The Effects of School Desegregation on Need Achievement of Catholic High School Girls

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THE EFFECTS OF SCHOOL DESEGREGATION
ON NEED ACHIEVEMENT OF CATHOLIC HIGH SCHOOL GIRLS

by

Constance S. Clune

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the Degree of
Master of Arts

June
1967
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Life

Constance S. Clune was born in Chicago, Illinois, on January 28, 1943.

She graduated from St. Mary High School, Chicago, Illinois in June, 1960. She attended Loyola University from which she graduated in June, 1964 with the degree of Bachelor of Science in the Social Sciences (Honors).

The author began graduate studies in psychology at Loyola University, Chicago, in July, 1964. As part of her training she served a clerkship in Clinical Psychology at Downey, Illinois Veterans' Administration Hospital, from June to October, 1965. She is presently serving an internship in Clinical Psychology at Loyola University Guidance Center.
Acknowledgements

The author wishes to express appreciation to her advisor, Dr. Frank J. Kobler, and to Dr. Patricia M. Barger, Dr. Ann Heilman, and Dr. Patrick Laughlin for their help.

Thanks go, also, to Brother Maurice who was on the Catholic School Board of Education when this study was initiated. Without his attention and assistance this thesis could not have been done.

The author is also grateful to Cheryl Armstrong, Harold Mosley, and Allen N. Shub who contributed their time and effort as co-examiners.

Finally, but most sincerely, the author thanks the principals, teachers, and students of the schools studied who rearranged their schedules and, in general, were so cooperative in facilitating this research. To protect their privacy these many helpful people must go unnamed.
Chapter I

Introduction and Statement of Purpose

Research in the area of n Ach can be said to have begun at the Harvard Psychological Clinic with Henry Murray's development of the Thematic Apperception Test in the 1930's. There he and his colleagues introduced a procedure by which human motives could be assessed by inferring their strength from stories told to pictures. (Merbaum, 1961).

Convinced by previous studies that motives could be experimentally aroused by manipulating external conditions, McClelland, using the thematic apperception method, centered his research on n Ach, developing a "miniature theory" around it. He came to define n Ach as a "higher order psychogenic need which at least functions like those at a simpler psychological level" (McClelland, Clark, Roby, Atkins, 1949). By this he meant that the same effects were seen in TAT productions by manipulating conditions of ego-involvement and of success and failure, as were observed when subjects were deprived of food.

In the latter case he and Atkinson (1948) had seen that the stories of subjects deprived of food for one, four, or sixteen hours were distinguishable. The number of food
deprivation themes, characters expressing a need for food, and actively instrumental in overcoming deprivation, all increased with increasing deprivation. In the same manner, then, n Ach, defined by an "achievement score" derived from a thematic test increased progressively, after tasks were performed in the following conditions: relaxed, neutral, failure, success followed by failure (Murstein, 1963).

Since McClelland's beginning research numerous studies of achievement motivation, a generic definition being "competition with some standard of excellence" (Atkinson, 1958), have been conducted. However, relatively few have dealt with Negro subjects and, to date, no study of the type reported here has been published.

Most discussion and literature which is pro-racial integration has until recently considered the idea of forced segregation from the viewpoint of being wrong and detrimental. Even the Supreme Court decisions regarding the legality of segregation have for the most part adapted this negative framework. In 1954 when the Supreme Court delivered one of its first major decisions regarding the unconstitutionality of forced racial segregation (Brown v. Board of Education of Topeka) Chief Justice Warren explained the opinion by refer-
ring to "intangible factors" which excluded the doctrine of "separate but equal" from a place in the field of education.

He appealed to "psychological knowledge" and "modern authority" saying that,

segregation of white and colored children in public schools has a detrimental effect upon the colored children. The impact is greater when it has the sanction of law; for the policy of separating the races is usually interpreted as denoting the inferiority of the Negro group. A sense of inferiority affects the motivation of a child to learn. Segregation with the sanction of law, therefore, has a tendency to (retard) the educational and mental development of Negro children and deprive them of some of the benefits they would receive in a racially integrated school system.

Reference is made to Sweatt v. Painter (339 U.S. 629 (1950) and McLaurin v. Oklahoma State Regents (339 U.S. 637 (1950), previous school segregation cases, in which "intangible consideration---incapable of objective measure-

ment" were cited, i.e., a student's "ability to study, to engage in conversation with other students, and, in general, to learn his profession." These positive considerations had not at that time, however, been scientifically researched as had some of the negative effects of segregation. They were deemed common sense and no appeal to psychological authority was made. This is true still. Katz (1964) points out that little research has been done regarding the effects of school desegregation on students in terms of personality changes and fluctuations in academic achievement; much of the evidence is only inferential.

