Minnesota's public schools. 1

Another study was done in 1946 by Roger Lennon comparing achievement, as measured by the Metropolitan Achievement Tests, between Catholic elementary school pupils and public elementary school pupils. From the 100,000 Catholic students in six dioceses who were given the Metropolitan Achievement Tests, Lennon took a random sample of approximately 3,900 from each of the grades, two through eight. He found that the Catholic students averaged three-tenths of a grade level ahead of the public school students in grades two through eight. Thus, showing what he considered a significant superiority of the Catholic elementary schools. 2

A third study comparing achievement test scores between Catholic school students and public school students was conducted by Robert Hill. He tested 1,497 graduates in 28 Iowa elementary schools, including parochial urban, public, and rural public, at the ninth grade


level and again at the twelfth grade level in 1952 and 1955 respectively. There was a statistically significant difference in mean scores found between the public urban scores and parochial schools at both grade levels on the science test, and a significant difference between those same group means on the written exposition and composite tests at the ninth grade level. All the differences favored the public school educated children. However, there was no attempt made to control for IQ levels or basic scholastic aptitudes in Hill's study. 3

Research by David Iwamoto attempted to compare public and non-public high school seniors' scores on the 1953 College Entrance Board tests. The public school students scored significantly higher on the math, social studies, chemistry, physics, and intermediate math aptitude tests, while the nonpublic school students scored significantly higher than the public school students on only the French test. But Iwamoto's research included no comparative data on the students' IQ scores and his samples were not randomly selected. 4

Robert Hill conducted another study which was published in 1961. In it, he compared the scholastic success, measured in terms of grade


point averages, of 103 college freshmen from parochial schools with that of 103 college freshmen from public schools. After the first quarter of their freshman year, the public school freshman ranked significantly higher, using a .01 level of significance. The grades obtained in the fourth quarter of the freshman year were also significantly higher for the public school educated freshmen, at a .05 level of significance. The cumulative grade point average for the entire freshman year showed that the public school educated students received significantly higher grades using a .01 level of significance. Hill's samples were fairly unbiased with respect to IQ scores and measurable scholastic ability.5

Hill theorized that "in parochial schools, curriculums, teaching, and supervising methods are such that the students are not prepared to perform at peak efficiency in the relatively unstructured college situation."6

In 1959, Baurenfiend and Blumenfield analyzed the difference in mean scores, on the Science Research Associates High School Placement Test, between 1,000 nationally matched students of parochial and public eighth grades. They were matched as to IQ scores, sex, and


6Ibid., p. 65.
The Catholic school pupils ranked 1.0 year higher than the public school students. In 1960, Baurenfiend and Blumenfield tested another 1,000 nationally matched students and found that the Catholic school students again ranked significantly higher than the public school students. This time the difference in achievement level was .45 of a year.  

At about this time, in the early 1960's, the necessity for maintaining an independent Catholic school system was beginning to be strongly questioned. Research continued to investigate whether academic achievement in parochial schools was comparable to that in public schools. But in addition, research was begun in an attempt to determine whether the school's influence on the social development of Catholic school students was of a positive nature.

Peck and Havighurst reported in their book, The Psychology of Character Development, that the development and stabilization of character traits is reached as early as the age of ten. They obtained a .78 correlation coefficient when comparing moral value ratings of ten-


year olds with moral value ratings of the same children at age 16. They concluded that whatever pattern of moral behavior and character development a child displays at the age of ten, he is very likely to display in late adolescence, and more importantly, for the rest of his life. Such findings certainly seemed to indicate that the early school years are very important in the development of moral behavior and character in individuals. But the part played by Catholic parochial education as opposed to public school education remained unanswered.

In 1962, Lawrence Kohlberg reported further research in the "Development of Moral Character and Moral Ideology." He found that attending character building agencies, which would include Catholic schools, has no significant measurable effect on the development of moral attitudes and conduct among children and adolescents. Moreover, by applying the implication of the Peck and Havighurst study, it can be concluded that Catholic parochial schools had not been shown to have any significant measurable effect on the development of moral attitudes and conduct of their students, according to the accumulated research. However, this was still the year 1962.


In 1963, Mary Perkins Ryan's book, *Are Parochial Schools the Answer* was published. The conclusions she reached in her book sent many people running to find evidence to refute her claims. She did not attack the parochial schools because they were academically unsound, but because she thought:

. . . the Catholic school system, although it is not in the least "divisive" in the sense of alienating young Catholics from American ideals or the American way of life, does tend to foster a kind of socio-religious segregation and the idea that such segregation is a desirable thing.\(^{10}\)

Rev. Andrew Greeley found that the Catholics in the parish he studied "seemed more inclined to view the parish school as a social center than the parents of public school children viewed the public school."\(^{11}\) Such conclusions lent support to Mrs. Ryan's claim that a type of "socio-religious" segregation tends to be fostered by parochial schools.

Peter and Alice Rossi also found that parochially educated Catholics were much more likely to be tied into formal and informal social networks that involve the Church and Catholics as a social group. They found that the parochial schools themselves provide a center for social activity in which friendships are formed that last into adulthood. This


school-centered social activity was not found to be a dominant characteristic of the public schools. The Rossi's concluded by saying that the Catholic schools are quite effective in integrating Catholics into society as a solitary social group.  

Two final studies that attempted to analyze Catholic education on a nation-wide scale, should be examined. The studies were conducted at Notre Dame and by Rev. Andrew Greeley and Peter Rossi. 

The Notre Dame study contained a history of the Catholic school system, goals of Catholic education, and a descriptive study of the Catholic school system as it was in 1963. 

One section of the Notre Dame study attempted to analyze the achievement scores of Catholic parochial school students in comparison to national norms. The "Stanford Achievement Test", the "Kuhlman-Anderson Test", and the "Otis Mental Ability Test" were used in the analysis for elementary students, while the "Metropolital Achievement Test" was used in the secondary school testing analysis. In both cases the achievement scores of the parochial students were found


to be significantly higher than national norms. It should be noted though, that there was no attempt to adjust for the Catholic students' higher than national average IQ scores. Also, although the study claims to be unbiased, there was no indication of how representative the sample dioceses were, or why twelve percent of the schools in the sample dioceses were not included in the study. 15

The second relevant section of the Notre Dame study dealt with opinions of 14,519 eighth and twelfth grade students concerning aspects of the Catholic parochial schools they were attending. They were asked to rank the goals of Catholic education in their order of importance. The students ranked the religious-moral goals of their Catholic schools of prime importance, while occupational and intellectual goals were ranked as close second place goals. As for the success of the Catholic schools in meeting their identified goals, the students ranked vocational goals in first place, religious goals in second, and intellectual goals in last place. 16

The other national study of Catholic parochial schools, the Greeley-Rossi study, was much more evaluative in nature and provides the most representative information to date on Catholic education. Greeley and Rossi obtained their data through personal interviews with


16 Ibid, p. 255.
a representative sample of noninstitutionalized Roman Catholics in the United States, twenty-three to fifty-seven years of age. A comparable sample of Protestants was also interviewed.

In Greeley and Rossi's study of occupational and educational achievement among Catholics, a slight, but consistently positive association between Catholic schooling and future achievement in occupations or higher education was found. Greeley and Rossi theorized that the greater achievement of parochially educated Catholics was related, in some way, to becoming integrated into the socio-religious Catholic community during and after the adolescent period. However, their major finding was that Catholic education does not correlate negatively with achievement.  

The other part of the Greeley-Rossi study that is most significant deals with the following question. Are religious schools divisive? Greeley and Rossi noted that popular opinion has been most critical of Catholic parochial schools due to the feeling "that they do restrict interaction between Catholics and adults of other religious faiths, that they lead Catholics to a noninvolvement in community activities, that they develop rigid and intolerant attitudes among their students, and that they cultivate social and economic attitudes which impede success in the occupational world."  


