1963

Appraisal of Potential Leadership Qualities Among Young Women Religious

Mary Rosaire. Lucassen

Loyola University Chicago

Recommended Citation
https://ecommons.luc.edu/luc_diss/704

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola ecommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola ecommons. For more information, please contact ecommons@luc.edu.

Creative Commons License
This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
Copyright © 1963 Mary Rosaire. Lucassen
APPRAISAL OF POTENTIAL LEADERSHIP QUALITIES
AMONG YOUNG WOMEN RELIGIOUS

by

Sister M. Rosaire Lucassen, O.P.

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Philosophy

June
1963
ACKNOWLEDGMENTS

To my religious community I wish to express my gratitude for the opportunity to continue in graduate work.

Many have contributed to the completion of this work and to all I am grateful. Especially do I want to thank the following; my superiors and fellow religious for their continued patience and encouragement; those Sisters of my own community who so generously cooperated as subjects in this research; the members of the Psychometric Laboratory of Loyola University, notably Dr. H. J. Rimoldi, Dr. J. Devane, and Mr. J. Haley, for their invaluable assistance in the design and statistical treatment of the criterion test; my advisor and major professor, Dr. Magda B. Arnold, for her generous giving of time and effort and for the example she offered in her own person of a teacher devoted to truth; and finally, my parents, without whose constant support and clerical assistance this work would have been much more difficult to complete.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>Purpose--Nature of leadership--Method of story sequence analysis--Story sequence analysis and leadership--Leadership vs. leadership potential.</td>
<td></td>
</tr>
<tr>
<td><strong>II. SURVEY OF LITERATURE</strong></td>
<td>21</td>
</tr>
<tr>
<td>Leadership as treated within religious communities--Studies using the story sequence analysis--Characteristics of a leader and of a leader's behavior--Other techniques used to identify leadership potential.</td>
<td></td>
</tr>
<tr>
<td><strong>III. METHOD</strong></td>
<td>41</td>
</tr>
<tr>
<td><strong>IV. RESULTS</strong></td>
<td>61</td>
</tr>
<tr>
<td>Correlation of TAT scores (M.I.) with aggregate criterion score--Meaning of factor-analyzed data--Correlation of variables derived from peer ranking with TAT scores (M.I.)--Correlation of TAT scores (M.I.) with ranking by superior--Motivational patterns and leadership--Motivational patterns and vocational aspects--False positive record--Negative record--Positive record.</td>
<td></td>
</tr>
<tr>
<td><strong>V. SUMMARY</strong></td>
<td>96</td>
</tr>
<tr>
<td><strong>BIBLIOGRAPHY</strong></td>
<td>101</td>
</tr>
</tbody>
</table>
Appendix

I. SCORING CATEGORIES .............................. 105

Outline of contents--Sample page.

II. SAMPLE QUESTION SHEET .......................... 107

III. TABLE OF SCALE VALUES: GUILFORD'S METHOD ........................... 109

IV. SEQUENCE ANALYSIS OF EACH SUBJECT: IMPORTS AND
SCORES ............................................. 110

V. SEQUENCE ANALYSIS: FALSE POSITIVE RECORD #17 .. 130

VI. SEQUENCE ANALYSIS: VERY NEGATIVE RECORD #11 .. 134

VII. SEQUENCE ANALYSIS: HIGHLY POSITIVE RECORD #1 .. 138
LIST OF TABLES

Table                                                                                           Page