The aspect of the question of race relations studied here is just this other facet of the opinions cited above, the good beneficial effects of integration. The specific problem being considered is the effect of school desegregation on the motivation of Negro girls to achieve. The hypothesis to be tested is that need achievement (N Ach), as measured by the Edwards Personal Preference Schedule (EPPS), strengthens or increases among Negro girls as they attend schools where there is an increasing proportion of their race in predominantly white schools.
Chapter II

A Review of the Literature

Merbaum (1960; 1961) compared n Ach in Negro and white children. In both studies, using McClelland's method she found that white children of elementary and high school age had higher n Ach scores than Negro children of similar age, education, and socioeconomic status. One of the explanations given for this is based on studies showing that Negro children are raised in a more highly permissive manner than white children (Davis and Havighurst, 1946).

Radkin and Kansii (1965) would disagree with this to some extent. They believed that the Negro mother feels she must suppress her children's internal impulses and shield them from a threatening world. The small child is so "protected, controlled, shielded, and suppressed" that his potential for inner control is not developed. In the final analysis, although the child-rearing practices are interpreted differently by Davis and Havighurst and Radkin and Kansii, the results are similar to what Mussen (1953) and Riesman (1955) find. Namely, substantially fewer and weaker demands for independence and achievement are made on Negro children by their families.
Tying together this research on child-rearing practices and the findings (Merbaum, 1960; 1961) that Negro children obtained lower n Ach scores than white children is Winterbottom's study (1958) which showed that parents of children with high n Ach scores made greater demands on them than did parents of children with low n Ach scores. McClelland (1955) gave further evidence that severity of independence training in childhood is positively correlated with achievement imagery.

Merbaum's studies involved children of lower socioeconomic status. Although her independent variable was race, studies in which socioeconomic status was the independent variable provide further explanation for the racial differences in n Ach. Lindzey (1952) stated that "a certain amount of the variation in any TAT (fantasy) production can be accounted for by the fact that an individual has grown up in a given milieu or social role." In relation to such fantasy material regarding need achievement, evidence supports Lindzey's statement.

Dowan (1956) found that members of lower and middle class groups of high school students had similar n Ach scores after failure in a task with a monetary reward. However, when
n Ach measures followed failure in a task where an abstract norm was used as the "deprivation" condition, the scores of the lower class subjects dropped while those of the middle class subjects remained the same. It was concluded that achievement motivation is modified by the cultural context in which it develops. Rosen (1958) and Ricuitti and McClelland (1958) did research which provided similar results.

In our country it appears that Negroes, often even if classified as upper middle class by means of education and salary, are distinguished from the white population in a way which further defines their social role, simply by virtue of their race.

Merbaum points out that this distinguishing-grouping results in a similarity of life experiences, such as child-rearing practices mentioned above, which will contribute several factors to the homogeneity of personality structure within the group. Further, later day-to-day experiences are more similar among Negroes than between Negroes and whites. Each race would have its own cohesive expectancies regarding the consequences of their actions in certain situations. In the area of independence and desire to achieve, for example, it was seen that Negro parents give less encouragement. This
can be explained by the fact that they have found less opportunity for such traits being rewarded. White parents, on the other hand, view these characteristics as ways of "getting ahead."

Reisman (1955) wrote that "every society seems to get, more or less, the social character it needs! This is likely to be a possibility for distinct subgroups within a society too." (Merbaum, 1961).

In the process of racial integration each race, then, is exposed to a system of attitudes, opinions, and values which differ from its own. In the case of school desegregation there is, initially at least, a marked increase in the proportion of white peers and/or authorities with which the Negro child is faced. The United States Commission of Civil Rights (1962a; 1962b) has said that almost invariably the minority child is confronted, also, with higher educational standards than prevail in segregated Negro schools. It appears from the social psychology research literature on "group influence" that both aspects of the Negro's experience - change in the racial environment with its concomitant cultural value implications and exposure to relatively high academic standards - will have important influences on his motivation.
Social scientists have become more and more aware of the intimate relationship between a person's thoughts and actions and the social matrix in which he exists ---- every person depends upon others for his view of the world around him, for his standards of right and wrong, and for the establishment of his ideals and aspirations. (Cohen, 1964).

A study by Deutsch and Collins (1951) is an example of how social contact influences attitudes. It was aimed at determining the effect on the attitudes of whites toward Negroes of living in interracial housing projects. The results of detailed interviews with a sample of housewives in each of four housing projects, two segregated and two integrated, were amplified and replicated later in a study by Wilner, Walkley, and Cook (1955). They found that "white occupants of the integrated housing projects were likely to have more positive attitudes toward Negroes and to have more contacts with them than those who lived in segregated projects." (Cohen, 1964). Regardless of what kind of comparisons were made in terms of original attitude, motives for moving into the project, social and political characteristics, etc., occupants of integrated housing showed less prejudice.

Sherif's (1935) classic experiment with the autokinet effect showed that when an individual who has developed his
own norm is put into a group with other individuals who have developed their own norms, the norms tend to converge. Internal or social factors seem to dominate the perception of stimulus situations. Shared frames of reference are built up through contact between individuals. People influence each other in setting a common norm or frame of reference which each of them uses as a standard for perceiving the world. Sherif's study, of course, involved an ambiguous situation, a factor which would more easily facilitate a person's tendency to shift.

