A Discriminative Scoring System for the Tat: An Investigation

Thomas Leo Qinn
Loyola University Chicago

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A DISCRIMINATIVE SCORING SYSTEM FOR 
THE TAT: AN INVESTIGATION

by

Thomas Leo Quinn

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

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CHAPTER I

INTRODUCTION TO THE PROBLEM

One of the chief problems which faces every religious order is the recruitment of new candidates to fill and expand its ranks and thus enable it, among other things, to carry on the work which it has elected to perform. Literally thousands of persons apply for admission to the religious life each year, and it is the task of religious superiors to decide which of them shall be given the opportunity to pursue their vocational choice and which of them shall be refused admission to the religious life because they are found wanting.

It may happen, for example, that a candidate may change his mind between the time that he has made application and the scheduled date of his entrance into the novitiate, the initial training house of religious candidates. He may, on the other hand, be barred because of a canonical impediment (e.g., illegitimacy in some religious orders); he may be lacking in supernatural motivation; he may not have the necessary physical stamina for living the type of religious life characteristic of a given congregation; he may not be sufficiently intelligent; or he may be needed at home to care for his aged parents. All of these difficulties and many more are each a sufficient reason for eliminating a person as a possible candidate in a religious congregation. But when all these difficulties have been overcome, a candidate must still
be judged in the light of his personal qualifications. These personal qualifications may be expressed in different terms such as maturity, stability, adjustment, or control; but there is at least general agreement on the part of religious superiors that a candidate must have a basic personality integration or, put negatively, that certain psychological factors in a personality render him unsuitable as a candidate for the religious life.

Religious superiors do not want to admit a candidate who does not show promise for the religious life nor to accept a doubtful candidate because the religious life might benefit him more than would the life of a secular. They do not look favorably upon the principle that a doubtful candidate should be given the benefit of the doubt. The religious community has rights just as well as has the candidate; and it seems a more fundamental working principle that the common good of the religious community should prevail over the good of an individual, and particularly when the latter is not as yet a member of the community. The doubtful candidate is liable to prove a problem from the very day of his entrance into the novitiate and will require a disproportionately large amount of the novice master's time, to the detriment of the other novices who would profit more from his counsel and direction. The primary objective of a novitiate is not to test the suitability of a candidate, much less a doubtful candidate, but rather to train novices in the following of Christ through the practice of the evangelical counsels in the manner that is characteristic of a given religious order as outlined in its Rules and Constitutions. A novice master has the right to assume that a candidate upon admission is suitable material with which
to work. It is true that life in the novitiate tests an aspirant's suitability, but this testing is only a corollary flowing from the training given in the novitiate. If a candidate proves to be a psychological problem for the novice master, such a problem impairs the essential function of the novitiate which is the training of a candidate in the practice of the religious life.

Furthermore, psychologically unstable individuals are difficult to live with, and it seems unfair that such persons should be permitted to enter and to disrupt the peace and harmony of the community life of the novitiate. Then finally there is always the distinct possibility that the demands of the religious life will only increase the psychological difficulties of an unstable personality to the point where the individual will have to leave the religious life or will have to be removed from the community and institutionalized. Any of these possibilities involves an unnecessary expenditure of time, effort, and money on the part of the religious congregation and so, if it is possible, they should be avoided at the time the undesirable candidate makes application for admission.

From the point of view of the candidate himself, it is also desirable that he discover whether he is suited to the religious life rather than have him enter for a time and then find that he does not belong there. It is easier for him to accept this viewpoint on natural and supernatural grounds at the time he makes application when he does not as yet have a position to protect. To leave religion, even shortly after admission, involves a loss of self-esteem, a fear of criticism on the part of others, the thought of failing one's friends and one's
family, and many other personal considerations. It is readily admitted that it takes more courage to leave religion, once one finds that he is unsuited to it, than it does to enter; but what may not be so apparent is that soon after admission a candidate may begin to mobilize his defenses against rejection or defection and that these defenses are often so subtle that the candidate himself may be quite unaware of them.

In June, 1938, Pope Pius XI, while discussing the acceptance of candidates to the religious life, made the following pertinent recommendations:

**Be severe.** These may be hard words, but they are prompted by love... We are not alluding merely to severity of discipline in general, but first and foremost to the severity which ought to be shown in accepting candidates...

It is not an exaggeration to say that whenever people unite to form a group, even in small numbers, deterioration occurs. We learn this from experience. This does not mean that a religious family ought therefore to reduce the number of its members; on the contrary, the tendency should always be to increase. But it should see that its members are carefully chosen, like picked soldiers. This is a difficult task, but essential. When a number of men join together in some enterprise, their good qualities, and particularly the highest ones, do not become common property; each man keeps his own. Their weakness and bad qualities, on the other hand, add up and merge together.

It is precisely with these good and bad qualities in candidates to the religious life of which His Holiness spoke that the present study is concerned. Despite the efforts of religious superiors, vocational directors, and others to judge the adequacy of an aspirant's personality and orientation for living the life of

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a religious, there remains the fact that their efforts at screening candidates have not been notably successful and that many men and women who are accepted into the novitiate each year do not persevere or, if they do, they become a burden to the religious community. Exact statistics on perseverance of first admissions to the religious life are difficult to obtain, but it may be conservatively estimated that a novice master would consider a defection of forty per cent of a group of high school graduates during the first eighteen months of the novitiate as not unusual. Certainly the perseverance of candidates who enter during their high school years shows a much greater mortality rate as measured by their perseverance to the time of taking first vows. Thus it can be readily seen that it would be to the advantage of both the religious congregation and their prospective members if psychological testing could be employed in such a way as to eliminate those aspirants who are definitely not suitable and if such psychological testing could be employed as an aid in the religious formation of those who are accepted.

Regarding this point, Father A. Plé, O. P., remarks:

If the psychologist can give us warning at the outset, it would surely be a sin not to ask his services. The sacred character of grace, especially the grace of vocation, as well as respect for the human person make it a serious obligation for us to use every possible means to avoid mistakes about vocation.

Certainly this is not to say that psychological testing of candidates to the religious life: II Vocations, (Westminster, Maryland), 1952, p. 110.
religious life is something new. For centuries religious superiors have been interviewing, questioning, and evaluating the personality assets of those who seek admission; and it is true that these methods still have their value today and should not be disregarded. However, in view of the recommendations of such men as Pope Pius XI and Father Ple, it is desirable to use careful psychological testing which should avoid the unscientific, highly intuitive, and frequently haphazard experimentation that has characterized such screening up to the present time.

It is with the scientific and objective psychological screening of candidates to the religious life and more specifically to the religious Brotherhood that the present study is concerned. It attempts to investigate the candidate's promise for the religious Brotherhood through the employment of a relatively new projective personality test analysis, the Sequential Analysis of the TAT. The theory underlying the interpretation of this test hypothesizes that the test can get at what the individual wants to do in dealing with his goals and the means he has at his disposal for attaining them. If this is so, the test will give a hint as to the individual's personality orientation and will reveal his emotional evaluations as he experiences them in his day to day activity. In this way we hope that the test will provide a valuable clue to the candidate's personality by showing his practical principles of action and thus his practical philosophy of life.

Such information regarding the candidate would be of inestimable value in evaluating his potential for living the religious life. It is of little genuine
import that a superior know the ideals to which a candidate gives lip service or to which he ascribes in theory. What a superior wants to know is how a given individual will freely respond to a series of rational objectives as he encounters them in his daily experience—whether he will take positive, constructive action on his own, for example, to work out his problems realistically with the supernatural and natural means at his disposal or whether he will consistently depend upon others to solve his difficulties for him or, worse still, will simply give up in the face of frustrating obstacles to his practical goals. It is precisely this kind of information which the Sequential Analysis of the TAT should provide. This investigation is a pilot study designed to validate such a hypothesis in terms of the extremes in a sample of seventy-five candidates to the Brotherhood and thus find a way to predict the success of such candidates to the Brotherhood.
CHAPTER II

REVIEW OF THE LITERATURE

In terms of both the subject matter being studied in this investigation and the technique being employed in it, not a great deal of pertinent material has as yet been published. Very little has been reported on the employment of objective psychological screening devices for selecting candidates to the religious life, to the priesthood, or, more specifically in terms of the present investigation, to the religious Brotherhood.