18Ibid., p. 115.
Greeley and Rossi's results that showed slightly higher occupational success for Catholic school graduates have already been alluded to and stand in answer to whether or not success in the occupational world is being impeded by Catholic school education.

In an attempt to find out how valid the unanswered criticisms of Catholic education were, Greeley and Rossi reached these conclusions about the questions involved through their personal interviews:¹⁹

1. Are Catholic school Catholics more isolated from non-Catholics than are coreligionists who did not go to Catholic schools? They were less likely to associate with non-Catholics when they were in school, but at this time there was no trace of any divisive influence. Catholic school Catholics are just as likely to be interested in community affairs and to have non-Catholic visitors, friends, neighbors, and co-workers as are public school Catholics.

2. Are Catholic school Catholics more rigid and intolerant than those who did not go to Catholic schools? The answer was negative. Catholic school Catholics are actually more tolerant with regard to civil liberties and are no more anti-Negro, anti-Semitic, or anti-Protestant. Neither were there any differences on attitudinal measures of "Nanichaenism," religious extremism, or permissiveness. While there was no evidence of divisive attitudes among the Catholic educated, neither was there any evidence of more social consciousness, except in the matter of civil liberties.

¹⁹Ibid., pp. 136-137.
3. Are there sociai or demographic variables which might mask a divisive effect of Catholic schools? No control variable could be found which would alter the findings of the previous two questions.

4. Was there any evidence of greater social consciousness in the younger Catholics who went to Catholic schools? There were some signs that the younger and better-educated Catholic school Catholics had greater social consciousness and greater tolerance than Catholics of the same age and educational level who had not gone to Catholic schools. The evidence that Catholic schooling had a positive effect on younger and better educated students was present but not conclusive.

As a result of the publication of the Greeley and Rossi study, American Catholics began to wonder whether there really is any difference between Catholics who have and Catholics who have not attended Catholic Schools. Catholics were gaining the impression that their parochial schools were having no major religious impact on Catholic students.

At about the same time as the publication of the Greeley and Rossi study, a debate was taking place at Vatican II as to whether Catholic schools were giving students proper religious and moral training to Catholic students. Many leaders were arguing that church-related schooling was ineffective and possibly harmful. Support seemed to be growing to replace the Catholic schools with well-staffed religious centers to provide moral and
The late 1960's appears to have brought a serious change in the outlook of both Catholic educators and Catholic parents toward Catholic parochial schools. With the ability of the Catholic schools to provide moral and religious education being called into question, parents and educators alike began to demand a parochial school system that could compete on an even basis with all aspects of the existing public school system. This meant that more and better teachers would have to be hired; a smaller class size would have to be maintained; better equipment would have to be purchased; and in general, more money would have to be spent on the Catholic parochial school system.

The switch in emphasis from a moral and religious one to an academically oriented one was partially successful and was apparent in research reported by Donovan and Maclaus in 1969. In their study, they found that about 45 percent of the parents who send their children to Catholic parochial schools felt that Catholic schools were superior in quality to public schools. Yet, in Leonard Koos' Study published in 1931, only 7.2 percent of the students attending Catholic parochial schools

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thought they were superior to public schools. At that time, 80 percent of
the students mentioned religious reasons for attending parochial schools. 21

In attempting to improve the academic strengths of the Catholic schools,
many problems were encountered. First, extra money was needed to hire
more teachers and buy more equipment for the schools. This forced many
Catholic schools to raise tuition payments of students. However, the
higher tuition rates caused some poorer families to either withdraw their
children from Catholic schools or not send them there in the first place.
The added tuition cost also was a further consideration for Catholics who
were wondering what functions the Catholic schools provided that could
not be provided by public schools.

Another factor which contributed to a continuing decline in enrollment
in Catholic schools was the drop in the national birth rate in the 1960's and
a progressively smaller number of school-age children being available for
possible attendance at Catholic schools. Such decreases in enrollment
meant that tuition costs in many parishes were pushed even higher. Figures
for the decreases in enrollments at Catholic schools for the year ending in
June 1971 include a seven percent decrease in elementary schools and a
2.3 percent decrease in secondary schools. 22

21 Ibid., p. 368

22 "Advance Report: U. S. Catholic Schools 1970-71", America,
The inability of the Catholic church to attract young nuns has also placed a financial strain on many parishes, since employing lay instructors costs three to four times as much as employing nuns for the same teaching positions.

Much of the huge sums of money that the Catholic schools need to operate have been coming from the budgets of local parishes. Father George Elford of the National Catholic Educational Association wrote in early 1971, that "the parish school is consuming 40 to 65 percent of the parish's total income." Many parishes have been finding the costs of parish schools just too high and have been forced to close schools. At the end of the 1970-71 school year, 3.4 percent of the Catholic elementary schools were closed and 4.3 percent of the Catholic high schools in the United States were closed down, continuing the trend toward fewer Catholic schools.

Government aid to parochial schools has been suggested as a possible way of saving Catholic parochial schools from extinction. However, in June 1971, the Supreme Court declared that supplying public aid for parochial school teachers' salaries is unconstitutional.

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The question of whether Catholic parochial schools should even be kept open any longer is being faced today. C. Albert Koob, the president of the National Catholic Educational Association said that Catholic schools are still the only real force in America that can guarantee education based on strong convictions about morality and religion, and therefore, must be maintained. However, according to research to date, there has not been conclusive evidence supporting a position that parochial school pupils are more socially sensitive or more Christian than public school students from similar family backgrounds.

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25 Koob, C. Albert, op. cit., p. 337.
SUMMARY

Research comparing Catholic parochial education to public school education has dealt primarily with academic achievement. Although the early studies were often conflicting in their results, the last few major studies have all concluded that the Catholic school students are at least on a par with public school students in terms of academic achievement.

In 1963, the question of whether Catholic schools represent a divisive force in society was raised, and has since remained an unanswered question. It has also not been established whether Catholic schools are actually providing any better Christian and moral training for their students than are the public schools.

Since the middle 1960's, Catholic schools have placed much emphasis on strengthening their schools academically. In fact, by 1969 a frequently cited reason for sending children to Catholic schools was that parents felt Catholic schools were academically superior to public schools.

However, maintaining the Catholic school system as a viable academic alternative to public school education is proving to be too costly an endeavor for many parish schools. Catholic schools are decreasing in number and are being threatened with complete extinction.

If it could be shown that Catholic schools are providing a worthwhile service to society that is not being provided by the public
school system, then a concerted effort would more likely be made to save the Catholic schools.

This study, conducted at Marycrest College in Davenport, Iowa, was an attempt to secure more information in regard to the effects on students' behavior of attending Catholic schools as opposed to public schools. The types of behavior examined were categorized as group inclusion, social control, and personal affection. The results of this study could be useful in any attempt to answer the question of whether Catholic schools represent a divisive force in society. Also, useful information for assessing the Catholic schools' influence on students' behavior, as compared with that of the public schools', may be provided.
CHAPTER III

DESIGN OF THE STUDY

Introduction

The problem in this study was to investigate the difference in interpersonal behavior between selected freshman women with Catholic parochial school backgrounds and selected freshman women with public school backgrounds at Marycrest College in Davenport, Iowa. In 1963, Mary Perkins Ryan pointed out that Catholic parochial schools may tend to create a "socio-religiously" segregated group in society. Research done by Lawrence Kohlberg in 1962 seemed to support such a claim, and the Greeley and Rossi study of 1963 mildly supported such a conclusion in the section dealing with occupational achievement. If Catholic parochial education actually does create such a "socio-religiously" segregated group in society, the interpersonal behavior of the members of such a group compared with public school educated persons should show some differences. This study attempted to determine if there are such differences in measurable interpersonal behavior, and if so, in what areas the differences lie.
Procedures

Design for Sampling

Two sample groups were selected from the 1972-1973 freshman class at Marycrest College. One group was composed of the forty-two women in the freshman class who had graduated from a Catholic parochial high school the previous year, and who met an age requirement of being between seventeen years and six-months and nineteen years of age. The second sample group was composed of forty-two randomly selected Marycrest freshmen who had attended and graduated from public schools the previous year. They were also required to be within the seventeen years and six-months to nineteen year old age span.