Another classic experiment that concerned individuals' resisting or yielding to "group pressures" was done by Asch (1951). This time the correct response was rather clear-cut. An experimental subject was put into a group in which all the other members were confederates of the experimenter. The group members were each asked to make some perceptual judgment. The "shills" unanimously made obviously incorrect judgments and the subject was faced with the problem of what weight to give the great odds which contradict the evidence of his senses. Although the majority of the naive subjects remained independent a substantial minority (about 40 per cent) yielded to the group and modified their judgments in
accordance with the majority. There appears to be, even in such obviously dissonant situations, a need to conform to the expectations of others.

The above experiment dealt with individuals, one at a time, and with situations which were quite contrived and presumably not too important to the subjects' everyday life. Cartwright and Zander (1962) quote Bill Mauldin's book *Up Front* in giving an example of how men in combat outfits during the war knew what was expected of them and readily accepted the group pressures to behave in a certain way while they were group members.

This illustrates the distinction made by Deutsch and Gerard (1955) between normative social influence, an influence to conform to the positive expectations of others and informational social influences, an influence to accept information contributed by others as evidence of reality. The former type of social influence typifies the phenomenon Mauldin spoke of as well as that considered in this research study.

In regard to the development of the more subtle motivation to achieve which would develop under a "normative influence" it was seen above that members of a particular culture
"learn from one another," indicating the influence of the group. Much of the literature, as well as the overt behavior experiments discuss conformity in terms of group expectations. There are other intertwined factors, of course, which affect the way a person will respond to such expectations, ego-involvement in the group, the degree of group consensus perceived by the individuals, the probability of successful conformity, among many others which even now do not appear to be clearly defined. This concept of ego-involvement is of prime importance here (Lewin, et al., 1943).

In studies with white subjects it has been shown that individuals are responsive to the standards of those with whom they desire to associate (reviewed by Bass, 1961; and Katz, 1964; French and Raven, 1952; Thiabaut and Kelly, 1959). That Negro children want to be friends with white peers was shown by Harowitz (1936), Radke-Yarrow, Sutherland and Rosenberg (1950) and Radke-Yarrow (1958). It seems a logical inference that the achievement motivation of a Negro child in a desegregated school would be influenced favorably by his white classmates. However, Criswell (1939) suggested that Negro children tend to adapt at least the scholastic norms of
the white majority group only when their desire for acceptance is not inhibited by or destroyed by sustained unfriendliness. Otherwise, there is "an acceptance of white prestige but (the Negro children) increasingly withdraw into their own group as a response to white rejection. The basic conditions for being positively influenced by the group are then gone.

Katz (1964) cites Dittes and Kelley (1956) as giving experimental support for Criswell's supposition when they found with white college students that private as well as public adherence to the attitudinal standards of a group were highest among persons who had experienced a fairly high degree of acceptance, with the possibility of even further acceptance while those who had experienced a low degree of acceptance exhibited little adherence to group norm.

The bulk of studies on the racial attitudes of white school children in the North, indicated that at an early age they expressed strong preference for their own racial group (reviewed by Katz, 1964). The role of teachers should be considered here since their shows of approval or disapproval toward Negro students are more structured and are visible, in terms of example, to all the students. In other words, the
white children themselves are still being "socialized" and when "the institution" sets a particular norm and expectation with an attitude of acceptance, these students will allegedly be influenced to conform.

These potential negative feelings by the white students are considered as a basic characteristic of the present study's independent variable. The n Ach scores of Negroes in schools of varying percentages of Negro enrollment are being studied here. It is believed that Negroes in predominantly white schools are exposed to more consistently higher achievement motivation standards or norms. And, yet, within these same schools, if there is a substantial number of their own race, it will tend to lessen the effects of a possible social rejection by white students which would cause feelings of inadequacy and inferiority. This, in turn, according to a summary by the Group for the Advancement of Psychiatry (1960) of the observations of several investigators of Negro personality "would seriously affect the levels of aspiration, the capacity to learn, and the capacity to relate in interpersonal relations." (Katz, 1964).
The Research Tool

Previous studies have employed McClelland's method of scoring thematic imagery. This was not practical for this study in terms of the schools' objections to projective techniques.

In this investigation the Edwards Personal Preference Schedule was used to assess need achievement defined generically as "competition with some standard of excellence." (Atkinson, 1958). More specifically, according the manual, the EPPS's achievement scale assesses the need in a person "to do his best, to be successful, to accomplish tasks requiring skill and effort, to be a recognized authority, to accomplish something of great significance, to do a difficult job well, to solve difficult problems and puzzles, to be able to do things better than others, and to write a great novel or play."


The EPPS was designed primarily, according to the manual to provide "quick and convenient measures of a number (15) of relatively independent normal personality variables. Besides Achievement the EPPS measures Deference, Order, Exhibition, Autonomy, Affiliation, Intraception, Succorance, Dominance, Abasement, Nurturance, Change, Endurance, Heterosexuality,
and Aggression.

Measures of test consistency and profile stability are also provided.

The statements in the EPPS and the variables they purport to measure are based on a list of manifest needs suggested by H. A. Murray. These are the same needs on which Murray centered his scoring of the TAT.