Although the TAT test ranks second only to the Rorschach in the number of studies that have been reported on it, one looks in vain throughout more than a thousand TAT studies for an allusion to the screening of candidates for either the religious life or the priesthood. When one turns from the subject matter of this study to the psychological interpretive procedure being employed in it, the Sequential Analysis of the TAT, one is faced with a similar dearth of material. This latter fact can, of course, be attributed to the comparative newness of the technique.

Since, on the one hand, it would be impossible to review all of the literature on the TAT, and since, on the other hand, there have been no studies reported on the use of the specific Sequential Analysis of the TAT for screening candidates to the religious life, the present survey covers three related
areas: (a) studies on male candidates to the religious life and on candidates to the priesthood, (b) studies employing the TAT in predicting various vocations, and (c) studies employing the Sequential Analysis of the TAT.

Studies on Male Candidates to the Religious Life and the Priesthood

Perhaps the most clearly related study to the present investigation is that completed by Brother Robert Godfrey, S.M., in the education department of Marquette University, Milwaukee, in 1955, called "A Predictive Study of the MMPI with Candidates for the Religious Brotherhood." Brother Godfrey tested thirty candidates studying in the novitiate of the Brothers of Mary in the Midwest and attempted to predict their perseverance over a period of two years through an analysis of the MMPI profiles. In a personal communication with the present investigator, he stated that he found "no correlation between scores on the MMPI and perseverance of the Brothers in the novitiate or the first year of the religious life."

At the present time there are two studies being made on candidates and professed religious in the Brotherhood, but unfortunately results have not as yet been published on either of them. One investigation is being carried on in the District of Montreal of the Christian Brothers, Montreal, Canada, for an evaluation of novices by means of the Rorschach test. The other study is being made in Rome by the Christian Brothers in an attempt to determine the suitability of candidates to the order through a study of various personality types.
Le Roy Wauk did a doctoral dissertation at Loyola University, Chicago, in 1956, called, "An Investigation into the Use of Psychological Tests as an Aid in the Selection of Candidates for the Diocesan Priesthood." He employed several psychological tests in his study of seminarians. Among the tests were the MMPI, the Group Rorschach, the Kuder Preference Test, the Allport-Vernon Scale of Values, and the Ohio State Psychological Examination. As a criterion he used a Faculty Rating Scale devised by Thomas J. McCarthy at the Catholic University of America. He did not find much correlation between the battery of tests and the Faculty Rating Scale nor for any individual test and the ratings of seminarians by their professors.\(^1\) The multiple coefficient of correlation between the battery of tests and the Faculty Rating Scale as the criterion is .38 with a standard error of estimate of 4.26. Of the individual tests, the Group Rorschach had the highest correlation, .24, with the Faculty Rating Scale. The Ohio Psychological Examination correlated .00 with the Faculty Rating Scale, and the MMPI scores correlated .01 with the Faculty Rating Scale.

In 1942 at the Catholic University of America, Thomas J. McCarthy did a study of personality traits of seminarians. In describing the results of his investigation, McCarthy states that he found,

\[\ldots\ a \"g\" \text{factor underlying the ten faculty-rated tests (which)}\]

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may be termed a factor for general fitness for continuance in seminary life. This seems reasonable in view of the fact that a seminarian scoring poorly on this scale would hardly be allowed to remain in the seminary.2

McCarthy used four tests in his investigation: the Bernreuter Personality Inventory, the Bell Adjustment Inventory, the Allport-Vernon Scale of Values, the Otis Intelligence Test (for the minor seminarians in his sample), and the American Council Psychological Examination (for the major seminarians in his sample). McCarthy found that in the employment of the Bernreuter Personality Inventory three measures showed a slight correlation with the faculty ratings of candidates who showed promise for the priesthood. These three measures were neurotic tendency, introversion, and self-confidence. With the Bell Adjustment Inventory, he found a common factor which would seem, he says, to underlie the measures of home, health, social, emotional, and total adjustment. This factor he identified as the schizoid factor, that is, a tendency on the part of promising seminarians to withdrawal as compared to an average sample of young men of comparable age. This factor, although differentiating promising seminarians as compared to the average group, did not produce a very high correlation. McCarthy rightly points out that this so-called schizoid factor is related to the social interests of seminarians, that is, that seminarians will obviously show less interest in socializing with the opposite sex, in dancing, etc., when compared with young men who have

not the celibate life in view.

McCarthy found that the Allport-Vernon Scale of Values did not in general produce any significant correlations with the faculty ratings. However, as might be expected, the subtest on religious interests correlated .37 with promise among the minor seminarians. There was no significant correlation with a subtest on the Allport-Vernon Scale of Values and promise for the priesthood among the major seminarians. McCarthy attributed this difference in this regard between minor seminarians and major seminarians to the fact that by the time a man has entered the major seminary his interests in the other fields measured by the Allport-Vernon Scale will have become sufficiently developed so that they balance out the predominant interest in religious values found in minor seminarians.

McCarthy found that intelligence tests scores show a .40 correlation with promise among minor seminarians, but he found no correlation between intelligence scores and promise for the priesthood among major seminarians. It would seem that McCarthy correctly attributed this fact to the difficulty that minor seminarians experience with their studies during the four years that precede their entrance into the major seminary.

During these four years, it would seem that intelligence operates as a selective factor, for usually only those students who are able to master the difficult academic program of the minor seminary are able to persevere. By the time that candidates have passed through the minor seminary and have become major seminarians, the function of intelligence has by and large finished
its work as a discriminating factor and so,

... it does not operate significantly any longer in determining promise for the priesthood. To enter and remain in a major seminary a certain amount of intelligence must have been attained. Taking this level for granted, the determination of a man's promise for the priesthood then involves definite character traits and dispositions. 3

In 1947 at the Catholic University of America in his, "Personality Traits of Successful Minor Seminarians," Henry R. Burke described an unsuccessful attempt to establish a battery of thirteen tests for the purpose of predicting success in the minor seminary. Burke employed a number of different types of psychological tests including intelligence tests, personality tests, interest inventories, adjustment inventories, and values studies. 4 In view of the present study, it is of interest to note that he did not employ the TAT. The only significant finding which Burke attained was that the mean IQ of minor seminarians rises from 111.8 (SD: 14.5) for students entering the freshman class of the minor seminary to a mean IQ of 117 (SD: 12.0) for fourth year students in the minor seminary.

From these statistics Burke implies that an intelligence test could be employed to screen less promising candidates during their freshman year, and even before their actual entrance into the minor seminary, and thus the administration could avoid the undesirable loss of time and manpower expended

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3Ibid. 35.

upon students who eventually defect in the minor seminary. He points out, however, that it is difficult to set a minimum IQ that is useful, . . . probably largely because the different academic standards and policies of the four participating institutions allow some dull students to remain even into third year high school. 5

Actually, however, there seems to be another reason for considering this particular screening device undesirable. In view of the large standard deviation in both measurements of intelligence in the freshman year and the senior year, it would seem that one could not eliminate very many seminarians on the basis of intelligence scores without risking the dismissal of several potentially successful candidates for the priesthood. It is very probable that more than intellectual capacity is being measured by the IQ of freshmen in the minor seminary and that such factors as academic achievement, reading ability, and general motivation in some of the grammar school grades also play a part in the intelligence scores of these students.

In a study begun in 1948 and still in progress, William C. Bier employed the MMPI to discover to what extent personality measures as standardized on the general population for the MMPI can be used on seminarians. He has devised a modified version of the MMPI which eliminates "MMPI items which presumably did not apply to seminarians in their way of life." 6 He reports that

5Ibid., p. 35.

6William C. Bier, S. J., A Comparative Study of a Seminary Group and Four Other Groups on the Minnesota Multiphasic Personality Inventory, (The Catholic University of America, Washington, D. C.), 1948, p. 92.
the seminarians' scores on the whole show a tendency to rise about a half a standard deviation on most MMPI scales and that seminarians, considered as a sampling of college students, are "the most deviant of an already deviant group." This deviation in seminarians' scores is, of course, understandable when one considers the manner in which the MMPI was constructed and validated. Since the sample used for the MMPI was taken from among the visitors to patients in the University of Minnesota Hospital, the sample consisted predominantly of urban and rural laborers. It is to be expected, therefore, that there should be a deviation between responses of such a group and the responses of a highly selective group such as that composed of seminarians.