Information regarding the type of schools attended and the current age of the freshman women had been previously requested and obtained through the cooperation of Marycrest College.

The Testing Instrument

(FIRO-B SCALES) are made up of six nonindependent scales. Two of the scales are designed to measure wanted and expressed affection, with affection being defined by the testing manual as the establishment
and maintenance of satisfactory relationships with others with respect to love and affection.¹ Two more scales measure wanted and expressed control, with control being defined by the testing manual as the establishment and maintenance of satisfactory relationships with people with respect to control and power.² The final two scales measure wanted and expressed inclusion, with inclusion being defined by the testing manual as the establishment and maintenance of satisfactory relationships with people with respect to interaction and association.³

The FIRO-B SCALES have been tested for internal consistency by determining the reproducibility of each scale. The usual criteria for good reproducibility is that ninety percent of all responses be predictable from scale scores. For the FIRO-B SCALES, using approximately 1,500 test subjects, who were primarily college students, the reproducibility for each scale was found to be at least ninety-three percent.⁴

The stability of the scales was also measured, using a group of approximately 125 Harvard students for the inclusion and control scales and a group of fifty-seven Harvard students for the affection scales. The time between the test and retest was a month for the group of 125 Harvard students and a week for the group of fifty-seven Harvard students. The coefficients of stability were quite con-

²Ibid., p. 5. ³Ibid., p. 5. ⁴Ibid., p. 5.
sistent for all six scales, with the mean coefficient of the six being seventy-six hundredths. 5

As for the content validity of the FIRO-B SCALES, if the theories underlying the use of Guttman scales are accepted, then all legitimate cumulative scales, which the FIRO-B SCALES are, naturally have content validity.

Collection of the Data

Both of the selected sample groups were mailed copies of the FUNDAMENTAL INTERPERSONAL RELATIONS ORIENTATION-BEHAVIOR SCALES on December 7, 1972 and asked to answer the questions contained in it. Their responses were to be returned in the stamped reply envelope within five days. They were assured that their responses would be considered confidential, and that any results which would be made public would be reported in group summary form only.

A follow-up letter was sent to those students who had not returned their questionnaires before leaving school at Christmas break. It urged completion of the questionnaire as soon as possible. Due to the long interim break at Marycrest College in January, the follow-up letter was not mailed until January 22, 1973.

5 Ibid., p. 5.
Questionnaire Returns

Out of the 84 questionnaires originally sent, 52 were completed and returned. However, two of the returned questionnaires were subsequently thrown out due to internal inconsistencies.

Of the 42 questionnaires sent to former Catholic parochial school students, a total of 23 were returned and included in the subsequent analysis, a 55 percent useable response. Of the 42 questionnaires sent to former public school students, 27 were returned in useable condition, a 64 percent response.

The combined number of useable returns from the 84 questionnaires sent out was 50, a 60 percent total response.

Treatment of Data

After receiving the returns from the two sampled groups of students, a two-tailed z test of the difference between mean scores was performed on each of the six scales included in the FIRO-B SCALES. The level of significance of .05, yielding a critical region of z greater than 1.96 or z less than -1.96, was established for all six analyses. The results of these z-tests are the subject of the following chapter.
CHAPTER IV

ANALYSIS OF THE DATA

Introduction

This study attempted to identify differences in social behavior between two sample groups of freshmen college women - one a Catholic parochial school educated sample and one a public school educated sample group. The purpose of the study was to try to isolate the variable of pre-college education and determine whether Catholic parochial school educated women have a significantly different interpersonal relationship orientation than do public school educated women.

The subjects were all women in the 1972-1973 freshman class at Marycrest College, Davenport, Iowa. The forty-two women at Marycrest College who made up the parochial school sample were the total number of freshman women who had graduated from a Catholic parochial high school the previous year and whose ages were between seventeen years six-months and nineteen years.

The forty-two women in the public school sample were randomly selected from the total population of freshman women who met the
qualifications of having graduated from high school the previous
year and being between the ages of seventeen years six-months and
nineteen years old.

Data was secured from the two sample groups through the use of
the Fundamental Interpersonal Relations Orientation Behavior Scales.
The scales were designed to measure expressed and wanted inclusion,
control and affection.

The FIRO-B SCALES were mailed to the eighty-four women in the
two sample groups on December 7, 1972, and the students were asked
to complete the questions and return the completed form within five
days. Fifty of the eighty-four questionnaires were returned and used
in the subsequent analysis, representing a sixty percent total re-
sponse.

For analysis the gathered data was first grouped into the six
FIRO-B SCALES, nine questions making up each scale. Next, an
analysis of the difference between mean responses to each of the
questions in the scales was performed to see which differences were
significant at a .05 level of significance. Then, a point value from 0
to 9 was assessed to each of the six scales for all 50 respondents.
The point value for each scale was determined by counting, one
point for each positive response to that scale's questions and count-
ing 0 points for each negative response. After each scale score was
determined, the difference between the sample groups' mean scores on the scale was tested to see if it was statistically significant at a .05 level of significance.

In this chapter, the results of the study are reported in six parts, one for each of the FIRO-B SCALES. Each part first contains an analysis of the difference between the mean responses of both samples to the questions in a given scale. This is followed by an examination of the scores from 0 to 9 on the scale being discussed, and a test of the difference between the mean scores of both samples.

Part I - A: The Expressed Inclusion Scale - an Analysis of the Questions

The questions in the eI Scale were designed to measure actual inclusion behavior exhibited by respondents. The results reported in Table I show that for three of the nine questions contained in the eI Scale, there was a significant difference between the mean response of the Catholic school educated sample and the mean response of the public school educated sample at a .05 level of significance.

The difference between mean responses of the Catholic school sample and the public school sample was significant at a .05 level.
### TABLE I

**Analysis of Questions in Expressed Inclusion Scale**

<table>
<thead>
<tr>
<th>Questions in eI Scale</th>
<th>$\bar{X}_1$</th>
<th>$\bar{X}_2$</th>
<th>$\bar{X}_1 - \bar{X}_2$</th>
<th>Standard deviations of difference between means</th>
<th>Significant difference at .05 level $^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I try to be with people.</td>
<td>1.52</td>
<td>2.00</td>
<td>-.48</td>
<td>.214</td>
<td>Yes</td>
</tr>
<tr>
<td>2. I join social groups.</td>
<td>2.83</td>
<td>3.33</td>
<td>-.50</td>
<td>.344</td>
<td>No</td>
</tr>
<tr>
<td>5. I tend to join social organizations when I have the opportunity</td>
<td>3.00</td>
<td>3.48</td>
<td>-.48</td>
<td>.352</td>
<td>No</td>
</tr>
<tr>
<td>7. I try to be included in informal social activities.</td>
<td>2.22</td>
<td>2.48</td>
<td>-.26</td>
<td>.288</td>
<td>No</td>
</tr>
<tr>
<td>9. I try to include other people in my plans.</td>
<td>1.57</td>
<td>2.04</td>
<td>-.47</td>
<td>.217</td>
<td>Yes</td>
</tr>
<tr>
<td>11. I try to have people around me.</td>
<td>1.82</td>
<td>2.33</td>
<td>-.51</td>
<td>.264</td>
<td>No</td>
</tr>
<tr>
<td>13. When people are doing things together I tend to join them.</td>
<td>2.00</td>
<td>2.92</td>
<td>-.92</td>
<td>.323</td>
<td>Yes</td>
</tr>
<tr>
<td>15. I try to avoid being alone.</td>
<td>2.57</td>
<td>3.04</td>
<td>-.47</td>
<td>.307</td>
<td>No</td>
</tr>
<tr>
<td>16. I try to participate in group activities.</td>
<td>2.14</td>
<td>2.63</td>
<td>-.39</td>
<td>.307</td>
<td>No</td>
</tr>
</tbody>
</table>

$^a$Means of Catholic parochial school sample on eI questions. $N = 23$  
Possible responses from 1 to 6 (1 = usually, 6 = never).