I. SCALE VALUES FOR QUESTION #1: THURSTONE'S METHOD VS. GUILFORD’S METHOD                        54
II. MATRICES OF THE FACTOR ANALYSIS                                                             57
III. SEQUENCE ANALYSIS SCORES                                                                   62
IV. COMPOSITION OF THE VARIABLES DERIVED FROM THE RANKING DATA                                  66
VI. CORRELATIONS BETWEEN THE M.I. SCORES AND THE VARIABLES OF THE CRITERION TEST: N = 19      70
VII. CORRELATIONS BETWEEN THE RANKINGS OF THE PEER GROUP AND THE SUPERIOR ON EACH OF THE TWELVE QUESTIONS 73
VIII. CORRELATIONS BETWEEN THE M.I. SCORES AND THE RANKINGS OF THE SUPERIOR ON EACH OF THE TWELVE QUESTIONS 74
IX. HIGHEST AND LOWEST RANKED SUBJECTS IN THE MAJOR GROUPINGS                                    77
X. COMBINED SCORES OF TOP AND BOTTOM RANKED GROUPS FOR IMPORTS LOCATED IN SIGNIFICANT SCORING CATEGORIES 79
<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. PLOT OF REFERENCE VECTORS $A_2 B_2$: FINAL ROTATION</td>
<td>58</td>
</tr>
<tr>
<td>II. PLOT OF REFERENCE VECTORS $A_2 C_2$: FINAL ROTATION</td>
<td>59</td>
</tr>
<tr>
<td>III. PLOT OF REFERENCE VECTORS $B_2 C_2$: FINAL ROTATION</td>
<td>60</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Especially during the past decade the formation and training of young women religious has been a matter of great concern to the Church and to superiors. Early efforts in this area have been crystallized into what is now known as the Sister Formation Movement. In greater or less degree, officially or unofficially, almost all communities of women have been affected by this movement which has now reached the status of a national organization staffed by members of many different orders and congregations. This movement is dedicated toward the furthering of the spiritual and intellectual formation of all young religious.

An interesting point about this movement is the fact that its general approach rests on quite sound psychological principles: For example, the person must be treated as a whole; that is, she is intended to act in an integrated as well as an integrating manner and no part of her life, whether it be her work or her spiritual exercises, can afford to be treated as an isolated area having no relation with any other. Second, a person is motivated only toward what she sees as good
for her, and therefore the strength of her motivation will be influenced by the clarity and magnitude of what she knowingly grasps as good for her. It is also recognized that an adequate preparation in all necessary fields is an effective means toward competence in one's work and toward encouraging the effort necessary to attain it; it effectively prevents incompetence, insecurity, and the feeling that one is in the wrong kind of job.

In applying these principles to women religious, the usual period of a year and a half to three years of basic formation is judged too short a time in which to expect that the good of religious life, its goals and objectives, can be so effectively grasped that the striving toward it will not lessen, especially since there is very little opportunity to rekindle the striving once the religious has left the period of training and becomes engaged in the regular work of the community. The religious needs the kind of training in which her whole life in all its phases is presented as an integrated whole and in which she can attempt personal integration while still under the direct guidance of special mistresses. She needs additional time to grasp more firmly as good for her the goals and objectives of the religious life, again with the help of those whose main concern is precisely this and nothing else.

From the beginning of the Sister Formation Movement the
primary emphasis has been upon the spiritual and the intellectual and apostolic in the life of the young religious who will eventually become a member of the regular body of her community. At all times, however, the focus of attention has been upon the young Sister as an ordinary member of the group. Because of this focus, one dimension of community life received very little official notice; that is, the leader in the community. Now one can argue that the particular way in which each institute plans the training of its younger members will naturally and implicitly afford a better preparation to those who will eventually be chosen as leaders, even if this aspect does not have an explicit reference. That this is precisely the assumption can possibly be inferred from the fact that in the first four years of its publication, the official organ of this movement, the *Sister Formation Bulletin*, has only two explicit references to the matter of leadership.

However, the question was not entirely absent from the minds of those who headed the movement. Sister Mary Emil, I.H.M., chairman of the Sister Formation Committee until 1960, in a progress report on Sister Formation given at the closing session of the National Catholic Educational Association on April 6, 1956, asked whether the communities had or were planning to have a kind of leadership pool of Sisters with special training in psychology, philosophy, and theology who might assume positions as mistresses and superiors. Yet it does re-
main difficult to find anything very concrete that has been done with the notion of leadership within the movement.

Particularly in a religious community, the matter of leadership poses a question. Are the leader and the religious superior to be considered as equivalent in meaning? Even without experimental work upon which to base an answer, common sense would seem to indicate that these two do not necessarily mean the same thing nor do they always go together. However, this is not the place to discuss the qualifications demanded in a religious superior. Each community may differ somewhat from every other in regard to what it expects its superiors to be. But the fact remains that a given superior may or may not also be a leader, and every leader in a community does not have to be a superior in order to be a leader. Therefore, when the term leader is used, it is not to be considered as the equivalent of religious superior.

However the religious communities may care to define their leaders, the fact remains that they do need them. While so much has been done, and is continually being planned, in the formation of their young members, they may lose a good opportunity here if attention is not also given to the formation of leaders. The efforts and the goal of at least one community in this regard are stated in the following paragraph.