Normative data for the EPPS has been developed for two groups of subjects: college students and adults. The college sample was composed of 749 women and 760 men who were high school graduates with some college training. A wide variety of majors were represented.

The general adult sample consisted of 4,031 males and 4,932 females who were household heads and members of a consumer purchase panel used for market surveys. Over 1,100 counties in 48 states were represented. Percentile norms were developed for each sex and means and standard deviations were found for each of the 15 variables the Edwards purports to measure.

Although differences were found between adult and college norm samples the differences between sex groups were in the
same direction for both samples.

As Anastasi (1961) says "the validity data reported in the manual are so meager and tangential as to be virtually negligible." However, some studies have been done which give some validity information for the various scales.

Since "pure criterion" measures are usually not available for psychological inventories self ratings or ratings by peers have frequently been substituted. John Man (1958) administered the EPPS, a self-rating scale assessing the same variables, and an ideal-self scale assessing the same variables as the Edwards to graduate students. He found the EPPS did correlate positively with self ratings on variables it purports to measure but does not correlate with ideal-self ratings on these variables.

Weiss, Wertheimer, and Groesbeck (1959) found a correlation of .42 between need achievement scores and grade point average; the multiple correlation when combined with an academic aptitude test was .64.

G. Lange, et al (1962) found the schedule to differentiate between high and low achieving freshmen. Using engineering students Krug (1959) duplicated earlier studies of such
students which found that overachievers scored significantly higher than underachievers on the Achievement Scale as well as the Endurance and Order scales.

In a study with 1,638 high school students Klett (1957) found significant differences between various groups which "lent considerable face validity to the needs as defined by Edwards."

The construct underlying the EPPS Need Achievement scale was investigated by Worell (1960) who found that high-scoring subjects showed significant superiority over low-scoring subjects in two verbal learning tests.

Edwards found reliability coefficients by the split half method in the high seventies and low eighties. Test-retest reliability coefficient based on records of a group of 89 students who took the EPPS twice, a one week interval separating the two administrations, ranged from the high seventies to the mid-eighties.

The EPPS, then, seems to be adequately reliable for a personality test. And the achievement scale has reasonable validity at least when actual achievement is used as the criterion. However, one question which must be resolved regards the comparison of the Edwards and the TAT. As mentioned above, both of these tests were based on Murray's manifest need system. Yet, of the few studies published which directly compare the TAT and the EPPS, none shows a
significant correlation of the measures. Dilworth (1958) made a comparison of scores on the fifteen EPPS variables with stories on ten TAT cards. Although some correlation was found it was not statistically significant. And Bendig (1958) found little or no relationship between TAT n Ach and need achievement scores from the EPPS.

This lack of correlation may well mean, as Melikian (1958) suggested that the two instruments are tapping different levels or aspects of the achievement motive.

In a study conducted with Arabic speaking students in American University in Beirut he found an insignificant r (.16) between the EPPS and the McClelland thematic scores. He explains, as does McClelland himself (1953) that the achievement motive "like all motives . . . is rather complex."

One theoretical distinction made is between "the hope for success" and "the fear of failure." An inspection of the items on the EPPS which measure achievement motivation "refer to competition with some standard of excellence similar to 'the hope for success'." The implication is that the imagery index taps both of these aspects. Also, while the responses to the Edwards' items "are made to clearly structured stimuli . . . the imaginative stories are responses to a variety of cues . . . internal . . . external . . . in the environment and the pictures, as well
as experimentally induced cues" (Melikian, 1958).

This reduces to the probability that the two measures differ in reflecting a more manifest or a more latent level respectively. It is this former measure of need achievement which will concern us here.
Chapter III
Procedure

Negro girls from each of five Catholic high schools were given the Edwards Personal Preference Schedule which has a scale to assess need achievement. These five schools were distinguished by the proportion of Negro students enrolled. The available schools, as determined by several conferences with an official of the Catholic School Board of Education, were not such as to meet the original hope of giving sufficient coverage to the entire continuum from 1% to 100% Negro enrollment. Instead, the five schools had 6%, 14%, 24%, 78% and 99+% Negro populations respectively. It was believed that making finer discriminations at the bottom of the range would be more meaningful in the long run since school administrators have found that once a certain point (not as yet specified exactly) in the Negro-white ratio is attained a school rapidly becomes entirely Negro.

Catholic schools were chosen for three reasons:
1. The author was more familiar with Catholic schools in the city and with the policies of the Catholic school board. It was believed that the thesis' being done in a Catholic university would be a factor which would expedite the gain of permission to enter the school.
2. Discussion with an official of the diocesan school board confirmed the author's belief that Catholic high schools in the city are not as rigidly controlled by the "Go to school in your district" dictum as are the public schools. Although the majority of a parish's eighth grade class may eventually go to the high school that is closest or which is staffed by their grammar school's religious order, there is no written policy which would result in "de facto segregation" by neighborhood. As a result, the student body of a Catholic high school will not of necessity be as great a simple reflection of the surrounding neighborhood as would a public school. There is a better chance that the white students in the five schools sampled in this study will be comparable in socioeconomic level in spite of the percentage of Negroes in the school. Thus, the Negroes in each integrated school will potentially be in contact with qualitatively similar cultural influences.