$^b$Means of public school sample on eI questions. $N = 27$  
Possible responses from 1 to 6 (1 = usually, 6 = never).

$^c$Statistically significant at .05 level of significance if $\left| \bar{X}_1 - \bar{X}_2 \right| > 1.96 \times \text{s.d. of } \bar{X}_1 - \bar{X}_2$, $N = 50$
for the three questions: 1) I try to be with people, 9) I try to include other people in my plans, and 13) When people are doing things I tend to join them. For each of the three questions, the Catholic school educated sample mean was significantly lower on the six-point scale of possible responses. The six-point scale was equated with the following choice of possible responses: 1 = usually, 2 = often, 3 = sometimes, 4 = occasionally, 5 = rarely, and 6 = never.

It should also be noted that for all nine questions in the eI Scale, the Catholic educated sample mean was measurably lower on the six-point scale of possible responses than was the public school educated sample mean.

Part I - B:

Scores on the Expressed Inclusion Scale

The number of positive responses to the nine eI Scale questions were totalled for each of the respondents in the two sample groups. Positive responses to the questions in the eI Scale were determined as follows:

1. response 1, 2 or 3
2. response 1, 2, 3, or 4
3. response 1, 2, 3, or 4
4. response 1, 2, 3, or 4
5. response 1, 2, 3, or 4
6. response 1, 2, or 3
7. response 1, 2, or 3
8. response 1, 2, or 3
9. response 1 or 2
10. response 1 or 2
11. response 1 or 2
12. response 1 or 2
13. response 1 or 2
14. response 1 or 2
15. response 1 or 2
16. response 1
<table>
<thead>
<tr>
<th>Possible scores on eI Scale(^a)</th>
<th>Frequency for (X_1)(^b)</th>
<th>Frequency for (X_2)(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[
\bar{X}_1 = 6.61 \quad \bar{X}_2 = 5.37 \\
\text{s.d. of } \bar{X}_1 - \bar{X}_2 = .460
\]

\(\bar{X}_1 - \bar{X}_2 = 1.24\) which \(\text{is}\) statistically significant at a .05 level of significance.\(^d\)

\(^a\)The questions in the eC Scale were scored one point for each positive response to an expressed inclusion question and 0 points for each negative response. Possible nine points.

\(^b\)Scores of Catholic parochial school educated students. \(N = 23\).

\(^c\)Scores of public school educated students. \(N = 27\).

\(^d\)\(2.4 > 1.96 (0.460) = .90\)
One point was recorded for each positive response and no points for each non-positive response, the range of possible scores being 0-9.

Table 2 presents the frequency distribution of scores on the $e_I$ Scale for both the Catholic educated sample and the public school educated sample. The mean scores on the $e_I$ Scale were 6.61 for the Catholic school educated sample and 5.37 for the public school sample. With a standard deviation of .460, the difference between the sample means on the $e_I$ Scale was found to be statistically significant at a .05 level of significance.

**Part II - A:**

The Wanted Inclusion Scale - an Analysis of the Questions

The questions in the $W_I$ Scale were designed to measure the amount of inclusion behavior actually wanted by respondents. The results reported in Table 3 show that for three of the nine questions contained in the $W_I$ Scale there was a significant difference between the mean response of the Catholic and educated sample and the mean response of the public school educated sample at a .05 level of significance.
### TABLE 3

**Analysis of Questions in Wanted Inclusion Scale**

<table>
<thead>
<tr>
<th>Questions in WI Scale</th>
<th>$\bar{X}_1$</th>
<th>$\bar{X}_2$</th>
<th>$\bar{X}_1 - \bar{X}_2$</th>
<th>Standard deviations of difference between means</th>
<th>Significant difference at .05 level$^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. I like people to invite me to things</td>
<td>1.78</td>
<td>2.11</td>
<td>-.33</td>
<td>.298</td>
<td>No</td>
</tr>
<tr>
<td>31. I like people to invite me to join in their activities</td>
<td>1.74</td>
<td>2.01</td>
<td>-.27</td>
<td>.259</td>
<td>No</td>
</tr>
<tr>
<td>34. I like people to include me in their activities</td>
<td>1.61</td>
<td>2.11</td>
<td>-.50</td>
<td>.247</td>
<td>Yes</td>
</tr>
<tr>
<td>37. I like people to ask me to participate in their discussions</td>
<td>1.78</td>
<td>2.59</td>
<td>-.81</td>
<td>1.1</td>
<td>Yes</td>
</tr>
<tr>
<td>39. I like people to ask me to participate in their activities.</td>
<td>1.70</td>
<td>1.96</td>
<td>-.26</td>
<td>.290</td>
<td>No</td>
</tr>
<tr>
<td>42. I like people to invite me to things</td>
<td>1.52</td>
<td>2.07</td>
<td>-.55</td>
<td>.246</td>
<td>Yes</td>
</tr>
<tr>
<td>45. I like people to invite me to join their activities</td>
<td>1.61</td>
<td>2.11</td>
<td>-.50</td>
<td>.269</td>
<td>No</td>
</tr>
<tr>
<td>48. I like people to include me in their activities</td>
<td>1.65</td>
<td>1.96</td>
<td>-.31</td>
<td>.232</td>
<td>No</td>
</tr>
<tr>
<td>51. I like people to invite me to participate in their activities</td>
<td>1.74</td>
<td>2.19</td>
<td>-.45</td>
<td>.269</td>
<td>No</td>
</tr>
</tbody>
</table>

$^a$Means of Catholic parochial school sample on WI questions. $N = 23$. Possible responses from 1 to 6. (for #28 - 39, 1 = most people, 6 = nobody; for #42 - 51, 1 = usually, 6 = never)

$^b$Means of public school sample on WI questions. $N = 27$. Possible responses from 1 to 6. (for #28 - 39, 1 = most people, 6 = nobody; for #42 - 51, 1 = usually, 6 = never).

$^c$Statistically significant at .05 level of significance if $|\bar{X}_1 - \bar{X}_2| > 1.96 \times \text{s.d. of } |\bar{X}_1 - \bar{X}_2|$. $N = 50$. 

-40-
The difference between mean responses of the Catholic school sample and the public school sample was significant at a .05 level for the three questions: 34) I like people to include me in things, 37) I like people to ask me to participate in their discussions, and 42) I like people to invite me to things. For each of the three questions, the Catholic school educated sample mean was significantly lower on the six-point scale of possible responses. The six-point scale was equated with the following choice of possible responses for questions 34 and 37: 1 = most people, 2 = many people, 3 = some people, 4 = a few people, 5 = one or two people, and 6 = nobody. For question 42, the six possible responses were: 1 = usually, 2 = often, 3 = sometimes, 4 = occasionally, 5 = rarely, and 6 = never.