We went further and put before these younger members of the community their serious obligation to prepare themselves, religiously and professionally, for leadership in
the community - for eventual officership even, should the Order see fit to use them in this way. In the opening talk they were told that the community needed them, was watching them with loving care and was hoping that in them she would find the perpetuation of her great work for souls. Our purpose here was to build up in the young Sisters, from their first years in the community, a healthy outlook on office and authority as an obligation to give, and a feeling of some kind of responsibility on the part of each member with active voice for the best possible direction of the whole group toward its religious and apostolic ends. We felt that the leaders among the young Sisters should be known not only to superiors but also to each other, and that these common discussions, over a period of years, would give opportunities for the best ideas to be judged and weighed, and would direct attention eventually from personalities to issues and principles.

This could almost serve as a clarion call to others.

The longer period of training which many young Sisters now enjoy as a result of enlarged programs of formation would certainly be a very convenient time during which to give some attention to this development of potential leaders. It would be a great help to the mistresses if in the very early stages of training some support could be given to their individual judgments as to who might be future leaders. This is a fertile area for psychological research, a point at which psychology may be able to make a definite contribution to the needs of a religious community.

Purpose

Accordingly, the primary purpose of this thesis is to see whether the sequence analysis of imaginative stories, a technique devised by Dr. Magda Arnold, can discriminate between potential leaders and non-leaders. As a preliminary step to this end, some estimate of potential leadership within a group will have to be obtained in order to serve as a criterion with which the results of the sequence analysis can be compared.

Second, the motivational patterns revealed in the sequence analyses will be studied to see what they reveal about the characteristics of a leader and to see what they present about the testees that should be taken up with those in charge of the training of the group.

At this point two important questions need to be answered:

(1) what is meant by the term leader as it is being used in this paper?

(2) what is the basis for supposing that the method of sequence analysis of imaginative stories may be able to spot potential leaders?

Obviously, these are not two unrelated questions; the answer to the first will provide material for the second.

The Nature of Leadership

To attempt a definitive statement on the nature of leader-
ship or the leader would be an ambitious undertaking, one beyond the scope of this paper. On the other hand, to say that the leader is one who leads may sound like too much of a simplification, but at least it would avoid the danger so aptly implied by Chester Barnard in his paper on this topic: "Leadership has been the subject of an extraordinary amount of dogmatically stated nonsense."\(^2\)

Somewhere between the limits of a definitive statement and an over-simplification, there is room for several pertinent remarks. Regardless of the field in which the subject of leadership is studied, psychology, sociology, philosophy or business, there is a decided communality in the various meanings given to the term. Although these references will be supplemented in Chapter II, several examples will be given here to illustrate the point. Hemphill states that "leadership may be said to be the behavior of an individual while he is involved in directing group activities."\(^3\) Gibb discusses several somewhat different meanings of the term, among which the leader is defined as one who exercises influence over others.\(^4\) Barnard uses the term


\(^3\)John K. Hemphill, Situational Factors in Leadership (Columbus, Ohio, 1949), p. 5.

leadership to refer "to the quality of the behavior of individuals whereby they guide people or their activities in organized effort."  

More in a relational context, Pigors conceives of leadership as existing when a personality is so placed in the environment that his will, feeling and insight direct and control others in the pursuit of a common cause. All of these descriptions of a leader contain the common notion of one who directs or guides others as they move toward an objective, and they imply further that the leader have some conception of what that objective is and how to get there.

The value of this common notion of a leader as found in modern studies is enhanced by its continuity with philosophical and ethical ideas of a leader in ancient and medieval times to which it bears a striking similarity. Aristotle in both the *Politics* and the *Nicomachean Ethics* indicates that the quality proper to a ruler is prudence insofar as that disposition is concerned with governing and commanding others, as distinct from himself, toward the common good. (Compare this with Pigors' description given above.)

---

5 Barnard, p. 83.
7 *Politica*, III, 4.
8 *Nic. Eth.*, VI, 8.
Thomas Aquinas, elaborating on the text of Aristotle, says that "prudence is in the ruler after the manner of a master-craft," thereby indicating that prudence is in the ruler in a special sense and that this in no way detracts from prudence as found in a different way in those who are not rulers. There is a definite reason why there should be a special prudence in rulers.

It belongs to prudence to govern and command, so that wherever in human acts we find a special kind of governance and command, there must be a special kind of prudence. Now it is evident that there is a special and perfect kind of governance in one who has to govern not only himself but also the perfect community of a city or kingdom; because a government is the more perfect according as it is more universal, extends to more matters, and attains a higher end. Hence prudence in its special and most perfect sense, belongs to a king who is charged with the government of a city or kingdom: for which reason a species of prudence is reckoned to be regnative.