Bier has not reported any attempt to predict perseverance with his modified test nor has he correlated his results with an objective criterion, such as the Faculty Rating Scale employed by Burke and McCarthy. At the present time Bier's work is concerned with the problem of the difference between MMPI scores of seminarians as compared to those of the normal population and, as such, does not have any immediate bearing upon the present investigation.

Studies Employing the TAT in Various Vocations

Among all the reports published on the TAT, there is only one clearly
predictive study using it for the prediction of success in a specific vocation or occupation. This study is the very elaborate research project devised by E. Lowell Kelly and Donald W. Fiske at the University of Michigan and reported by them in 1951. The TAT, along with nine other personality tests, was administered to seventy-five undergraduate students over a period of five years for the purpose of predicting success in clinical psychology.

The Thematic Apperception Test and the Sentence Completion Test were administered as group measures. Various members of the staff analyzed them. No staff member analyzed more than one projective test for any one subject. In addition to the qualitative interpretation, the projective analyst made ratings on the basis of each projective protocol plus a few items of basic identifying data, e.g., age, education, religion, etc. Thus the four complete sets of ratings were available, each based solely on one of the four projective techniques.

For half the students in each class, the person who had interpreted the Rorschach Test subsequently studied all four projective tests and interpretations for the purpose of integrating their several findings. This "Projective Integrator" wrote up the synthesis and made another set of ratings. 8

Kelly and Fiske reported that their methods of TAT analysis did not prove to be successful in predicting academic success among the students for they obtained a correlation of only .08 with academic performance and the ratings from the TAT. Their highest correlation for any single year was .24 with the TAT and the evaluation of diagnostic competence. 9

The difficulty in evaluating this study is that there is no clear description

8E. Lowell Kelly and Donald W. Fiske, The Prediction of Performance In Clinical Psychology (University of Michigan, Ann Arbor), 1951, p. 47.

9Ibid., 169.
of the method or methods of TAT analysis employed by the psychologists; we
are simply told that, "In our assessment programs, individual staff members
were urged to use such personality theory or theories as they found most ac-
ceptable and were permitted to formulate the dynamics of their cases in any
manner they wished.\textsuperscript{10} It is therefore difficult to accept without reservation
the conclusion of Kelly and Fiske, that projective techniques do not allow pre-
diction of performance to any significant degree.\textsuperscript{11} This conclusion holds good
only for the methods of TAT interpretation employed in their study, a series of
methods which are evidently intuitive and which probably differed to a consi-
derable extent in the case of each individual psychologist.

Studies Employing the Sequential Analysis of the TAT

The Sequential Analysis of the TAT to be employed in this study is a
revision of a technique by Magda B. Arnold and described by her in The Jour-
nal of Abnormal and Social Psychology in 1949.\textsuperscript{12} This same technique is also
discussed by her in the third chapter of Edwin S. Shneidman's book, Thematic
Test Analysis.\textsuperscript{13} Since the publication of these two articles, Arnold has consid-
erably revised her method and has placed the burden of emphasis upon the

\begin{itemize}
\item \textsuperscript{10}Ibid., 3.
\item \textsuperscript{11}Ibid., 169.
\item \textsuperscript{12}Magda B. Arnold, "A Demonstration Analysis of the Thematic Apper-
ception Test in a Clinical Setting," Journal of Abnormal and Social Psychology
XLIV (January, 1949), 97-111.
\item \textsuperscript{13}Edwin S. Shneidman et al, Thematic Test Analysis (New York, 1951).
\end{itemize}
sequence of underlying imports to be found in the stories. A detailed account
of the rationale and procedure employed in this method of analysis can be found
in chapters III and IV of Leo McCandlish's doctoral dissertation, done at Loyola University, Chicago, in 1958.14 This type of analysis provides an insight
into the motivational pattern of the testee. As McCandlish has remarked,

... by putting down in order the significant meaning of the stories
we will have a reflection of the operation of man's "creative intuition." This gives us a true picture of his motivation and principles,
his major problems and their solutions, and ultimately his basic
philosophy of life.

Our final premise then is simply that since the intrinsic func-
tion of man's "creative intuition" is to help him plan his activities,
analysis of the products of his creative intuition should lead to a
knowledge of his attitudes towards life and its problems. 15

In The Human Person Louis Snider describes in the chapter, "Person-
ality Differences Between High and Low Academic Achievers: a Rorschach and
Thematic Apperception Test Study," how he successfully distinguished between
low and high academic achievers through the use of Arnold's earlier version
of the sequential analysis technique.16 The difference in motivational patterns
found in the Sequential Analysis of the TAT material distinguishes the two
groups beyond the five per cent level of confidence as a criterion of significance.
Unlike the present study, Snider's investigation did not attempt to work out
an objective scoring system based upon an empiric study of stories which

14 Leo McCandlish, "An Investigation of a New Method of TAT Analysis,"

15 Ibid., 16.

16 Magda B. Arnold and John A. Gasson, S. J., The Human Person, (New
are characteristic of different types of personalities as revealed in the TAT.

Using the same data as that of Snider's study, Leo McCandlish, in his doctoral dissertation cited above, reported the development of an objective scoring system that definitely indicated differences between the high and the low achievers. Using an analysis of variance, he got an $F = 40.38$, which is significant at the .01 level of confidence. Furthermore, he was able to predict blindly thirty-nine of the forty cases of high and low achievers on the basis of a scoring system derived from the TAT Sequential Analysis which gave a Chi Square of 36.11, significant at the .01 level of confidence and beyond it.

A related study was done by Sister Mary Innocentia Burkard in her doctoral dissertation at Loyola University, Chicago, in 1958. She reports a very successful system of scoring and prediction in distinguishing the extremes in a group of excellent and poor teachers. When the TAT analysis of each test was scored according to a standard that had been empirically set up and validated, it was possible to discriminate perfectly between the high and the low groups of teachers. Differences between the two groups were found by the Sign Test to be significant far beyond the .01 level of confidence. 

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17McCandlish, p. 58.

reliability on the TAT was also shown to be extremely high with the lowest reliability being 94.3\%\textsuperscript{19}. 

F. E. Petrauskas employed the Sequential Analysis of the TAT to score thirty matched pairs of men in the United States Navy. The pairs each consisted of a man who possessed a delinquent history before enlistment and who was at the time of testing confined in the naval brig for repeated aggressive activity and of a man who had never been involved in official delinquency before enlistment and who was never subjected to disciplinary action while in service\textsuperscript{20}. The stories were scored on the basis of an objective scoring criterion developed for the two groups, and each story was scored as positive constructive or negative nonconstructive and placed in one of five attitude categories. The hypothesis which stated that the individuals who were considered offenders by the Navy would give more negative and less positive attitudes in their stories than the non-offenders was confirmed at the .00003 level of confidence\textsuperscript{21}.

Perhaps at this point in concluding the survey of the literature relative to the present study, it would be well to summarize the findings. In general it may be said that very little has been accomplished in the way of screening candidates for the religious life or of seminarians aspiring to the priesthood.

\textsuperscript{19}Ibid., 64


\textsuperscript{21}Ibid., 36.
Thus far, none of the studies has shown that psychological tests of various kinds can be successfully employed for this purpose; for, as yet, nothing has been done with the TAT along this line. The Sequential Analysis of the TAT as devised by Arnold has proven quite successful in discriminating between high and low academic achievers, between efficient and inefficient teachers, and between men who have had delinquent records and those whose naval records show no history of delinquency during or before their years of service in the Navy. Furthermore, it has been shown that it is possible to establish an objective scoring criterion based upon an empiric study of TAT stories of subjects rated at the extremes in the samples of which they are a part. Consequently, it may be said that the Sequential Analysis of the TAT shows promise as a technique for discriminating among various subjects as to their promise for various vocations. In view of this fact, it is being employed in this study to discriminate among candidates for the religious life according to the promise which they seem to show for it.
CHAPTER III

DESIGN OF THE RESEARCH

The Sample

The sample of the population employed in this investigation consists of seventy-five subjects who were at the time of testing either Junior Novices in the Preparatory Novitiate or Senior Novices in the Senior Novitiate of the Christian Brothers in California. The Christian Brothers are a lay order of male religious devoted exclusively to the profession of teaching. A Junior Novice is a high school student who has expressed his intention of becoming a Christian Brother and is pursuing the specialized training program conducted for that vocation in the Preparatory Novitiate. Since he has not as yet finished high school, much of his day is occupied with high school courses; while the remainder of it is devoted to a community life of spiritual exercises, manual labor, recreation, private study, etc. Since a boy may enter the Novitiate Preparatory during any of the four years of high school, the length of his stay there depends upon how long it takes him to earn his high school diploma.