It should also be noted that for all nine questions in the W I Scale, the Catholic school educated sample mean was measurably lower on the six-point scale of possible responses than was the public school educated sample mean.

Part II - B:

Scores on the Wanted Inclusion Scale

The number of positive responses to the nine questions in the W I Scale were totalled for each of the respondents in the two sample groups. Positive responses to the questions in the W I Scale were determined as follows:
Table 4

Scores on Wanted Inclusion Scale

<table>
<thead>
<tr>
<th>Possible scores on WI Scale</th>
<th>Frequency for $X_1^b$</th>
<th>Frequency for $X_2^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

$X_1 = 6.78$  
$X_2 = 5.37$  
$s.d. of X_1 - X_2 = .871$

$X_1 - X_2 = 1.41$ which is not significant at a .05 level of significance.

---

*a The questions in the WI Scale were scored one point for each positive response to a wanted inclusion question and 0 points for each negative response. Possible 9 points.

*bScores of Catholic parochial educated students. $N = 23$.

*cScores of public school educated students. $N = 27$.

*d $1.41 < 1.96 (0.87) = 1.71$
One point was recorded for each positive response and no points for each non-positive response, the range of possible scores being 0 - 9.

Table 4 presents the frequency distribution of scores on the WI Scale for both the Catholic educated sample and the public school educated sample. The mean scores on the WI Scale were 6.78 for the Catholic school educated sample and 5.37 for the public school educated sample.

With a standard deviation of .871, the difference between the sample means on the WI Scale was not statistically significant at a .05 level of significance.

Part III - A:

The Expressed Control Scale - an Analysis of the Questions

The questions in the EC Scale were designed to measure actual controlling behavior of the respondents. The results reported in Table 5 show that there were no questions for which there was a significant difference between the mean response of the Catholic
### TABLE 5

**Analysis of Questions in Expressed Control Scale**

<table>
<thead>
<tr>
<th>Questions in ec Scale</th>
<th>( \bar{X}_1 )</th>
<th>( \bar{X}_2 )</th>
<th>( \bar{X}_1 - \bar{X}_2 )</th>
<th>Standard deviations of difference between means</th>
<th>Significant difference at .05 level&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. I try to influence strongly other people's actions.</td>
<td>4.22</td>
<td>4.00</td>
<td>.22</td>
<td>.329</td>
<td>No</td>
</tr>
<tr>
<td>33. I try to take charge of things when I am with people.</td>
<td>4.26</td>
<td>4.00</td>
<td>.26</td>
<td>.355</td>
<td>No</td>
</tr>
<tr>
<td>36. I try to have other people do things the way I want them done.</td>
<td>4.61</td>
<td>4.15</td>
<td>.56</td>
<td>.332</td>
<td>No</td>
</tr>
<tr>
<td>41. I try to be the dominant person when I am with people.</td>
<td>4.22</td>
<td>4.00</td>
<td>.22</td>
<td>.340</td>
<td>No</td>
</tr>
<tr>
<td>44. I try to have other people do things I want done.</td>
<td>4.04</td>
<td>3.93</td>
<td>.11</td>
<td>.315</td>
<td>No</td>
</tr>
<tr>
<td>47. I try to influence strongly other people's action.</td>
<td>4.52</td>
<td>4.33</td>
<td>.19</td>
<td>.317</td>
<td>No</td>
</tr>
<tr>
<td>50. I try to take charge of things when I'm with people.</td>
<td>4.43</td>
<td>4.00</td>
<td>.43</td>
<td>.317</td>
<td>No</td>
</tr>
<tr>
<td>53. I try to have other people do things the way I want them done.</td>
<td>4.40</td>
<td>3.89</td>
<td>.51</td>
<td>.303</td>
<td>No</td>
</tr>
<tr>
<td>54. I take charge of things when I'm with people</td>
<td>4.13</td>
<td>4.11</td>
<td>.02</td>
<td>.303</td>
<td>No</td>
</tr>
</tbody>
</table>

<sup>a</sup>Means of Catholic parochial school sample on ec questions. N = 23. Possible responses 1 to 6. (1 = most people, 6 = nobody; for #30 - 36; for #41 - 54, 1 = usually, 6 = never)

<sup>b</sup>Means of public school sample on ec questions. N = 27. Possible responses from 1 to 6. (for #30 - 36, 1 = most people, 6 = nobody; for #41 - 54, 1 = usually, 6 = never)

<sup>c</sup>Statistically significant at .05 level of significance if \( \left| \bar{X}_1 - \bar{X}_2 \right| > 1.96 \times \text{s.d. of } \bar{X}_1 - \bar{X}_2 \), N = 50.
school educated sample and the mean response of the public school educated sample at a .05 level of significance.

However, it should be noted that for all nine questions in the eC Scale, the Catholic school educated sample mean was measurably higher on the six-point scale of possible responses than was the public school educated sample mean. For questions 30 - 36, the six possible responses were: 1 = most people, 2 = many people, 3 = some people, 4 = a few people, 5 = one or two people, and 6 = nobody. For questions 41 - 54, the six possible responses were: 1 = usually, 2 = often, 3 = sometimes, 4 = occasionally, 5 = rarely, and 6 = never.

Part III - B:

Scores on the Expressed Control Scale

The number of positive responses to the nine questions in the eC Scale were totalled for each of the respondents in the two sample groups. Positive responses to the questions in the eC Scale were determined as follows:

30. response 1, 2 or 3
33. response 1, 2 or 3
36. response 1 or 2
41. response 1, 2, 3 or 4
44. response 1, 2 or 3
47. response 1, 2 or 3
50. response 1 or 2
53. response 1 or 2
54. response 1 or 2

One point was recorded for each positive response and no points for each non-positive response, the range of possible scores being 0 - 9.
Table 6

Scores on Expressed Control Scale

<table>
<thead>
<tr>
<th>Possible scores on ec Scale&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Frequency for X&lt;sub&gt;1&lt;/sub&gt;&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Frequency for X&lt;sub&gt;2&lt;/sub&gt;&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.</td>
<td>.7</td>
<td>.7</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \bar{X}_1 = 1.74 \quad \bar{X}_2 = 2.48 \]

s.d. of \( \bar{X}_1 - \bar{X}_2 = .583 \)

\[ \bar{X}_1 - \bar{X}_2 = -.74 \] which is not significant at a .05 level of significance.<sup>d</sup>

---

<sup>a</sup>The questions in the ec Scale were scored, one point for each positive response to an expressed control question and 0 points for each negative response. Possible nine points.

<sup>b</sup>Scores of Catholic parochial school educated students. N = 23.

<sup>c</sup>Scores of public school educated students. N = 27.

<sup>d</sup>\[ |-.74| < 1.96 \left( .583 \right) = 1.14 \]
Table 6 presents the frequency distribution of scores on the $e^C$ Scale for both the Catholic educated sample and the public school educated sample. The mean scores on the $e^C$ Scale were 1.74 for the Catholic school educated sample and 2.48 for the public school educated sample.

With a standard deviation of .583, the difference between the sample means on the $e^C$ Scale was not statistically significant at a .05 level of significance.

Part IV - A:

The Wanted Control Scale - an

Analysis of the Questions

The questions in the $W^C$ Scale were designed to measure the amount of controlling behavior actually wanted by respondents. The results reported in Table 7 show that for two of the nine questions contained in the $W^C$ Scale there was a significant difference between the mean response of the Catholic school educated sample and the mean response of the public school educated sample at a .05 level of significance.