Now one could argue that a leader has not been defined as synonymous with a king or ruler, that, in fact, these terms connote something additional if not quite different. However, the Latin word princeps used quite often by Thomas Aquinas in these texts and translated as ruler, has the basic meaning of first in line or dominator of the situation and could just as well be translated as leader. Nevertheless, the fundamental notion remains: the leader possesses prudence in a special way in that...

---

he is concerned with directing others, not to some goal specific and personal to himself alone, but to some common goal or objective. Here again the similarity to the modern notions is evident.

Old and new conceptions can also be compared according to what constitutes the nature of prudence and what characterizes the behavior of leaders. The three acts or steps in a prudent act are counsel, judgment and command. Farrell neatly summarizes these steps as: considering the pertinent possibilities regarding what is to be done here and now, making a decisive choice of one of these means and then going into action. Of these three the principal act is the last one of actually getting things done. Prudence, then, is the virtue by which a person "gets things done the way they should be done . . . . it is the channel down which flow the powers of the practical intellect into the sea of action." Or, more briefly, prudence is right reason applied to action, and since the practical reason is concerned with the things that are to be done in order to attain some end, i.e., for the sake of action, it follows that the principal act of prudence is command which carries into action what has been considered and decided upon. Now the


12 Ibid., p. 147.
same three acts of counsel, judgment and command are also found in that special kind of prudence belonging to rulers or leaders, except that here one is concerned not primarily with his private good as an individual, but with the common good of a group.

These points find a close parallel with some personal characteristics of leadership. Argyris states that the leader's "emphasis is always upon action, and action today, not tomorrow, but today." ¹³ Furthermore, the leader's personal goals, values and feelings are primarily centered in the objective of the organization or the group. Barnard lists four types of activities that mark the leader's behavior: the determination of objectives, the manipulation of means, the control of the instrumentality of action, and the stimulation of coordinated action. ¹⁴ In refining the fundamental characteristics of a leader in terms of what he does, Tead states that "we want a good generalist or generalizer able to take multifarious facts and see them in a meaningful, directive significance. Ability to take the overview and do something projective with it is certainly one of the crucial talents." ¹⁵ What stands out, then, is the ability to see what means are available for the purpose in


¹⁴Barnard, p. 85.

view and, most important of all, to take action toward that end which is effective within the whole group of which one is the leader. Evidently there is a striking comparison between the nature of prudence and the characteristics of leadership.

This concludes the discussion of what is meant by the term leader as it is being used here. The remainder of the chapter will deal with the rationale for using the method of sequence analysis of imaginative stories to spot potential leaders.

The Method of Story Sequence Analysis

Story sequence analysis, originally devised by Dr. Magda Arnold, is a method of scoring imaginative stories. It was first reported in the literature in 1949 in the Journal of Abnormal and Social Psychology. Then several theses under her direction, to be discussed in the following chapter, investigated the method further. These efforts have culminated in the publication of a book, Story Sequence Analysis, in which she presents this method in its entirety.

Sequential analysis is a method of scoring a sequence of stories such as told in the TAT. Perhaps Dr. Arnold herself has best stated the reason for her interest in developing this method of scoring and for the need of such a method in

Unfortunately, there has never been general agreement on how the TAT should be scored, or even on what should be scored. Murray's original . . . scoring of "themes," which counts "needs" and "press" separately, is rather cumbersome. Since then, a number of scoring methods have been developed, most of which allow a considerable accuracy in clinical diagnosis . . . . As time goes on, the TAT seems to be used more and more impressionistically, in much the same way as dreams are used by various schools of psychoanalysis. This has led to a general disappointment in the TAT as a valid measuring device.¹⁷

One of the basic reasons for this impasse, both in the opinion of Arnold and of others such as Wyatt and Veroff as expressed in their article in Progress in Clinical Psychology,¹⁸ is the number of inaccurate and untenable assumptions underlying the various scoring methods. In two carefully worded analyses, Arnold shows the validity of this criticism.¹⁹

Arnold's new method sets aside such preconceived notions; for example, that a projective test like this is a test of perception which means the projection of an image into the external world, that the stories reveal latent and overt motives, that needs frustrated in reality will be expressed in the stories,


that the storyteller always identifies with the hero thereby making the hero's emotions his own, and that each story is a recall of past significant personal memories somewhat "falsified" by imaginative twists. Extensive research using these notions has not been very fruitful in prediction, as noted above. Since Arnold presents the complete rationale for this method in her book, only those parts which are especially pertinent to this study will be discussed here.