A Senior Novice is a boy who has already completed high school either in the Novitiate Preparatory (in which case he spends fifteen months in the Senior Novitiate) or in any regular high school (in which case he spends eighteen months in the Senior Novitiate) and has expressed a desire to become a
Christian Brother. The training in the Senior Novitiate is more intensive than that in the Novitiate Preparatory. It does not include any secular courses, and it places much stress upon the principles and practices of the spiritual life in general and of the religious life in particular. Upon his admission to training, any boy who has completed his high school education must pursue the course of training in the Senior Novitiate before doing any other kind of work or study in the Order regardless of how much education he may have already acquired beyond the high school level. No amount of higher education, therefore, shortens a candidate's training in the Senior Novitiate.

Both the members of the Novitiate Preparatory and those in the Senior Novitiate are free to leave either of these houses of formation and return home at any time that they may decide to do so. On the other hand, either superior of these houses of formation may dismiss a candidate should he decide that the candidate is not a suitable prospect for the Brotherhood. When a candidate has completed his training in the Senior Novitiate, he is required to take one year of vows in the religious life; and it is only then, as he pursues his higher education, that he must remain in the religious life for a definite period of time. None of the candidates or members of the Order of the Christian Brothers aspires to the priesthood.

Since all of the subjects have for the most part followed the traditional course of studies found in American grammar schools and high schools, they are all about the same age in each of the various classes. In this particular sample with which this investigation is involved there is one exception, a
TABLE I

DISTRIBUTION OF SUBJECTS
BY AGE AND GRADE

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<tr>
<th>Class</th>
<th>Number of Subjects</th>
<th>Average Age</th>
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<td>9th Grade</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>10th Grade</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>11th Grade</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>12th Grade</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Senior Novitiate</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

A twenty-one year old Dutch immigrant who was completing his sophomore year in the Novitiate Preparatory. The grade level and the average age of the students of this sample are indicated in Table I.

**Administration of the TAT**

All of the subjects were tested at the same time in a small auditorium. Previous studies have shown that results from group administration and individual administration of the TAT for this type of analysis are very similar and so it was decided to administer the test to the entire group rather than to each individual separately. Since the method of the Sequential Analysis of the TAT employed in this study uses the import of the story as it is expressed in the sequence, it is to the advantage of both the administrator and the interpreter of the test to have the stories written down by the testee himself. It has been
found that when the testee has to write his own story that he is more likely to be concise and to the point. When a boy tells a story orally, he may ramble and embellish the plot to such an extent that it can hardly be disentangled and so, under such circumstances, it becomes very difficult for the interpreter to determine the import of it. Methods of TAT interpretation that use themes rather than the story import may find that these additional embellishments are valuable, but for the Sequential Analysis of the TAT they are irrelevant and are therefore to be avoided. Hence there is nothing objectionable in group administration as long as the necessity for a plot in each story is emphasized.

Before the first picture of the usual series consisting of twenty TAT pictures for adult males was shown to the subjects on a motion picture screen, the following directions were given to them:

This is a test in imagination and personality. I am going to show you twenty pictures, one at a time on the motion picture screen; and your task will be to make up as dramatic a story as you can for each of them. Tell what has led up to the event that is shown in each picture, describe what is happening at the moment, what the characters are feeling and thinking, and then give the outcome. You may devote about five minutes to each story. Do not worry about grammar, spelling, or punctuation since this test is concerned with the story that you imagine and not with the mechanics of how you tell it. The story need not be long; a story that is about five to ten sentences long will be just fine.

What we are interested in is dramatic stories. Be sure to avoid writing just descriptions of the scene that is shown you on the screen, and do not give explanations of how things can be done or how something works. Tell a story with a plot, that is, a story with characters who are having some kind of experience or are faced with some kind of a problem. Check each story to make sure that you tell what has happened to the characters in the past, what they are doing now, and how things turn out for them in the future. Be sure that you write a story and not just a piece of conversation between two or more people. Conversation is all right, but it should
be included in the story rather than be the whole story itself. If you have any doubts about how to proceed or whether or not your story is satisfactory, do not hesitate to bring it up to me so that we can check it together. Number your stories as you go along, and tell them in the order in which the pictures are shown. You need not worry about the results of the test; they will not be shown to your superiors or anyone else who knows you.

The reason for giving these rather detailed instructions to the subjects and thus departing from the usual formula suggested by Murray is that it is difficult to get young people to write stories that are suitable for interpretation by the method of sequential analysis. If one is looking for themes in a story, he does not have to be so concerned with the plot construction; but, that this particular method may be employed, the plot of the story must be clear to the examiner and it is absolutely essential that the outcome of the plot be clearly stated. When a subject limits himself to a record of dialog between characters, it is often extremely difficult, if not impossible, for the interpreter to follow the trend of the conversation and to determine the outcome of it. It is for this reason that great stress was laid upon the necessity of a clear plot involving a beginning, a middle, and an end.

While the stories were being written, the examiner moved about the group and answered any questions that arose concerning the stories. He encouraged the subjects to write legibly and to write on only one side of the paper. Silence was observed throughout the testing situation, and the subjects were seated far enough apart so that they could not contact one another while writing their stories. Between the administration of the tenth and eleventh picture there was a fifteen minute break. Before leaving the hall for this break,
the subjects were requested not to discuss the stories that they had written until the test was completed. Altogether the testing session took slightly more than two hours. The length of time involved in the testing may be attributed to the fact that all of the subjects had to complete a story on a given picture before the group could go on to the next picture.

**Ranking of the Subjects**

After the seventy-five subjects had been tested, an envelope containing seventy-five slips of paper on each of which was written a name of one of the subjects who had been tested was given to the religious superior of the boys. This superior had been in close contact with each of the subjects of the investigation and was therefore in an eminently satisfactory position to pass judgment upon them. He had known each boy for at least eight months and he had known some of them for more than four years. Each week he had interviewed each of the subjects so that they might have an opportunity to discuss their problems with him, get advice from him regarding their school work and their social contacts with the other boys, and learn of his evaluation of their potential as future Christian Brothers. It is the job of this religious superior to determine the fitness of each of the candidates in his charge and to dismiss any boy from the house of formation should he think him unsuitable for the Brotherhood. He was not asked to predict the perseverance of the subjects in the religious life since there are other factors besides psychological (e.g., sickness, parental pressure, etc.) which can also determine the perseverance of a
candidate. Too, a candidate who changes his mind about being a Brother while still in a house of formation and wants to enter the seminary might well show great promise as material for the Brotherhood and yet not persevere. As a consequence, instead of being asked to predict perseverance, he was asked to pass judgment upon the promise of each of the subjects as potential Christian Brothers.

The religious superior was asked to rank the names of the candidates on the slips of paper in order of promise according to how he judged them as candidates, that is, from the most promise to the least promise. No specific definition of "promise for the Brotherhood" was given him since it was thought that he could best define the concept for himself and that it is one to which he has already given considerable thought. He was encouraged, however, by the present investigator to consider in his evaluation of the candidates the extent to which they had definite goals and principles and the extent to which they, on their own initiative, put these principles into day to day practice.

Analysis of TAT Stories

After the religious superior had ranked the candidates, the tests of the ten highest ranking candidates and the tests of the ten lowest ranking candidates were separated from the other tests and placed in two separate piles. Each of these twenty tests were then analyzed by means of the Sequential Analysis of the TAT so as to derive the import of each story in terms of the
sequence of the stories. Thus the investigator had at his disposal, after his analyses were completed, two hundred import statements derived from the stories of high ranking candidates and two hundred import statements derived from the stories of low ranking candidates. He then proceeded to study empirically these two sets of imports in order to discover the differences that characterized the two sets. It is the hypothesis of this investigation that the kinds of imports found in the tests of the most promising candidates will differ markedly from the kinds of imports found in the tests of the least promising candidates and that this difference will be sufficiently great so that the two groups of candidates can be readily distinguished.