3. Catholic schools are staffed by members of religious orders who are assigned to their positions as they are needed in a particular place. There has been much publicity about how predominantly
Negro public schools are staffed by inexperienced teachers and provided fewer and poorer educational facilities and materials. Whether or not this is so is irrelevant here except that the use of Catholic schools was some precaution against some possible inequality of the schools.

The sex of the subjects was controlled for pragmatic as well as theoretical reasons. In the normative sample there was a significant difference \((p = .01)\) between the mean achievement scores of college men and women on the EPPS (Manual, 1959). Other studies have been reported which show similar sex differences on the Edwards (Allen, 1957; Klett, 1957). Investigators using the TAT have found such differences also (Veroff, 1953; Field in McClelland, et al, 1953; Cofer and Appley, 1964; Murstein, 1963). These considerations suggested the use of only one sex in this study. Girls were chosen because their schools presented a greater range in terms of per cent Negro enrollment.

Originally, 48 students were chosen from each school for this study. Although alternate subjects were named in the event of absences an uneven number of subjects resulted, nevertheless, due to random causes. Thus, there was a total \(N\) of 229 divided as follows among the schools of increasing Negro population: 46, 44, 45, 47, and 47.
It was hoped that the five groups of subjects could be matched according to number of years in school (upper classmen and under classmen). Within these categories a matching of subjects on intellectual ability (high, average, low) and a further division and matching on past academic achievement (high, average, low) was attempted.

An IQ of 110 and higher defines high ability; and low ability is designated by an IQ of 89 and below. The three tests used in the schools to provide these data were the Otis Quick Scoring, the SRA, and the California Test of Mental Maturity.

These measures had already been obtained in the individual schools and were available in the students' records. The numerical breakdown of subjects for each school on this variable of intellectual ability can be seen in Table 1. The means and standard deviations for each of the five samples are reported in Table 2.

A lack of balance between the "High" and "Low" IQ groups is seen within the schools of lowest Negro enrollment. In schools A and B this results in a lowered mean IQ while school C has a higher mean IQ. In schools D and E the IQs have a greater variance because they are more evenly distributed along the entire Low to High range, and the means are closer to the expected population mean. Obviously, in the first three schools there
Table 1

The Distribution of Students with High, Average, and Low IQ's Within Each School

<table>
<thead>
<tr>
<th>School IQs</th>
<th>A (6% Negro)</th>
<th>B (14% Negro)</th>
<th>C (24% Negro)</th>
<th>D (78% Negro)</th>
<th>E (99% Negro)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (110+)</td>
<td>5</td>
<td>3</td>
<td>17</td>
<td>14</td>
<td>16</td>
<td>55</td>
</tr>
<tr>
<td>Average (90-109)</td>
<td>31</td>
<td>24</td>
<td>26</td>
<td>22</td>
<td>16</td>
<td>119</td>
</tr>
<tr>
<td>Low (-89)</td>
<td>10</td>
<td>17</td>
<td>2</td>
<td>11</td>
<td>15</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>44</td>
<td>45</td>
<td>47</td>
<td>47</td>
<td>229</td>
</tr>
</tbody>
</table>

were smaller populations from which to choose the desired samples.

It is hoped that the "overloading" in the "Average" category will help to alleviate the effects of the intellectual

Table 2

Means and Standard Deviations of IQs for Each School

<table>
<thead>
<tr>
<th>School</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean IQ</td>
<td>95.76</td>
<td>93.11</td>
<td>106.2</td>
<td>101.4</td>
<td>102.09</td>
</tr>
<tr>
<td>S.D.</td>
<td>11.29</td>
<td>10.49</td>
<td>12.65</td>
<td>13.0</td>
<td>14.76</td>
</tr>
</tbody>
</table>
disparity. If the results indicated that the IQ inequalities may be disturbing the effect of the independent variable on the dependent variable, it was planned that statistical analysis to be described below would be made. A close look at this variable is in order since, among others, Goodstein and Heilbrun (1962) in using the n Ach scale of the EPPS to predict academic achievement found the level of intellectual ability to be an important control. Also, it would seem that one's intellectual ability would provide an index of how well a person could judge and adopt a system of values and desires or motivations.

On the assumption that past experience will affect one's future aspirations, students representing a cross section of possible past records of academic achievement within each category of intellectual ability were desired. High achievers include those subjects who have a cumulative average of B to A. Those students having cumulative averages of C to B- are considered average achievers, and an average of C- or below distinguishes low achievers. It is realized that an "A" in one school might not be an "A" in another school. But the important point here is to classify students in terms of achievement within their own school's system since this is their standard of being "on top" or "on the bottom."

As with intellectual ability an equal number of students
in each category could not be obtained, again, due primarily to the unequal populations from which to choose in each school. In this case, however, it is believed that the school samples being used are actually a representative cross section of the school populations on this variable.