An understanding of this method rests on three crucial points: What a story really is, the true function of the imagination, and what can be inferred about the storyteller as a consequence of these two. A story is not merely an autobiographical account somewhat enhanced by imaginative twists. Rather, a story is a new production, which, although it may use the material provided by memory, uses it in an entirely new way. A story may be autobiographical, and this can be confirmed by the storyteller himself, but when this is not the case, the story remains a creative production. Asking a person to tell a story with a plot and an outcome requires, then, not merely perception of a visual or verbal picture and a recall of past experiences related to it, but the use of creative imagination. The person is not asked to tell what he sees or hears or to recall what past experiences this picture reminds him of; he is asked to tell a story.
When a man is asked to tell a story about each picture, he must take what is portrayed in the picture, interpret its meaning by recourse to his own experience and recombine past impressions in such a way that a series of actions is shaped into a connected plot and outcome. Though the individual elements have their source either in immediate perception or in past experience, the imaginative production is something new that forms an articulated structure.  

The principal function of the creative imagination is to recombine the data of present perception and past experience in a way that is different from that in which they were actually perceived. When this capacity functions to produce a story rather than, say, a description of an object such as a winged horse, it must deal with possible courses of action that could be contained in the story and the possible consequences of any of these alternative actions.

However, there must be some direction to this planning for action. Obviously, the storyteller prefers some courses of action and backs away from others. Now any direction or movement requires some object known in such a way that it arouses action or a tendency to action, either toward or away from it. It makes no difference how the object is known, either through the functions of sensing, recognizing, recalling, imagining, understanding or judging.

In man, they are followed both by an immediate appraisal and a reflective value judgment of good/bad; these are

---

20 Arnold, *Story Sequence Analysis*, original mimeographed manuscript, p. 9.
estimative functions and result in an action tendency toward what is judged good, away from what is judged bad. We feel drawn toward what we like or judge available, we avoid what we dislike or judge worthless. 21

In storytelling, the action tendency that directs the development of the story seems to be the person's (emotional) attitude toward something he experiences. In the case of sequential analysis, it will be his attitude toward what the visual or verbal picture portrays. These attitudes, in turn, are the result of previous appraisals of people and situations, of his own or other people's actions, and even of previous tendencies to action. Once these appraisals have been made, the person retains them in such a way that ordinarily they are revived whenever similar situations are experienced. Again, in the case of sequential analysis, the similar situation that arouses these appraisals is the situation portrayed or suggested by the visual or verbal picture.

Accordingly, our attitudes are merely emotional impulses that have become habitual and stem from earlier appraisals which may be either immediate, intuitive, or reflective. In human beings, they usually are both. We have both emotional and intellectual attitudes. . . . When such an attitude is activated by a picture. . . . it directs our imagination so that we describe the picture and sketch out the action represented in such a way that it conforms to our attitudes and thus to past value judgments and emotions. This does not mean that we experience the emotions of the characters in the situation. It does mean that the judgment of the characters, by their emotions and actions, as indicated by the way the story is told and particularly by the outcome, is a judgment that

21Ibid., 12.
flows directly from our habitual appraisals of similar situations.22

As a consequence of this, several things can be inferred about the storyteller. In the way he develops the plot and ends the story, he is revealing his attitudes and convictions toward the situations depicted in the stories, he is telling what he thinks could be done or should be done under the particular set of circumstances he has set up. If the stories reveal a definite problem, he will show in the plot and outcome how he would go about handling it. If there seems to be no special problem depicted, he will still reveal his attitudes toward whatever situations he has set up.

Accordingly, stories betray a man's attitudes (emotional and intellectual) and the way in which they influence him to act; they reveal his motives. And since motives are blueprints for action it is possible to infer what he will do in real life from the way in which he resolves the problems he sets himself in the stories.23

An attitude or motivational pattern is termed constructive or positive when it indicates that achievement is the result of effort, initiative, virtue, or the outcome of a definite plan that accepts limitation and adapts to circumstances; when loss, harm, or danger is overcome by positive action; when ill-intentioned action is punished, rejected, or renounced; when others are met with good will, good fellowship, or humor.24

22 Ibid., 14.
23 Ibid., 20.
The opposite of any of these is termed non-constructive or negative.

These attitudes or patterns were not arbitrarily designated as constructive or non-constructive. They are the ones drawn from stories told by people who were actually achieving or not achieving in various fields. That high achievers do show positive attitudes can be explained by a further inference. The way these people speak about actions and their consequences reveals how they think about them, i.e., what are their attitudes, and it also reveals their own motivating action tendencies.