As was mentioned in the Introduction, this investigation is a pilot study that is being done in preparation for a more detailed study of a large group of candidates to the Brotherhood. In the proposed study a sample of candidates over the whole range from "very promising" to "least promising" will be studied by means of the Sequential Analysis of the TAT. Such a study of a complete range of a sample will be the first of its kind done with Arnold's method of analysis. Before one can embark upon such an investigation, it is necessary that a scoring system that is sharply discriminative be developed. The plus-minus scoring employed by McCandlish, Burkard, and Petrauskas in their dissertations was quite adequate since they dealt only with the extremes of the population which was sampled, but it is altogether inadequate for the scoring of subjects in a sample over the total range. It is for this reason that the present pilot study is being conducted so as to validate a
scoring system that will eventually be adequate to the more comprehensive investigation to be carried on at a later date.

The Scoring System

In the present study the investigator used a scoring system that replaced the plus-minus scoring with ratings from 4 down to 1. A score of 4 was given to those imports commonly found in the tests of the most promising candidates and never, or practically never, found in the tests of the least promising candidates. In a similar manner the imports that were found in the least promising candidates but hardly ever found in the most promising candidates were given a score of 1. Scores of 3 and 2 were given to those imports which were more common to the high ranking and low ranking subjects respectively or which seemed more closely related to the meanings of the imports rated 4 or 1. Whenever there was doubt as to whether an import should be scored as high or low or at an intermediate level, the protocols of the subjects were checked to verify what type of candidate produced such an import. Thus it can be said that this method of scoring is truly empiric and objective; it does not depend upon the opinion of the investigator.

Judging the Protocols

Once the scoring standard was established (see Appendix I) the protocols and stories for each of the twenty tests were submitted in random order to three judges whose task it was to score them according to the scoring criterion. All three of the judges had had some experience and training in
scoring the Sequential Analysis of the TAT, but none was familiar with the special scoring system devised for imports of candidates to the Brotherhood. Thus they had to study carefully this new scoring system before beginning the scoring of the protocols. That the reader may familiarize himself with the method, a sample scoring of a protocol of a high ranking subject and a low ranking subject has been provided in Appendix II.

The reason for having three judges score the tests blindly was twofold: (1) to validate the objective character of the scoring method, and (2) to validate the hypothesis that sharp discrimination between high and low candidates is possible with this method of scoring. Thus both the reliability and validity of this method of analysis and scoring are tested in this investigation.

It has already been mentioned that some investigators have thought intelligence an important factor in screening candidates for the religious life, but it has also been shown that experimental evidence does not support this claim to any extent. Burkard, McCandlish, and Snider found that there was the same range of scores for good and poor achievers with high intelligence and with low intelligence. Since the earned TAT scores for high and low achievers with a high intelligence rating were not significantly higher than the scores for high or low achievers with low intelligence ratings, it was decided that in the design of the present experiment that the differences in intelligence of the subjects in the novitiate should be disregarded, the more so since such differences had not been found decisive in the MMPI studies either. It would seem that motivation for the religious life is a variable that is not significantly influenced by the
level of intelligence, at least not within the range of intelligence investigated here.

After the scoring of the three judges had been completed, the inter-judge reliability was determined by calculation of agreement among the three raters with regard to their assigning subjects' protocols to the group that ranks above the mean or to the group that ranks below the mean of the total scores of the twenty tests. In addition, the contingency coefficient was to be employed to determine the significance of inter-judge ratings. A Chi-Square value of 3.84 or more, which is significant at least at the .05 level of confidence, was chosen to reflect an acceptable degree of inter-judge reliability and could therefore be considered as evidence for the validity of the conclusions of this investigation.

Statistically, a null hypothesis was tested in this study also: that the groups of candidates do not differ significantly and are therefore from the same population. The Chi-Square test for two independent samples was decided upon to test the null hypothesis since the data of the research consists of frequencies in discrete categories. A Chi-Square value of 6.64 or more, which is significant at the .01 level of confidence, was set as the basis for the rejection of the null hypothesis.
CHAPTER IV

RESULTS OF THE INVESTIGATION

Development of a Scoring System

Once the rankings of the candidates had been submitted by the religious superior and the stories of the subjects ranked at the extremes had been analyzed, a cursory examination of the two sets of data showed that a distinct pattern was emerging. Although there was some overlapping in the types of imports produced by the two groups, each group obviously formed its own definite cluster.

This distinction between the two groups showed from the outset a rational pattern; that is, despite the fact that the categorization of the two groups was an empiric one, it was evident that the characteristics of the two groups followed an arrangement that one might logically suppose would be found. This point is an important one because it is a vindication of the rational character of human beings. At no time was there evidence for the necessity of a reductive interpretation of the data. The various imports did not have to be interpreted in a way that would violate them by explaining them in terms of the opposite of what they seemed to say. When a subject told a story, he supplied an import which was a reflection of his motivational pattern. And so, in general, to recognize the two groups from the test data it
was only necessary to take the imports of the stories at their face value.

An illustration of the foregoing statement may perhaps help to clarify it. Throughout the stories of the high ranking subjects there were many that dealt with aggression, with depression, etc. On the other hand, in the stories told by low ranking subjects there were many involving characters with high ideals, laudable ambitions, etc. Yet, despite what may at first seem a stumbling block to making a distinction between the two groups, there was never any real difficulty in this regard. If a high ranking subject told a story of violent aggression, the outcome of the story upon which the import is based was consistently of a positive and constructive nature. For example, a boy might tell a story of a man who beats and kills his brother in order to steal all of their inheritance. Almost always, when a high ranking subject tells a story with such a theme, we find that the man who harms his brother is punished for his crime or he is so bothered by his guilt feelings that he turns himself into the proper authorities. On the other hand, in stories told by the low ranking subjects, we find the reverse to be true: the man who is guilty of killing his brother in his greedy attempt to have money manages to escape his just punishment, may enjoy his ill-gotten gain, and suffers no remorse for his wrong doing.

The fact of such a difference between stories told by high ranking and by low ranking students, recurring as it does with great consistency, seems to be of genuine importance in any interpretation of TAT stories. If an investigator insists upon enumerating the themes of the stories rather than the imports, he will not get a significant difference between the high and the low group. As a
matter of fact, it is frequently true that the most violent or aggressive action may be recounted in stories told by the high ranking subjects and actually told in a much more explicit fashion than in the stories told by the low ranking subjects. But it is the import of the story which is the key to the meaning of the story for the storyteller, and it is in the import that one finds what the storyteller really thinks and feels about the action described, laudable or condemnable as it may be.

Since this definite pattern of imports began to show itself from the outset, the problem of distinguishing between the two groups was not for the most part a difficult one. Certainly if the investigator had been satisfied with such a simple discrimination there would have been little difficulty.

The problem of scoring the tests in terms of a 4 to 1 scoring system presented greater difficulty. Even in the stories of the best subjects one is liable to find imports which are not as good as they might be, and occasionally one may find an import which, if it were the sole basis for evaluating a subject, would place him in the opposite group from that in which he actually belonged. But it is in this very diversity of imports -- the production of some poor imports by good candidates and some good imports by poor candidates and also the shades of difference between two imports that may be both positive or both negative -- that one must look for the graded material with which to build a discriminating scoring system that is the chief goal of this pilot study.

If the reader will refer to Appendix I, he will see that a great many distinctions have been made regarding the various kinds of imports. It was
absolutely necessary that the differences to be found in these imports be recognized before an adequate scoring system could be hoped for. A few examples will show the importance of this kind of careful analysis.

Not infrequently it was found that subjects from both groups told stories that involved the necessity of being helped by others. In comparing the stories told by the high group and the low group, the investigator found that there was one striking difference in the conditions under which help is introduced in a story by the high group as compared to the low group. In stories by the high ranking subjects, characters sought help; in the stories of the low ranking subjects, the characters assumed a passively dependent attitude and simply waited for help to come to them without initiating any positive action on their part to help themselves.

Similarly it was found that prayer or supernatural aid is mentioned in the stories of both groups. Both groups also tell of situations that involved great loss, harm, or threats. But it was crucial for the discriminative scoring of these stories that the investigator determine what the character in the stories did when faced with such difficulties or how he employed the various means at his disposal (e.g., prayer). In the stories of the subjects who were in the high ranking group, the characters usually do all that they can to solve their difficulties or problems while at the same time using prayer as an auxiliary means. They meet threats, loss, or harm in a positive fashion by handling it as best they can. In the stories of the low ranking group the same passive attitude was found toward prayer as was found in regard to human aid. Usually
the characters did little or nothing for themselves; they either waited for fate or God to get them "magically" out of their difficulties. When such external assistance was not forthcoming, they gave up and did nothing.