Table 3

The Distribution of Students with High Average, and Low Academic Achievement within Each School

<table>
<thead>
<tr>
<th>School</th>
<th>Past Achievement</th>
<th>A (6%)</th>
<th>B (14%)</th>
<th>C (24%)</th>
<th>D (78%)</th>
<th>E (99+)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2 (4.3%)</td>
<td>4 (9.1%)</td>
<td>14 (31.1%)</td>
<td>11 (23.4%)</td>
<td>14 (29.8%)</td>
<td>45 (19.6%)</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>28 (60.8%)</td>
<td>21 (47.7%)</td>
<td>18 (40.0%)</td>
<td>21 (44.7%)</td>
<td>17 (40.4%)</td>
<td>107 (46.7%)</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>16 (34.8%)</td>
<td>19 (43.2%)</td>
<td>13 (28.9%)</td>
<td>15 (31.9%)</td>
<td>14 (29.8%)</td>
<td>77 (33.6%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46 (100%)</td>
<td>44 (100%)</td>
<td>45 (100%)</td>
<td>47 (100%)</td>
<td>47 (100%)</td>
<td>229 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

There are other variables which one can think of as affecting the desire or motivation for achievement. McClelland and Rindlisbacher (1955), for example, found that Protestant and Jewish parents expected earlier independence from their children than did Catholic parents. In light of the research cited earlier one might consider the possibility that Catholics would, thus, have lower
achievement strivings. The question of whether \( n \text{ Ach} \) is correlated with institutionalized religion, in general, or any particular religion has not been dealt with in the literature. Yet, due to the possibilities it would be well to control for this. The majority, but not all, of the subjects in this study were Catholics but they were all receiving religious training in Catholic doctrine. The number of subjects and families who were of another religion were assumed to be randomly distributed in the five samples.

Whether there are two parents in a stable family situation, and whether the subjects and/or their parents were born in the north or south are two other variables, not dealt with in the literature, but which might be assumed or hypothesized to affect \( n \text{ Ach} \). These variables would be important in influencing a person's expectations and, hence, desire or need to achieve. However, it would be unrealistic to suppose that the school, especially those with smaller Negro enrollments, would have enough students to fulfill all the criteria asked for in terms of perfectly matched groups. Again, it was assumed that the samples chosen would be equally randomly distributed on these variables.

There are other variables which could not be controlled which one or more researchers have found to be important factors of, or covariates with, the strength of need.
Achievement. These factors include birth order which was shown by Hall and Willerman (1963) to affect the degree to which students influence or are influenced by the attitudes and norms of others. Socioeconomic status was shown by Deutsch (1960), Furneaux (1963) and Jamaur (1963) to be a determinant of conditions which affect motivation. Katz (1964) found that past success affects ideas of self worth and both of these are important in sustaining achievement motivation (Katz, 1964; Crootof, 1963; Payne and Farquhar, 1962; Bruck and Bodwin, 1962; Angers, 1960; Shaw, Edson, and Bell, 1960; Man, 1958). Feelings of belongingness and acceptance by peers and teachers (Katz, 1964), identification with an institution (Katz, 1964), level of aspiration of self and parents (Katz, 1964; Bell, 1963; Burstein, 1963; Cooper and Lewis, 1962; Schultz and Blocher, 1961; Atkinson, 1958) are still further factors shown by investigators to affect need achievement.

All of these variables must likewise be assumed to be randomly distributed in each of the samples under study.

The possibility of an examiner variable affecting the subjects' willingness to cooperate and to answer the Schedule honestly was controlled for by systematic variation. Four examiners were used, a white male, a Negro male, a Negro female, and the author, a white female. Each examiner read a set of standard instructions (See Appendix I)
and was briefed before testing began on how to answer questions the subjects might ask.

The need achievement scores of the subjects from the five schools was subjected to an analysis of variance. It was planned that, in the event of significance, Duncan's Multiple Comparisons would be used in making post hoc tests (Edwards, 1960). According to the research hypothesis the Ss from the school with 24% Negro enrollment will have the highest n Ach scores, followed by the Ss from the schools with 14% and 78% Negro enrollment. The Ss from the schools with 6% and 99+% Negro enrollment should, according to this hypothesis, have the lowest need Achievement scores.
Chapter IV

Results

When the need achievement scores of the five experimental groups were compared by means of an analysis of variance, no significant differences were found. Table 4 provides a summary of this statistical analysis.

Table 4

Analysis of Variance on the EPPS Need Achievement Scores of Negro Girls from Schools Differing in Degree of Racial Integration

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>65.71</td>
<td>4</td>
<td>14.43</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>3043.77</td>
<td>224</td>
<td>13.59</td>
<td>1.06</td>
</tr>
<tr>
<td>Total</td>
<td>109.48</td>
<td>228</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With 4 and 224 degrees of freedom an F ratio of approximately 2.40 is necessary for significance at the .05 level. The attained F ratio of 1.06 is not significant at even the .25 level, indicating that the scores achieved by the girls in the five different schools could easily have occurred by chance. The research hypothesis that need achievement scores on the EPPS would be significantly affected by the independent variable has not been upheld.
Table 5