Therefore, since the method of story sequence analysis reveals a person's attitudes, what actions he thinks will lead to success and what to failure, and what is required for success or failure, this is most likely the way in which he will conduct himself in actual life situations.

Story Sequence Analysis and Leadership

Now, how does this discussion relate to the thesis that the method of story sequence analysis can spot leadership potential? The leader has been described as one who directs or guides others as they move toward an objective, as one who possesses prudence in a special way. He can pick out the available means to an end and take effective action toward that end. In other words, he knows the possible means, he can make a decisive choice of one of them and, most important of all, he is able to carry his de-
cision into action. Related to this, story sequence analysis is a method of scoring a projective test which really taps the imagination in that it requires the telling of creative stories. The function of imagination is to plan for action, to figure out possible courses of action and their consequences. In the course of the test, the person reveals what alternatives he approves of and which he disapproves, what action he thinks leads to success and what to failure. He reveals what goals he thinks worth striving for and how he would go about reaching them.

All this certainly applies to the leader. He is a leader because he uses his imagination to map out an effective course of action. His stories will express this functioning of imagination, and sequence analysis will reveal what he considers effective action; it also shows the type of goals which he judges can be reached by various courses of action. This points to the method of story sequence analysis as a suitable means for spotting leadership potential.

Leadership vs. Leadership Potential

However, it must be remembered that leadership potential is the objective in this study. Some people know what would be a good thing to do, but they seem to lack the ability to convince others and spur them to effective group action. The term potential does not apply to this group, for without such ability one could hardly speak even of leadership potential. Rather,
the term refers to one who has not yet met the situation in which he could demonstrate this particular kind of prudence. The test does not tap what the subjects have done in actuality. Primarily it seeks to determine whether they have sound and constructive attitudes motivating their own personal actions and how effective their choice of actions seems to be. If they do well in this, it is possible to infer that at least they have the potential for leadership in the sense that they are able to choose a course of action that leads reasonably to success or a constructive and purposeful outcome. The test can give only the testee's attitudes, his motives for action. If these are positive and the solutions suggested are effective, he demonstrates his ability to do the right and effective thing. Whether he will actually be listened to and followed depends perhaps as much on the situation as on himself.
CHAPTER II

SURVEY OF LITERATURE

Three topics were considered of particular importance in the literature related to this study: namely, (1) the manner in which leadership has been treated within religious communities, (2) studies using the method of story sequence analysis as a predictor of leadership, and (3) other techniques used for the identification of leadership potential. However, an initial survey showed that very little was available in regard to the first two topics. The material covering the third was slightly off center from the actual topic: most studies involving leadership are concerned with the actual evolution of a leader from within the group, the functioning of an already given leader or the delineation of a leader's characteristics, none of which is the primary objective here.

Leadership as Treated Within Religious Communities

For example, in regard to the first topic, Chapter I mentions the fact that in the first four years of publication of the Sister Formation Bulletin there are only two explicit ref-
erences to the question of leadership;¹ and in the remaining
issues up to the summer of 1962 there are no additional ref-
erences. However, a word of caution is demanded here. The
dearth of material in this publication or in any other one de-
voted to religious life must not be taken as an indication that
nothing at all is being done regarding the matter of leadership
within religious communities. That would be an unwarranted
assumption. This discussion is simply pointing out that very
little has actually been published on this topic (a fact which
is also true in regard to many other factors to be found in
religious life); and no attempt was made to survey various com-
munities by means of questionnaire to find out what they were
doing since that was not the purpose of this study. The closest
approximation to the subject of leadership can be found in the
reports that deal with the kind of training that a woman re-
ligious should have to be an able administrator in some institu-
tion and the qualities that would best fit her for such a job
or the qualifications and requirements of a good superior. How-
ever, it has already been decided that in this study the terms
superior and leader will not be considered as synonymous. For
this reason, this type of material was not deemed pertinent.