It was thus in the various shades of attitudes revealed in the import of each story that it was possible to achieve the present scoring system. By questioning the degree of constructive action or attitude manifested in the imports, the investigator was able to discriminate between the two groups. A very telling point may be made here which is of particular importance when dealing with subjects such as novices or young religious. Special care had to be taken to distinguish between constructive attitudes which were backed up by genuine emotional tone and those attitudes which superficially seemed to be constructive but which were actually merely platitudinous statements which had no real meaning for the subject who had produced them. The recognition of this difference is crucial when one is dealing with the type of subjects with which this investigation is concerned. Probably if the subjects were drawn from another sample the present scoring system would have to be revised to some extent. Though the general pattern ought to remain the same, certain imports would have to be scored higher for most other samples than they are in the present scoring system. When one is dealing with a group of subjects who are of high caliber and have been trained in supernatural values and habits from early childhood, one finds that the imports which they produce may appear to be of good quality at first glance only to discover later their lack of emotional depth and that they are really pious statements which are accepted by the
subject but never actually integrated into his practical motivational pattern. Since emotions guide the imagination in the production of stories in the TAT, it is in terms of genuine emotional involvement with the meaning of an import in a story that the distinction between the two groups of such highly selected subjects must be made.

Although it is impossible to go into detail in this study about the matter, this distinction between cliches and genuine emotionally toned imports has a very real meaning for those who are charged with the formation of candidates to the religious life. The relationship of religious obedience and its effect upon the development of personality on the one hand and the ease with which it can be used by a candidate to support his own motivational inertia on the other is a problem that deserves serious consideration.

In the stories the subjects revealed how they thought about and reacted emotionally to a given situation. No doubt the external conduct of most of the subjects in both groups is by all normal standards quite good. But in the stories, the subjects, without realizing it, spoke for themselves and spoke about their attitudes as they habitually experience them.

It is interesting to note that although some subjects attempted to write stories "with tongue in cheek" it was still possible to handle the stories according to the method of Sequential Analysis. It must be admitted that such stories told facetiously do present some difficulty for the investigator because the jocose manner in which they are told, characteristically ending in a pun, often makes it difficult to determine exactly what is the outcome of the story.
Once, however, the outcome has been established, the analysis can be readily made. One of the important results of the present investigation is, therefore, the realization that in future studies adolescent subjects should be encouraged to write stories in a rather serious manner. It is not that facetious stories are less valid than serious stories, but they are harder to analyze and prove to be much more time consuming for the examiner.

Another point this investigation has made clear is that to formulate a sharply discriminating standard for scoring, a great many more stories than the present four hundred should be studied. In four hundred stories there are so many different imports that it is inevitable that some types of imports are not frequently produced. If a much larger sampling were employed, the investigator would have a much better chance of securing more samples of each kind of imports found in the scoring system and thus greater validation of each scoring import could be secured. It is the intention of the present investigator to make such a study of more imports by novices at the extremes before commencing the research on the study of the full range of subjects for which the present pilot study has been made.

Statistical Interpretation

After the judges had completed their scoring of the twenty protocols, the total rating for each subject was computed as indicated by the scorings of each judge. It was the original intention of the investigator to calculate a Chi-Square of these cumulative ratings as compared to the ratings of the religious
superior. This technique seems, however, altogether superfluous since every judge had no difficulty in determining whether each of the subjects was from the high or the low rated groups. It is possible for a subject to attain a score from 20 to 80 inclusive according to the scoring system. No low ranking subject obtained a score of more than 41, and no high ranking subject attained a score of less than 63 from any of the three judges. Thus it can be seen that there is a very definite discrimination obtainable with the present scoring system.

Since, however, this pilot study is concerned mainly with the scoring system, it is of interest to explore the power of the scoring system to discriminate over a whole range of subjects rather than with just the extremes as has been done in this study. Obviously, though the judges may be able to discriminate between the extremes, the scoring system would be of little value in an investigation of the total range of subjects if the actual difference in scores between the extremes was not sufficiently great to allow for the intermediate subjects which are found in a total range.

As has been indicated, the total range of possible scores is from 20 to 80. Obviously, even in the most perfect scoring system, there is bound to be some overlapping of subjects' scores in such a range when there are more than sixty subjects being tested. It is also probable that there will be some overlapping when the total number of participating subjects begins to approach sixty.

What we must look for in this study is a difference in scores between the high ranking and the low ranking subjects that is sufficiently great to admit of the real possibility of working with the intermediate group also. With this purpose
in mind and with a hypothetical mean of 50 for scores obtained over the total range of subjects, the mean and the standard deviation of the extreme groups was computed. The low ranking subjects' scores had a mean of 31.2 with a SD of 6.33. The high ranking subjects' scores had a mean of 70.2 with a SD of 5.7. These statistics seem to indicate that the present scoring system does offer promise for the kind of discrimination that is desirable when one is dealing with the total range of subjects. Even if one calculates the difference between high and low ranking scores in terms of a standard deviation below the mean for the high ranking subjects and a standard deviation above the mean for the low ranking subjects, there are still thirty-three score points open to the intermediate subjects of the sample. That is, thirty-three points for approximately sixty per cent of the subjects. Since it may be safely assumed that the standard deviation of a group of subjects that lies closer to the true mean than does an extreme group will be much less than the standard deviation of scores of extreme groups, the present scoring system seems to offer genuine possibilities for dealing with the total range of subjects.

It is also of interest to examine the relationship that exists among the scorings of the three judges. As has already been pointed out, they entirely agreed with each other in placing each of the twenty subjects in either the high or the low group. Furthermore, they were all in perfect agreement with the ratings given to the subjects by their religious superior. However, as is to be expected, there was not perfect agreement on the scoring of every story by all three of the judges.
Judge A and Judge B agreed on scoring 71% of the four hundred stories. Judge A and Judge C agreed on scoring 77% of the stories. Judge B and Judge C agreed on scoring 92.5% of the stories. There were no stories upon which all three judges disagreed. In the event that there was a disagreement on the scoring of a story, the score used in determining the total score of a subject was the score of an import agreed upon by two of the three judges.

An analysis of the imports upon which there was disagreement indicates that the disagreement can be attributed to several factors. The primary cause of disagreement seems to be a lack of familiarity with the scoring system and with the TAT. Judges B and C have had more experience with this type of work and so they show a high degree of agreement in their scorings. It is evident that Judge A misunderstood the scoring of certain imports and this misunderstanding led to a consistent disagreement with the other two judges. It is of great importance in using this technique that the judges understand the various subpoints of the scoring system. For example, Judge A failed to distinguish between achievement which is frustrated by fate which receives a score of 1 and achievement that is attained through fate which receives a score of 2. Because this type of import occurs frequently in the four hundred stories of this investigation, it was inevitable that a judge who did not make this distinction would disagree frequently with the others' judging of imports in which this particular factor was involved. By examining the scoring system in Appendix 1 of the present work, the reader may verify the fact that this distinction between achievement through fate and achievement frustrated by fate was indicated to
the judges. Obviously the recognition of this distinction, empirically es-
lished, is essential for uniform scoring.

Other than a misunderstanding about the scoring system, the only other
consistent error found in the ratings of the judges seemed to be due to inad-
vertence. There are several illustrations of this type in the scorings of the
judges. Despite the fact that a judge may correctly score an import several
times when it deals with a certain subpoint of the scoring system, occasionally
he would give it a different and altogether unexplainable scoring that did not go
along with the scoring which he had consistently employed. Perhaps these er-
rors may be attributed to fatigue, distraction, or haste. When some of these
apparently accidental errors were discussed with the judges, they agreed that
inadvertence was the only explanation for them.

When one considers the number of imports which entered into this study
and the consistency with which they were scored by the three judges, it seems
safe to say that the present scoring system does offer promise as a device for
dealing with the TAT Sequential Analysis in a quantitative fashion. Certainly
once the misunderstandings on the part of the various judges concerning the
nature of a scoring category have been worked out, there is reason to believe
that a very high correlation among judges' ratings can be achieved. In terms
of the scorings of the judges in the present investigation, it may be asserted
that the scoring categories do lend themselves to a scoring technique and that
with practice and careful attention great accuracy can be obtained by various
judges with them.
Perhaps, as has already been mentioned, if a greater number of stories written by the extremes of subjects in a sample were to be studied and the results were incorporated into the present scoring system, still greater discrimination could be obtained. But even as the scoring system now stands, it does seem to offer great promise for use with a total range of subjects and is an improvement over the simple plus-minus scoring system that has been used in various studies involving TAT Sequential Analysis up until this time.