Mean EPPS Need Achievement Scores for Each School

<table>
<thead>
<tr>
<th>School</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- 6%</td>
<td>12.76</td>
</tr>
<tr>
<td>B-14%</td>
<td>12.13</td>
</tr>
<tr>
<td>C-24%</td>
<td>13.29</td>
</tr>
<tr>
<td>D-78%</td>
<td>13.19</td>
</tr>
<tr>
<td>E-99+%</td>
<td>13.29</td>
</tr>
</tbody>
</table>

Table 5 provides the mean EPPS scores for each of the five experimental groups. Although the differences shown are not significant schools C and E have the highest mean scores. It is recalled from Table 1 that these schools had

Table 6

An Analysis of Variance on the Need Achievement Scores of 229 Negro Girls Distinguished by High, Average, and Low IQs

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>87.46</td>
<td>2</td>
<td>43.73</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>3022.03</td>
<td>226</td>
<td>13.37</td>
<td>3.27</td>
</tr>
<tr>
<td>Total</td>
<td>3109.49</td>
<td>228</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the highest number of subjects in the high IQ range. The results of an analysis of variance on the need achievement scores based on IQ grouping are reported in Table 6.

The F ratio of 3.27 is significant at the .05 level but not at the .01 level (Fs of 3.04 and 4.71 are needed respectively). When t-tests are performed, it is seen that the difference indicated by the overall F ratio can be accounted for by the high IQ group. A significant (p < .05) t score of 2.57 with 62 degrees of freedom of found when the High and the Average IQ subjects' mean EPPS scores are compared. (See Table 7.)

Table 7

<table>
<thead>
<tr>
<th>IQ</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>13.98</td>
</tr>
<tr>
<td>Average</td>
<td>12.48</td>
</tr>
<tr>
<td>Low</td>
<td>12.71</td>
</tr>
</tbody>
</table>
Chapter V

Discussion of Results

The results of the present study indicate that Negro girls do not differ significantly in their desire to achieve as a result of the Negro-white ratio of their school's population. It was noted that there was some tendency for the schools contributing the largest number of high IQ subjects to be somewhat higher in mean n Ach scores. However, even this variable did not significantly influence the results, although support was given for the assumption that intelligence affects need achievement positively. Since, in the smaller percentage Negro schools, the smaller population from which to choose an appropriate sample adversely affects complete matching of groups on certain allegedly crucial variables, in future research subjects should be matched on other than a numerical criterion set by the examiner. Perhaps matching subjects according to the sample afforded by the school with the smallest population would be a helpful alternative.

There are several considerations to be kept in mind when interpreting the results of this study. Several variables which have been suggested as possibly affecting need achievement were not systematically controlled for. These were listed at the end of Chapter III (describing the procedure). It is because of such difficulties that
others have not attempted a research project of this type. As Katz (1964) pointed out, conclusions regarding the effects of racial integration have been inferential. Pieces of research are put together to form the premises of hopefully logical conclusions. These conclusions were tested here; and, in view of the results, it might well be asked if the results of the published research were overgeneralized when they were accepted as premises of the research hypotheses. For example, Merbaum found a difference in need achievement scores for whites and Negroes by using a thematic apperception technique. It was granted that the EPPS has not been found to correlate with the more projective techniques; but it was believed that similar differences, although at another level of consciousness, would be observed with the EPPS. This assumption may be unfounded. With a more sophisticated technique, then, it may be found by a study of this type conducted here that Negro students can be differentiated on the n Ach variable. Perhaps, it is on the very level of n Ach not tapped by the EPPS which the majority makes its influence felt.

Another change which could be adopted in future research of this type revolves around the findings of McClelland and others cited above which point to the need of ego-involvement with a task and identification with a group or institution in order for a person to develop
a desire to achieve and to be susceptible to influence.

The possibility of a lack of such ego-involvement and/or ability to identify would point to a need of doing this study with younger children, before early-life experiences have had a chance to build up a resistance. It is possible that the "optimal" Negro-white ratio of the research hypotheses would be effective in influencing n Ach when it is started in Kindergarten or first grade. Integration on the high school level may not have had "enough time to work," at the right time.

It should be emphasized that this research was concerned with need achievement, described above as a complex psychological drive or motive. This is not the same as actual achievement or performance, obviously a good in itself and something which has already been shown to improve as a result of integration. The United States Commission on Civil Rights has recently (1967) published a report of conclusions of a nationwide study of integration and its effects on education (Design and data are not yet fully available). Among the numerous conclusions reached were the following:

The social class of a student's school-mates. . . strongly influences his achievement and attitudes. . . Regardless of his own family background, an individual achieves (underlining added) better in schools where most of his fellows are from advantaged backgrounds than in schools where most of his fellows are from disadvantaged
backgrounds. The relationship... grows stronger as the student progresses through school (p. 203).

There is also a relationship between the racial composition of schools and the achievement and attitudes of most Negro students, which exists when all other factors are taken into account.

(a) Disadvantaged Negro students in school with a majority of disadvantaged students achieve better than Negro students in school with a majority of equally disadvantaged Negro students.