There is a noticeable concern in the literature, however,
with another aspect of religious life that is certainly related

¹See pp. 3-5, Chapter I.
to the matter that will be discussed under the secondary purpose of this study, which concerns the motivational patterns revealed in the sequence analysis; this is the question of maturity in religious. Plé, for instance, points out the close relationship between virtue, maturity and the emotions. In man, emotion ordinarily involves both sensory and intellectual functioning. Emotional maturity is determined by the extent to which these two levels are integrated in operation; virtue consists in the development of these emotions in a truly human way; and moral maturity consists, at least in part, in the further integration of emotions and intellectual appetites. Zellner emphasizes the need for maturity in prospective candidates to the religious life.

It is mistaken charity to accept doubtfully mature and questionably stable individuals into religion . . . . There is definite evidence, carefully compiled, which shows that the effect of religious life is to extend and to deepen the pre-existing psychological tendencies and thus produce a quantitative rather than a qualitative change in the psychological functioning of the individual religious.

Since sequence analysis reveals the storyteller's attitudes toward various situations, and since emotional attitudes are habitual emotional impulses to action, it is evident that this method can provide much information on maturity, i.e., a

---


person's stability, his motivational pattern, and the way he handles his emotions.

Studies Using the Story Sequence Analysis

In regard to the second topic, there seems to be no study up to the present time which is using the method of story sequence analysis for the specific purpose of discriminating between potential leaders and non-leaders. This review, then, will cover other studies using the method of story sequence analysis.

Each of the studies conducted under Arnold's direction demonstrates the ability of the method of story sequence analysis to discriminate and predict motivation and achievement. After Arnold's original article in 1949, the first published study using her method was the doctoral research reported by Snider in 1953, which he later summarized to form a chapter in the book, *The Human Person*, edited by Arnold and Gasson in 1954. After failing to obtain any statistically significant results using the traditional methods of analyzing the stories obtained from the Thematic Apperception Test, Snider was able to differentiate significantly between high and low academic

---

achievers by using Arnold's method of analysis and interpretation as it was formulated at that time. Although Arnold's method originated within the framework of diagnosis and therapy, Snider demonstrated its value in personality research where "the main problem is to quantify qualities in such a way that the investigator can draw comparisons between groups which are actually different in some psychological quality." Snider's original research paper also contains a good summary of the history and development of the Thematic Apperception Test and methods of scoring it.

It soon became apparent that while the method of sequential analysis was fruitful by itself in individual guidance or clinical situations, a scoring system based on the material obtained by story sequence analysis was necessary for further personality research. McCandlish developed a scoring method derived from his subjects' stories and then was able to designate correctly thirty-nine out of forty high school students as high or low achievers on the basis of their test scores. Burkard, working in a different area, also set up a scoring system using definite criteria obtained from the stories and was able to discriminate


in fifty out of fifty cases between good and poor teachers. In a study by Petrauskas, again using a scoring system formulated for his particular research, a group of sixty naval recruits were correctly designated as offenders or non-offenders.

The work of formulating a scoring system, rather than of prediction itself, seems to have been the focal point of Quinn's first study. Although it is interesting from the standpoint of its contribution to the development of such a system, its primary importance for this paper is that it dealt with religious as subjects and obtained valuable information on the use of sequence analysis with religious. The fact that Quinn's subjects were men does not alter its value for this study which employs women; the significant aspect here is that both groups are religious. Quinn notes an important point that must be kept in mind when scoring stories told by religious.

Special care had to be taken to distinguish between constructive attitudes which were backed up by genuine emo-

---


tional 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. 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 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.

Quinn then goes on to point out the value of sequence analysis for those who are charged with the training and formation of young religious.

[T]his 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.

The necessity of constructive, well integrated attitudes that lead to positive, independent action in meeting practical, every day problems and the avoidance of passive,

\[10\text{Ibid.}, 37-38.\]

\[11\text{Ibid.}, 38.\]
dependent attitudes in candidates are extremely important to the development of a rationale suited to the training of novices.\textsuperscript{12}

In all the studies cited so far, it should be noted that the middle range of each group was excluded before beginning the predictive work so that extreme high achievers were compared with extreme low achievers. In the two remaining studies discussed next, the entire group was used in correlating TAT scores with achievement.

Continuing his earlier study and using the scoring system he had worked out there, Quinn investigated the relationship between the total scores from sequential analysis and a criterion estimating the promise that young religious showed for future success in the religious life.\textsuperscript{13} When fellow religious estimated the criterion score, they obtained a correlation of .59; when the superiors of these religious estimated the criterion score, the correlation was .61. Garvin in his study\textsuperscript{14} also used the whole range of scores in a large sample. The

\textsuperscript{12}Ibid., 47.