Finally, it is of interest to note that although control for intelligence was disregarded in this experiment the same range of scores for high ranking and low ranking novices was found. Evidently, as Burkard, McCandlish and Snider found in their studies, the intelligence of the subjects studied in this experiment was a variable which did not significantly influence the motivational pattern of the candidates.
CHAPTER V

SUMMARY AND CONCLUSIONS

For centuries religious superiors have attempted to screen candidates to the religious life and, both for the good of the candidate and the good of the order, to eliminate those persons who seemed to be unsuitable prospects. Yet despite their efforts, this screening process has not been altogether successful. More and more, competent authorities are urging religious superiors to employ the skill and findings of modern psychologists to help them in their task. Some have gone so far as to say that to ignore the kind of aid that psychologists can give religious superiors would be a sin.

But the failure to employ psychological tests for screening purposes cannot be altogether blamed upon religious superiors. It must be admitted that psychologists are also delinquent in the necessary experimentation and investigation that must precede the introduction of such methods into the operations of a religious order. To date there have not been many studies made in this area, and those that have been made have not been notably successful. About the only psychological test that has shown any discriminative power is the intelligence test, and it seems to have a very limited use. Its power to discriminate is not sufficiently sharp to eliminate undesirable candidates without running the great risk of losing several promising candidates too, and it is im-
portant to note that its power diminishes as the candidates pass through adolescence so that it is practically useless by the time they enter the senior novitiate or the major seminary.

The present study has been devoted to an investigation of the use of the Sequential Analysis of the TAT as a possible means of achieving the desired sharp discrimination in this area. Because it has been quite successfully employed in work not unlike the screening of candidates to the religious life, it seemed the most likely tool for the present study. It has already been shown that it can be used to discriminate high and low academic achievers, successful and unsuccessful teachers, and delinquent and nondelinquent naval personnel.

The present experiment, a pilot study made to develop a scoring system that will prove sufficiently sharp so that it may later be employed in a full range study of candidates to the religious life, has shown that this goal of getting sharp discriminating power in a test is possible. The extremes of candidates to the religious life were tested, and an empiric scoring system was developed on the basis of the kinds of imports produced by the two extremes of a sample of candidates for the religious life. The resulting scoring system has proved to be quite effective in distinguishing varying degrees of constructiveness in motivational patterns and seems to show definite promise for an exhaustive study in which the whole range of a sample of novices will be introduced.

The reason why this scoring system shows promise is that it not only makes possible the sharp discrimination that is necessary in scoring the total
range of a sample but also because it is an objective technique which can be employed by anyone trained in the use of it. It is not an intuitive process. The agreement among the judges involved in the present investigation on the scoring of the extremes of the sample seems to be adequate evidence for this assertion.

The results of the present investigation also have practical and significant implications for the religious superiors who have charge of the training of candidates for the religious life. Although extensive research of the problem is necessary to verify the use of the results of this study in this regard, it seems safe to say that a close analysis of the types of attitudes produced by the low and the high ranking candidates offers valuable clues to the kind of emphasis that should be developed in the training program found in religious houses of formation.

Even a cursory examination of the scoring categories will show the importance of the types of attitudes and habitual evaluations that must be developed and encouraged and those which ought to be avoided in the training of the future religious in an order. The necessity of constructive, well integrated attitudes that lead to positive, independent action in meeting practical, every day problems and the avoidance of passive, dependent attitudes in candidates are extremely important to the development of a rationale suited to the training of novices.

Further psychological analysis of scoring categories should provide religious superiors with the kind of awareness that they need in training novices.
There are numerous specific clues in the scoring categories for identifying desirable and undesirable motivational patterns. If these clues were to be organized and made explicit so that they could be incorporated into a general plan for the training of novices, they would be invaluable as an aid to proper religious formation. Such a scheme would give direction to the psychological aspects of training and would also enable the religious superiors to devote more time to the many other positive phases of the job to which they have been assigned.
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APPENDIX I.

SCORING THE TAT SEQUENTIAL ANALYSIS OF NOVICES

Instructions: When you are in doubt as to the meaning of an import, check the sequence and also the story from which the import was taken. Do not, however, change the interpretation of the import of the story as given in the protocol. When it is possible to score for different aspects of an import, score for achievement first. If achievement is not mentioned, then for score for another aspect.

Infrequently a story may be incomplete and the outcome is indicated in the following story. In such cases the use of parentheses has been employed in which case both imports receive the same score which is determined by the outcome of the second import in the series.

It would be of help to the investigator if you would not only score the imports relative to the 4 to 1 classification but if you would also indicate the appropriate letter under the numerical scoring that would identify the subheading that is being used. The use of this device is left, however, to your discretion; perhaps you will only want to use it when you believe that it will clarify your scoring.

Scoring 4 on an Import: Outgoing, well-intentioned, prudent action.

A. Achievement because of supernatural or ethical motives, own effort, initiative, virtue, definite goal or definite means, accepting own limitations, realistic adaptation, positive action with the help of others when one has done all that he can do.

B. Work brings enjoyment.

C. Failure in achievement or work because of a lack of the above (under Achievement), because of impulsive or imprudent action, or because of ill-intentioned action.

D. Loss, harm, danger, threat overcome by positive action (see Achievement above) or suffered in a positive way, avoided if it cannot possibly be overcome. In the face of great misfortune which cannot be overcome (e.g. the death of a loved one), one prays
but also indicates that he will carry on.

E. Good relationships by outgoing action, by good will, good fellowship, good humor, accepting one's own limitations, resisting temptation, avoiding or escaping bad influence or companions.

F. Failure by the reverse of the above (under Good Relationships).

G. Revenge is rejected or repented accompanied by positive action, doing something about it. It is necessary to distinguish between revenge which seems to imply getting even or paying a person back in kind and punishment for wrong doing. Revenge usually seems to imply taking the law into one's own hands. Note the following examples:

Revenge:
A man shoots another man for killing his wife.
A boy harms his teacher because she gave him a low grade.

Punishment:
A mother spanks her son for tinkering with her sewing machine so that it no longer runs.
A young man who has been unfaithful to his wife is not permitted to kiss her; thus her displeasure is evident to him.
A woman hits her husband in the nose because he has been unfaithful to her.

H. Legitimate enjoyment is earned.

I. Excessive enjoyment or making enjoyment the primary goal results in failure, punishment by fate, by the law, or by another.

J. Wrong doing is punished (even though the doer may not know that what he has done is wrong).

K. Excessive fear leads to destruction.

L. Fears prove groundless through positive action of the one who is afraid.

Scoring 3 on an Import: Well-intentioned, prudent, positive but more passive.

A. Achievement by taking thought rather than acting, seeking (by doing something active) advice rather than doing one's own thinking, eternal reward in spite of one's present failures, by acting after seeking help from others. In spite of vague goals or means
by wishing, by passive virtue (e.g., patience) when action is called for, by promising to do better in the future, by prayer, by fate, by chance. Success that is eventually enjoyed because one was forced to do something which he finally learned to like.

B. Failure in achievement by the reverse of the above. Failure in achievement through carelessness, disproportionate punishment or loss for action involved.

C. Loss, harm, danger, threat accepted with resignation and hope (no depression); fears are unfounded but not discovered so by positive action (they "just aren't so"); countered by forced action, avoided rather than overcome with positive action when the problem is relatively unimportant and does not involve responsibility.
Worry about future loss or harm despite present success.
Decision against despair without positive action indicated.

D. Good relationships because others cooperate, depending upon another to take the initiative or even maneuvering that person to get him to take the initiative because of one's own shyness. Refusing to do something unimportant (not involving responsibility) out of fear of what others might think.
Refusing to betray a friend who has done some minor wrong out of "loyalty" to that person.

E. Revenge is frustrated or punished or succeeds at first and is then punished.

F. Legitimate enjoyment is too intense under the circumstances but is not thought of as a primary goal; enjoyed freely though not evidently earned.

G. Ill-intentioned action is simply repented (without intense remorse or guilt; without punishment; without restitution).