The difference between mean responses of the Catholic school sample and the public school sample was significant at a .05 level of significance for questions: 20) I let other people take charge of things and 24) I let other people control my actions. For both of
# TABLE 7

## Analysis of Questions in Wanted Control Scale

<table>
<thead>
<tr>
<th>Questions in Wc Scale</th>
<th>$\bar{X}_a$</th>
<th>$\bar{X}_b$</th>
<th>$\bar{X}_1 - \bar{X}_2$</th>
<th>Standard deviations of difference between means</th>
<th>Significant difference at .05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I let other people decide what to do.</td>
<td>2.96</td>
<td>3.19</td>
<td>-.23</td>
<td>.224</td>
<td>No</td>
</tr>
<tr>
<td>6. I let other people strongly influence my actions.</td>
<td>4.26</td>
<td>4.15</td>
<td>.11</td>
<td>.325</td>
<td>No</td>
</tr>
<tr>
<td>10. I let other people control my actions.</td>
<td>4.83</td>
<td>4.59</td>
<td>.24</td>
<td>.319</td>
<td>No</td>
</tr>
<tr>
<td>14. I am easily led by people.</td>
<td>4.70</td>
<td>4.41</td>
<td>.29</td>
<td>.325</td>
<td>No</td>
</tr>
<tr>
<td>18. I let other people decide what to do.</td>
<td>3.48</td>
<td>3.48</td>
<td>.00</td>
<td>.308</td>
<td>No</td>
</tr>
<tr>
<td>20. I let other people take charge of things.</td>
<td>3.87</td>
<td>3.30</td>
<td>.57</td>
<td>.273</td>
<td>Yes</td>
</tr>
<tr>
<td>22. I let others strongly influence my actions.</td>
<td>4.43</td>
<td>4.56</td>
<td>-.13</td>
<td>.302</td>
<td>No</td>
</tr>
<tr>
<td>24. I let other people control my actions.</td>
<td>5.26</td>
<td>4.67</td>
<td>.59</td>
<td>.221</td>
<td>Yes</td>
</tr>
<tr>
<td>26. I am easily led by people.</td>
<td>4.87</td>
<td>4.56</td>
<td>.31</td>
<td>.328</td>
<td>No</td>
</tr>
</tbody>
</table>

*a* Means of Catholic parochial school sample on Wc questions. N = 23.

Possible responses from 1 to 6. (for # 2 - 14, 1 = usually, 6 = never; for # 18 - 26, 1 = most people, 6 = nobody.

*b* Means of public school sample on Wc questions. N = 27.

Possible responses from 1 to 6. ( # 2 - 14, 1 = usually, 6 = never; for # 18 - 26, 1 = most people, 6 = nobody).

*c* Statistically significant at .05 level of significance if $\left| \bar{X}_1 - \bar{X}_2 \right| > 1.96 \left( \text{s.d. of } \bar{X}_1 - \bar{X}_2 \right)$. N = 50.
these questions, the Catholic school educated sample mean was significantly higher on the six-point scale of possible responses. The six-point scale was equated with the following choice of possible responses for both questions: 1 = most people, 2 = many people, 3 = some people, 4 = a few people, 5 = one or two people, and 6 = nobody.

On the other seven questions in the WC Scale, there was no consistent direction of variation in mean responses on the six-point scale of possible responses.

Part IV - B:

**Scores on the Wanted Control Scale**

The number of positive responses to the nine questions in the WC Scale were totalled for each of the respondents in the two sample groups. Positive responses to the questions in the WC Scale were determined as follows:

- 2. response 1, 2, 3, or 4
- 6. response 1, 2, 3, or 4
- 10. response 1, 2, or 3
- 14. response 1, 2, or 3
- 18. response 1, 2, or 3
- 20. response 1, 2, or 3
- 22. response 1, 2, 3, or 4
- 24. response 1, 2, or 3
- 26. response 1, 2, or 3

One point was recorded for each positive response and no points for each non-positive response, the range of possible scores being 0 - 9.

Table 8 presents the frequency distribution of scores on the WC
\textbf{TABLE 8}

\textbf{Scores on Wanted Control Scale}

<table>
<thead>
<tr>
<th>Possible scores on W/C Scale\textsuperscript{a}</th>
<th>Frequency for $X_1^b$</th>
<th>Frequency for $X_2^c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

$X_1 = 3.43$ \quad \quad \quad X_2 = 3.78$

s.d. of $X_1 - X_2 = .709$

$X_1 - X_2 = -.35$ which is not statistically significant at a .05 level\textsuperscript{d} of significance.

\textsuperscript{a}The questions in the W/C Scale were scored one point for each positive response to a wanted control questions and 0 points for each negative response. Possible nine points.

\textsuperscript{b}Scores of Catholic parochial school educated students. $N = 23$.

\textsuperscript{c}Scores of public school educated students. $N = 27$.

\textsuperscript{d} $|-.35| < 1.96 (.709) = 1.39.$
Scale for both the Catholic educated sample and the public school educated sample. The mean scores on the WC Scale were 3.43 for the Catholic school educated sample and 3.78 for the public school educated sample.

With a standard deviation of .709, the difference between the sample means on the WC Scale was not statistically significant at a .05 level of significance.

Part V - A:

The Expressed Affection Scale - an Analysis of the Questions

The questions in the eA Scale were designed to measure actual affection exhibited by respondents. The results reported in Table 9 show that there were no questions in the eA Scale for which there was a significant difference between the mean response of the Catholic school educated sample and the mean response of the public school educated sample at a .05 level of significance.

It should also be noted that for all seven positively stated questions in the eA Scale, questions 4, 8, 12, 17, 21, 23, and 27, the Catholic school educated sample mean was measurably lower on the six-point scale of possible responses than was the public school educated sample mean. For the two negatively worded questions, 19 and 25, the Catholic school educated sample mean was measurably
### TABLE 9

**Analysis of Questions in Expressed Affection Scale**

<table>
<thead>
<tr>
<th>Questions in eA Scale</th>
<th>( \bar{X}_1 )</th>
<th>( \bar{X}_2 )</th>
<th>( \bar{X}_1 - \bar{X}_2 )</th>
<th>Standard deviations of difference between means</th>
<th>Significant difference at .05 level(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. I try to have close relationships with people.</td>
<td>2.23</td>
<td>2.44</td>
<td>-0.22</td>
<td>0.319</td>
<td>No</td>
</tr>
<tr>
<td>8. I try to have close, personal relations with people.</td>
<td>2.48</td>
<td>2.89</td>
<td>-0.41</td>
<td>0.346</td>
<td>No</td>
</tr>
<tr>
<td>12. I try to get close and personal with people.</td>
<td>2.83</td>
<td>3.15</td>
<td>-0.32</td>
<td>0.368</td>
<td>No</td>
</tr>
<tr>
<td>17. I try to be friendly to people.</td>
<td>1.22</td>
<td>1.26</td>
<td>-0.04</td>
<td>0.113</td>
<td>No</td>
</tr>
<tr>
<td>19. My personal relations with people are cool and distant.</td>
<td>4.74</td>
<td>4.19</td>
<td>0.55</td>
<td>0.297</td>
<td>No</td>
</tr>
<tr>
<td>21. I try to have close relationships with people.</td>
<td>2.78</td>
<td>3.19</td>
<td>-0.41</td>
<td>0.330</td>
<td>No</td>
</tr>
<tr>
<td>23. I try to get close and personal with people.</td>
<td>2.83</td>
<td>3.33</td>
<td>-0.50</td>
<td>0.353</td>
<td>No</td>
</tr>
<tr>
<td>25. I act cool and distant with people.</td>
<td>4.57</td>
<td>4.44</td>
<td>0.13</td>
<td>0.328</td>
<td>No</td>
</tr>
<tr>
<td>27. I try to have close, personal relationships with people.</td>
<td>2.91</td>
<td>3.33</td>
<td>-0.42</td>
<td>0.358</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^a\)Means of Catholic parochial school sample on eA questions. \(N = 23\). Possible responses from 1 to 6. (for \#2 - 12, 1 = usually, 6 = never, for \#17 - 27, 1 = most people, 6 = nobody).