(b) Differences are even greater when disadvantaged Negro students in school with a majority of disadvantaged Negro students are compared with similarly disadvantaged Negro students in school with a majority of advantaged white students. The difference in achievement for 12th grade students amounts to more than two entire grade levels (p. 204).

It was also noted, as suggested above, that the earlier racial isolation is broken in a child's educational experience the better the Negro child's academic achievement and aspirations as well as his attitude toward the white race.

Finally, a factor which may have resulted in a lack of differentiation on this psychological variable was the choice of adolescent girls attending private girls' high schools. This could very easily be a pre-selection of subjects already high on the variable of n Ach since their choice of school reflects social ambition and upward mobility. As a result, it is quite possible that the subjects of this study do not have "a great distance to go" in adopting the motives of their white peers.
Chapter VI
Summary

The purpose of this thesis was to study the effect of school desegregation on the desire of Negro girls to achieve.

Merbaum (1960; 1961) compared n Ach in Negro and white children. In both studies, using a thematic apperception technique propounded by McClelland, she found that white children of elementary and high school age had higher n Ach scores than Negro children of similar age education, and socioeconomic status. Davis and Havighurst (1946), Mussen (1953) and Riesman (1955) have pointed out cultural and racial differences in child-rearing regarding independence and achievement demands made by parents; white parents are more demanding in this respect. According to Winterbottom (1958) stronger demands of this nature are positively correlated with higher n Ach scores.

Bass (1961); Katz (1964); French and Raven (1952); and Thiabaut and Kelly (1959) have all indicated that individuals are responsive to the standards of those with whom they desire to associate. That Negro children want friendship with white age mates was shown by Horowitz (1936), Radke-Yarrow, Sutherland and Rosenberg (1950) and Radke-Yarrow (1958).

The logical inference from the above which provides the
hypothesis for this study is that need achievement, seen to be stronger in white children, will increase among Negro girls as they attend schools where there is an increasing proportion of their race in predominantly white schools. It is believed that a larger percentage of Negro students, up to 50%, will diminish the possibility that feelings of inferiority or inadequacy, which could inhibit the adoption of the majority standards, will develop.

To test the research hypothesis 229 female subjects from five Catholic high schools differing in Negro-white enrollment ratio (6%, 14%, 24%, 78%, and 99+% Negro respectively) were administered the Edwards Personal Preference Schedule which has a scale measuring need achievement. Matching for age, years of education, past academic achievement, and IQ were attempted.

A single factor analysis of variance model was employed with regard to the achievement scores of the five experimental groups. It was found that the subjects in the five schools did not differ significantly on this measure. The research hypothesis could not be accepted.

An analysis of variance followed by appropriate t-tests applied to the n Ach scores when the subjects were divided according to high, average and low IQs indicated that intelligence did have an effect on the desire to achieve as measured by the EPPS.
In conclusion, it was suggested that further research regarding the effect of integration on the desire to achieve should be done in the primary grades. This could be done to test the possibility that negative inter-personal experiences before high school will build up a resistance to the Negro youngsters' ability to identify with and adopt the values and standards of the white majority. Integration, starting in kindergarten and first grade would appear desirable in offsetting this.
Abstract

To test the hypothesis that need achievement, as measured by the EPPS, strengthens or increases among Negro girls as they attend schools where there is an increasing proportion of their race in predominantly white schools, 229 subjects from five Catholic high schools differing in Negro-white enrollment ratio were tested. Matching for age years of education, past academic achievement, and IQ were attempted but found unfeasible.

A single factor analysis of variance model was employed with regard to the achievement scores of the five experimental groups. It was found that the subjects in the five schools did not differ significantly on this measure. The research hypothesis could not be accepted.

An analysis of variance applied to the n Ach scores when the subjects were divided according to high, average, and low IQs indicated that intelligence did have an effect on the desire to achieve as measured by the EPPS.
APPENDIX A

Instructions to be Read
By Examiner

I've asked you to meet with me in order that you may take part in a research study being done at Loyola University. I'm interested in some of the likes, dislikes and feelings of teen-aged girls and I'm going to several high schools in the city for this purpose.

I have a questionnaire that I would like you to answer. I'll explain the directions for this in just a moment. But first I want to promise you that none of your answers will be given to anyone here at the school. Be free to say what you really feel or think. I'll ask you to put your name on the answer sheet now but when all the records, from all the schools, are in, the names will be taken off and replaced by a number.

Here, then, is the questionnaire. Let's go over the instructions quickly.

(READ INSTRUCTIONS FROM EPPS, PRINTED ON COVER OF TEST)

You have about 50 minutes to complete this booklet. You shouldn't have to rush but do work steadily. And remember, this isn't a test in the usual sense of the word; there are no right or wrong answers. Different people feel and think differently and what I'm interested in is what you feel and think.

Since there won't be much time at the end I want to thank you beforehand for cooperating in this study and helping us out.
BIBLIOGRAPHY


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The thesis submitted by Constance S. Clune has been read and approved by the director of the thesis. Furthermore, the final copies have been examined by the director and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

June 6, 1967

Signature of Adviser