Scoring 2 on an Import: Motivated from outside, motivated by negative emotion

A. Achievement because of wanting to please others, helped or advised by others, waiting for another's approval or permission for doing something one has the right to do, wanting fame or recognition, in spite of vague goals or means, by wishing, by passive virtue (e.g. patience), promising to do better in the future, by prayer alone, by fate, by chance. Last minute repentence gives
eternal reward. Feeling selfsatisfied because one belongs to an achieving group although no effort on one's own part is indicated. One shows approval of another's achievements without indicating positive action for himself.

B. **Failure in achievement** because others do not help, advise, cooperate, due to unavoidable circumstances, by accident.

C. **Success in spite of vague goals or means**, by wishing, by passive virtue (e.g. patience) when action is called for, by promising to do better, by prayer, by fate, by chance.

D. **Good relationships with others** from negative motives, fear of punishment, fear of danger, fear of losing love, fear of losing the esteem of others.

E. **Loss, harm, danger, threat** accepted passively where positive action is possible, overcome through the efforts of others alone without the person himself doing anything, solved by fate without any positive action, compensated for by others without a person doing positive action, faced with sadness, with resignation, solved by the passage of time or just clear up on their own.

F. **Ill-intentioned action has indecisive outcome**: one is still hesitant as to whether to yield to temptation or not.

G. **Ill-intentioned action goes practically unpunished** or is treated platitudeously or in a routine manner involving 'eternal damnation' as a cliche. Ill-intentioned action is punished in an extreme manner that is all out of proportion to the offense.

H. **Platitudes, unfeeling observations, "philosophic thoughts"** concerning, e.g., God and His beauty, etc. without any positive action indicated, inspiration that leads to action without genuine emotional tone. (The emotional tone may be judged by the other imports in the series and the general manner in which the story or stories have been written.)

**Scoring 1 on an Import**: Constructive action prevented by negative emotion, avoided, or frustrated.

A. **Success or achievement through magic or highly unlikely means** (distinguish between magic or highly unlikely means and rare but perfectly possible means, e.g. prayer in 2 above).
B. Active effort results in failure, giving up, frustrated by others, by God, by fate, avoided because of laziness or difficulty, ends in despair if unsuccessful or harmful, good people suffer along with bad people when the emphasis of the story is on the good people.

C. Bad relationships lead to no real problems, harmless results, even success. One refuses to take responsibility because of what others might think of him. Refusal to betray evil companions who have done serious wrong.

D. Escape from responsibilities, difficulties, or legitimate punishment is successful.

E. Harm, loss, danger, threat lead to impulsive or desperate actions, prevent action altogether, end in despair, result in destruction, result in altogether unlikely means that overcomes them. Are the result of harmless action, caused by supernatural motivation, resulting from virtuous action, resulting from legitimate pleasure.

F. Legitimate pleasure brings harm.

G. Ill-intentioned action is approved or goes scot free, successful escape from legitimate authority or other consequent difficulties. Not carried out because fate or other accidental circumstances or actions of others make it unnecessary. Is fixed up by a deathbed repentence. Evil doing remains a mystery (thus no punishment comes to the evil doer).
## Appendix II.

### Scoring of a Profile of a High Ranking Subject

<table>
<thead>
<tr>
<th>Scoring:</th>
<th>Imports:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a</td>
<td>1. Though one's work is hard at first, eventually one finds that he can accomplish much more than he thought he could once he puts himself to the task,</td>
</tr>
<tr>
<td>4a</td>
<td>2. and one is always anxious to make progress and apply himself rather than be satisfied with things as they are,</td>
</tr>
<tr>
<td>3a</td>
<td>3. but one should be aware of a tendency to be curious about things that do not concern him or otherwise trouble can result,</td>
</tr>
<tr>
<td>3e</td>
<td>4. and one should not yield to revenge out of jealousy and resentment of infidelity because, if he does, all will end in tragedy,</td>
</tr>
<tr>
<td>4k</td>
<td>5. nor should he allow his imagination to make him unnecessarily fearful and cause false alarms and make him the object of laughter.</td>
</tr>
<tr>
<td>2e</td>
<td>6. One who is weak and indulgent can solve his difficulty by simply listening to the advice of another which is offered to him,</td>
</tr>
<tr>
<td>4j</td>
<td>7. but one who does a favor for another so that he may continue to take advantage of or exploit a weakness of that person will end in misfortune because of bad fate.</td>
</tr>
<tr>
<td>4j</td>
<td>8. Guilt of harm done unnecessarily to another in order to avoid being annoyed by that person results in mental derangement,</td>
</tr>
<tr>
<td>4e</td>
<td>9. for kindness is blessed while selfishness when indulged results in a loss,</td>
</tr>
<tr>
<td>4e</td>
<td>10. for one who refuses to be tied down to responsibility will lose out in the end.</td>
</tr>
<tr>
<td>Scoring:</td>
<td>Imports:</td>
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<tr>
<td>----------</td>
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<tr>
<td>4d</td>
<td>11. Those who fight hard for what is right when the odds are against them can hold out valiantly until help comes,</td>
</tr>
<tr>
<td>4i</td>
<td>12. but one with a repugnant disposition and morbid interests will be destroyed by his peculiar manner and tastes,</td>
</tr>
<tr>
<td>4f</td>
<td>13. whereas, if one grieves over the loss of a friend who was not much good, he is likely to suffer a similar fate.</td>
</tr>
<tr>
<td>3c</td>
<td>14. One can put up with the big things that are difficult, but it is the little things that cause him to give up one job and try another,</td>
</tr>
<tr>
<td>4f</td>
<td>15. but one's singlemindedness can lead to disaster for him.</td>
</tr>
<tr>
<td>4f</td>
<td>16. Everywhere there are obstacles to those who prey on others,</td>
</tr>
<tr>
<td>4d</td>
<td>17. but a good man who works hard can overcome unexpected difficulty through his own ingenuity.</td>
</tr>
<tr>
<td>4f</td>
<td>18. If one has an abnormal habit, it can cause him to come to a tragic end,</td>
</tr>
<tr>
<td>4f</td>
<td>19. and only one who looks upon happiness as a monster to be rejected will try to avoid friendship and so he will be without confidence and hope,</td>
</tr>
<tr>
<td>4i</td>
<td>20. and it is the one who without a goal seeks happiness in sinful pleasure who eventually ends in despair and destroys himself.</td>
</tr>
</tbody>
</table>

Total score for high ranking candidate: 75
SCORING OF A PROTOCOL OF A
LOW RANKING SUBJECT

Scoring:

1. One will do something and succeed once a person whom he likes offers advice and convinces him to do it.

2. and one can do what he wants to do once those who oppose him destroy themselves.

3. One can help his people by daring to conceal information from the enemy and then, when they are liberated, they will give him honors out of proportion to what he has done.

4. When one is angered by the conduct of another and is unable to punish that person, he will kill himself.

5. or one may be made half crazy and paralyzed by fear and so he drops dead.

6. One may reform when he sees that advice offered by another is right.

7. but one can get revenge when his own identity is not suspected.

8. but, if one cannot succeed in what he wants to do and loses sleep over it, he will die; another like him will try and will succeed later on.

9. Those who are not satisfied with others can band together, and by just sticking together they can succeed in their endeavors.

10. or one can make elaborate arrangements just to provide an opportunity to upset others who are not making any attempts to bother him.

11. One in difficulty can attract another's attention and thus be saved.

12. but one who experiments on another and fails will never forgive himself (although that person recovers) and so he gives up and destroys himself (although he was doing work proper to his field
of activity),

13. and, if one is self-indulgent, fate will punish him severely in an altogether disproportionate way.

14. When one is left with nothing but dreams of a loved one who has gone, there is nothing left but self-destruction.

15. One's fears of an inherited weakness can be allayed by magic,

16. but one feels that he can accomplish his goal some way or other for he has learned the truth of this from a platitude.

17. Whenever one's imagination controls him, he dreams of being admired, but then another will talk to him and straighten him out.

18. but, though one may conform to the demands of superiors out of fear, one eventually succeeds by engaging in what they have denied him -- the satisfaction of his indulgence.

19. One imagines something that he has planned and that will be pleasant, but he is destroyed in his attempt to attain it.

20. but, though one's imagination and dreaming may cause one to endanger himself, a superior can come to him and straighten him out.

Total score for low ranking subject: 29
APPROVAL SHEET

The thesis submitted by Thomas Leo Quinn has been read and approved by three members of the Department of Chemistry.

The final copies have been examined by the director of the thesis 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, form, and mechanical accuracy.

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

May 20, 1957
Date

[Signature]
Signature of Adviser