\(^b\)Means of public school sample on eA questions. \(N = 27\). Possible responses from 1 to 6. (for \#4 - 12, 1 = usually, 6 = never, for \#17 - 27, 1 = most people, 6 = nobody).

\(^c\)Statistically significant at .05 level of significance if \( \left| \bar{X}_1 - \bar{X}_2 \right| > 1.96 \) \( \frac{s.d.}{\text{of } \bar{X}_1 - \bar{X}_2} \). \(N = 50\).
higher on the six-point scale of possible responses. For questions 4 - 12, the six possible responses were: 1 = usually, 2 = often, 3 = sometimes, 4 = occasionally, 5 = rarely, and 6 = never. For questions 17 - 27, the six possible responses were: 1 = most people, 2 = many people, 3 = some people, 4 = a few people, 5 = one or two people, and 6 = nobody.

Part V - B:

Scores on the Expressed Affection Scale

The number of positive responses to the nine questions in the eA Scale were totalled for each of the respondents in the two sample groups. Positive responses to the questions in the eA Scale were determined as follows:

4. response 1 or 2
8. response 1 or 2
12. response 1
17. response 1 or 2
19. response 4, 5, or 6
21. response 1 or 2
23. response 1 or 2
25. response 4, 5, or 6
27. response 1 or 2

One point was recorded for each positive response and no points for each non-positive response, the range of possible scores being 0 - 9.

Table 10 presents the frequency distribution of scores on the eA Scale for both the Catholic school educated sample and the public school educated sample. The mean scores on the eA Scale were 4.65 for the Catholic school educated sample and 4.41 for the public
Table 10

Scores on Expressed Affection Scale

<table>
<thead>
<tr>
<th>Possible scores on eA Scale&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Frequency for X&lt;sub&gt;1&lt;/sub&gt;&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Frequency for X&lt;sub&gt;2&lt;/sub&gt;&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ \bar{X}_1 = 4.65 \quad \bar{X}_2 = 4.41 \]

s.d. of \[ \bar{X}_1 - \bar{X}_2 = 0.756 \]

\[ \bar{X}_1 - \bar{X}_2 = 0.24 \text{ which is not statistically significant at a 0.05 level of significance.} \]<sup>d</sup>

<sup>a</sup>The questions in the eA Scale were scored one point for each positive response to an expressed affection question and 0 points for each negative response. Possible nine points.

<sup>b</sup>Scores of Catholic parochial school educated students. \( N = 23 \).

<sup>c</sup>Scores of public school educated students. \( N = 27 \).

<sup>d</sup>\[ 0.24 < 1.96 \left( \frac{0.756}{1.756} \right) = 1.49. \]
school educated sample.

With a standard deviation of .756, the difference between the sample means on the eA Scale was not statistically significant at a .05 level of significance.

Part VI - A:

The Wanted Affection Scale - an Analysis of the Questions

The questions in the WA Scale were designed to measure the amount of affection actually wanted by respondents. The results reported in Table 11 show that for one of the nine questions contained in the WA Scale there was a significant difference between the mean response of the Catholic educated sample and the mean response of the public school educated sample at a .05 level of significance.

Question 34) I like people to act close and personal with me, was the question with a statistically significant difference between the two sample means. On question 34, the Catholic educated sample mean was significantly lower on the six-point scale of possible responses. The six-point scale of possible responses was equated with the following choice of possible responses for questions 29 - 40: 1 = most people, 2 = many people, 3 = some people, 4 = a few people, 5 = one or two people, and 6 = nobody. For questions 43 - 52, the six possible responses were: 1 = usually, 2 = often, 3 = sometimes,
## TABLE 11

### Analysis of Questions in Wanted Affection Scale

<table>
<thead>
<tr>
<th>Questions in WA Scale</th>
<th>$\bar{X}_1$</th>
<th>$\bar{X}_2$</th>
<th>$\bar{X}_1 - \bar{X}_2$</th>
<th>Standard deviations of difference between means</th>
<th>Significant difference at .05 level&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. I like people to act close and personal with me.</td>
<td>2.35</td>
<td>3.07</td>
<td>-.72</td>
<td>.310</td>
<td>Yes</td>
</tr>
<tr>
<td>32. I like people to act close toward me.</td>
<td>2.57</td>
<td>3.04</td>
<td>-.47</td>
<td>.328</td>
<td>No</td>
</tr>
<tr>
<td>35. I like people to act cool and distant toward me.</td>
<td>5.43</td>
<td>5.44</td>
<td>-.01</td>
<td>.203</td>
<td>No</td>
</tr>
<tr>
<td>38. I like people to act friendly toward me.</td>
<td>1.22</td>
<td>1.33</td>
<td>-.11</td>
<td>.174</td>
<td>No</td>
</tr>
<tr>
<td>40. I like people to act distant toward me.</td>
<td>5.13</td>
<td>5.44</td>
<td>-.31</td>
<td>.289</td>
<td>No</td>
</tr>
<tr>
<td>43. I like people to act close toward me.</td>
<td>2.30</td>
<td>2.48</td>
<td>-.18</td>
<td>.315</td>
<td>No</td>
</tr>
<tr>
<td>46. I like people to act cool and distant toward me.</td>
<td>5.26</td>
<td>5.19</td>
<td>.07</td>
<td>.283</td>
<td>No</td>
</tr>
<tr>
<td>49. I like people to act close and personal with me.</td>
<td>2.22</td>
<td>2.67</td>
<td>-.45</td>
<td>.291</td>
<td>No</td>
</tr>
<tr>
<td>52. I like people to act distant toward me.</td>
<td>5.39</td>
<td>5.11</td>
<td>.28</td>
<td>.278</td>
<td>No</td>
</tr>
</tbody>
</table>

<sup>a</sup>Means of Catholic parochial school sample on WA questions. N = 23. Possible responses from 1 to 6. (for # 29 - 40, 1 = most people, 6 = nobody; for # 43 - 52, 1 = usually, 6 = never).

<sup>b</sup>Means of public school sample on WA questions. N = 27. Possible responses from 1 to 6. (for # 29 - 40, 1 = most people, 6 = nobody; for # 43 - 52, 1 = usually, 6 = never).

<sup>c</sup>Statistically significant at .05 level of significance if $\mid \bar{X}_1 - \bar{X}_2 \mid > 1.96 \times \text{s.d. of } \bar{X}_1 - \bar{X}_2$. N = 50.
4 = occasionally, 5 = rarely, and 6 = never.

Also, for all five positively stated questions in the WA Scale, questions 29, 32, 38, 43, and 49, the Catholic school educated sample mean was measurably lower on the six-point scale of possible responses. For the four negatively stated questions in the WA Scale, questions 35, 40, 46, and 52, there was no consistent direction of variation in mean responses on the six-point scale of possible responses.

Part VI - B:

Scores on the Wanted Affection Scale

The number of positive responses to the nine questions in the WA Scale were totalled for each respondent in the two sample groups. Positive response to the questions in the WA Scale were determined as follows:

29. response 1 or 2
32. response 1 or 2
35. response 5 or 6
38. response 1 or 2
40. response 5 or 6
43. response 1
46. response 5 or 6
49. response 1 or 2
52. response 5 or 6

One point was recorded for each positive response and no points for each non-positive response, the range of possible scores being 0 - 9.

Table 12 presents the frequency distribution of scores on the WA Scale for both the Catholic educated sample and the public school
<table>
<thead>
<tr>
<th>Possible scores on WA Scale&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Frequency for X&lt;sub&gt;1&lt;/sub&gt;</th>
<th>Frequency for X&lt;sub&gt;2&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ \bar{X}_1 = 6.04 \quad \bar{X}_2 = 5.44 \]
\[ \text{s.d. of } \bar{X}_1 - \bar{X}_2 = .698 \]

\[ \bar{X}_1 - \bar{X}_2 = .60 \text{ which is not statistically significant at a .05 level of significance}. \]

<sup>a</sup>The questions in the WA Scale were scored one point for each positive response to a wanted affection question and 0 points for each negative response. Possible nine points.<br>
<sup>b</sup>Scores of Catholic parochial school educated students. N = 23.<br>
<sup>c</sup>Scores of public school educated students. N = 27.<br>
<sup>d</sup>.60 < 1.96 (.698) = 1.37.
educated sample. The mean scores on the $W^A$ Scale were 6.04 for the Catholic educated sample and 5.44 for the public school educated sample.

With a standard deviation of .698, the difference between the sample means on the $W^A$ Scale was not statistically significant at a .05 level of significance.
CHAPTER V

SUMMARY, CONCLUSIONS, AND NEED FOR FURTHER STUDY

Introduction

Since the publishing of Mary Perkins Ryan's book in 1963,1 there has been a continuing controversy concerning the social effects of the Catholic school system on Catholic parochial students and society in general. However, there has been little evidence gathered to determine what effect Catholic parochial school education has had on the social behavior of its students.

In this study, an attempt was made to isolate the variable of pre-college education and to determine whether Catholic parochial school educated women have a significantly different interpersonal relation orientation than do public school educated women. The two samples used in this study were made up of a total of eighty-four women in the 1972-1973 freshman class at Marycrest College,

Davenport, Iowa. One sample group was composed of forty-two women who had graduated from a Catholic parochial high school the previous year; the other was composed of forty-two women who had graduated from a public high school the previous year.

The data was gathered through the use of the Fundamental Interpersonal Relations Orientation-Behavior Scales. The testing instrument was designed to measure expressed and wanted inclusion, expressed and wanted control, and expressed and wanted affection.

The FIRO-B questionnaires were mailed to the 84 freshman women on December 7, 1972. A total of 50 completed questionnaires were returned and used in the subsequent analysis, a 60 percent response.

The analysis of the data was done by using a two-tailed z-test at a .05 level of significance to test the difference between the sample means on the six FIRO-B Scales. The critical region involved in the testing was \( |z| > 1.96 \). The difference between mean responses to the nine questions in each of the FIRO-B Scales was also analyzed with a two-tailed z-test, yielding a critical region of \( |z| > 1.96 \).
Summary of the Findings

The major findings of the study are reported in the following section. The results of the analysis of the questions in a scale are included with the results of the difference between mean scores on that scale when significant.

1. The difference between the mean scores of the two sample groups on the Expressed Inclusion Scale was found to be statistically significant at a .05 level of significance. The mean score of the Catholic parochial school educated women was 6.61, while the public school educated women scored 5.37 on a scale ranging from 0 - 9 (0 being the lowest level of expressed inclusion behavior and 9 being the highest). The difference between mean responses to questions 1, 9, and 13 of the Express Inclusion Scale were statistically significant for the two samples at a .05 level of significance, with the Catholic parochial educated women exhibiting a higher level of expressed inclusion.

2. The difference between the mean scores of the two sample groups on the Wanted Inclusion Scale was not statistically significant at a .05 level of significance. However, for all nine questions in the scale, there was a consistent difference between mean responses, with the Catholic parochial school women exhibiting a somewhat higher level of wanted
inclusion. The difference between mean responses to questions 34, 37, 42 were statistically significant at a .05 level.

3. The difference between the mean scores of the two sample groups on the Expressed Control Scale was not statistically significant at a .05 level of significance. There were also no questions in the scale for which there was a significant difference in mean responses at the .05 level. But the Catholic parochial school educated women consistently responded at a somewhat lower level of expressed control on all nine questions.

4. The difference between the mean scores of the two sample groups on the Wanted Control Scale was not statistically significant at a .05 level of significance. The difference between mean responses of questions 20 and 24 were statistically significant at a .05 level of significance with the Catholic parochial educated women exhibiting a lower level of wanted control. However, there was no consistent direction of variation in mean responses for the other seven questions in the Wanted Control Scale.

5. The difference between the mean scores of the two sample groups on the Expressed Affection Scale was not statistically significant at the .05 level of significance. There were also
no significant differences in mean responses to any of the nine questions in the Expressed Affection Scale at a .05 level of significance. However, the mean responses of the Catholic parochially educated women consistently showed a slightly higher degree of expressed affection for all nine questions.

6. The difference between the mean scores of the two sample groups on the Wanted Affection Scale was not statistically significant at a .05 level of significance. The difference between mean responses to question number 29 was statistically significant at a .05 level of significance. However, the other eight question responses did not exhibit a consistent direction of difference between mean responses.

Conclusions

Based upon the data in this study, the following conclusions concerning the effects of Catholic parochial school education on the interpersonal behavior of its women students, as compared to the interpersonal behavior of public school educated women, seem warranted.

1. The most important conclusion is that Marycrest College freshman women who have received a Catholic parochial school education are included and include others in social groups, activities, and organizations, more frequently than is the case of public school educated freshman women.
at Marycrest College.

2. There is a strong, but not significant tendency for Catholic parochial school educated freshman women to want to be included in social groups, activities, and organizations more often than public school educated women at Marycrest College.

3. There is a slight, but not significant tendency for Catholic parochial school educated freshman women to exert less controlling behavior or be the dominating person in a social situation than is true of the public school educated freshman woman at Marycrest College.

4. There appears to be little, if any difference in the amount of control wanted in social situations by the Catholic and public educated freshman women at Marycrest.

The significant differences in responses to questions 20 and 24 may have been a result of the Catholic parochial school educated sample's dislike of the particular words "take charge" and "control my actions".

5. There appears to be no difference in the amount of
affection exhibited in social situations by the Catholic parochial and public school educated freshman women at Marycrest College.

6. There appears to be no difference in the amount of wanted affection in social situations by the Catholic parochial and public school educated freshman women at Marycrest College.

The significant difference between responses to question number 29 apparently had something to do with that question being the first one in the questionnaire dealing with wanted affection, and the triggering of different initial response from the two sample groups.

Need for Further Study

The findings of this study suggest that some differences in behavior may be a result of a difference in the educational background of a person. There is a definite need for further research along the following lines:

1. Since this study was conducted at a Catholic private College, a similar and maybe a broader study should be conducted at a larger university or in a local community to see if the same conclusions would follow.
2. Since a study of the behavior of Catholic educated and public school educated men was not considered in this study, further research should include them.

3. An attempt should be made to assess the importance of the difference in inclusion behavior exhibited by Catholic parochial school educated persons and public school educated persons. Can such a difference in behavior be responsible for fostering some kind of socio-religious segregation in society, or does the difference represent a socially desirable behavior that is being learned in Catholic schools and is not being learned nearly as well in public schools?
BIBLIOGRAPHY

Books


Dissertation

Publications of Professional Organizations


**Periodicals**


**Test Manual**

APPENDIX

TEST INSTRUMENT AND
FOLLOW-UP LETTER
FIRO-B SCALES are available from:

CONSULTING PSYCHOLOGISTS PRESS, INC.
577 College Avenue
Palo Alto, California 94306