\textsuperscript{13}Thomas Leo Quinn, "Differences in Motivational Patterns of College Student Brothers as Revealed in the TAT, the Ratings of their Peers, and the Ratings of their Superiors: A Validation Study, "Unpublished Doctoral Dissertation (Loyola University, Chicago, 1962).

correlation between the final test scores using sequential analysis and the grade-point average of college men was .85; and between the final scores and the grade-point of college women the correlation was .83. Arnold herself did a study using an entire group of seventh grade children and obtained a correlation of .75 between their sequential analysis scores and school grades.15

The final form of the actual scoring system and the scoring criteria as worked out by Arnold appear in her book, *Story Sequence Analysis*; they are briefly described in the next chapter.

From these studies it is evident that the method of story sequence analysis has demonstrated the ability to make significant predictions regarding real life situations.

Characteristics of a Leader and of a Leader's Behavior

The next topic to be covered in the literature concerns the characteristics of a leader and of a leader's behavior. Gibb has an excellent chapter in the *Handbook of Social Psychology*, to which reference has already been made in Chapter I, in which he covers both parts of this topic. In the matter of leadership, there seem to be three key terms: the group, the leader, and leader behavior. Since group action and the inter-

action between leader and group is not the focus of this thesis, nor is it a question of types of leadership such as authoritarian or democratic, such material will not be reviewed. Gibb gives several general definitions of a leader that practically summarize all the current ways in which such a person could be conceived. A leader can be considered (1) as an individual in a given office, (2) as the focus for the behavior of group members, (3) in terms of sociometric choice, (4) as one who exercises influence over others, (5) in terms of his influence upon the total performance of the group as a group, and (6) as one who engages in leadership behavior. 16 Within this section is an important discussion on the point that leadership and headship or dominance are to be clearly distinguished. This fits in very well with the position maintained in this study that the terms leader and superior are not to be considered synonymous. In a religious community, the superior may exercise headship but not necessarily leadership, although the notion of also being a leader is not essentially excluded.

After reviewing many studies concerned with the empirical determination of leadership behavior, Gibb summarizes the findings in terms of five characteristics which generally seem to identify leader behavior; namely, technical proficiency, initiating and directing action, showing consideration for follow-

---

16 Gibb, pp. 880-884.
Gibb concludes his article with a discussion of three theories of leadership which seem to underlie all the work on his subject. He designates the first as the unitary trait theory which holds that there is one single trait that will mark leaders of any kind and in any situation. However, the research so far has not produced any indication that there definitely is any such single common trait characteristic of all leaders.

The constellation-of-traits theory broadens the preceding one so that now a pattern of traits is held to constitute a capacity for leadership. Here again the emphasis is on the personality of the leader, but the entire formulation is not nearly so rigid as in the former theory. Some play is given to the fact that this constellation may vary from group to group and from situation to situation.

Perhaps the most widely held position is the interactional theory in which the major emphasis is given to four factors; the personality of the leader, the followers, the group itself in terms both of its structure and of its movement as a group, and the situation. These factors are utilized in interactional theory under three aspects.

First, leadership is always relative to the situation .... Secondly, the basis psychology of the leadership process is that of social interaction. It is distinctly a quality of a group situation. No individual can be
conceived of as a leader until he shares a problem with others, until he communicates with them about the problem, until he has succeeded in enlisting their support in giving expression to his ideas. Leader and follower must be united by common goals and aspirations and by a will to lead, on one side, and a will to follow on the other, i.e., by a common acceptance of each other. It is a corollary of this principle that the leader must have membership character in the group which sponsors him for that role . . . .

Finally, given group-membership character, election to leader status depends upon perception of individual differences.17

In a work by Argyris dealing with leadership in the business field, the leader is described as performing best "when he stimulates others to action . . . . An effective leader arouses motivation through his action."18

In an analysis of the relations between a leader's behavior and leadership adequacy, Hemphill mentions the following as significant: the ability to advance the purpose of the group, competence in administrative functions, the ability to inspire others to greater activity, the manner in which the leader adds to the individual group member's feeling of security in his place in the group, and the fact that the leader is relatively free from activities serving only his own interests. He also mentions an interesting point regarding leader behavior as it refers to the dimensions of the group. "A leader's most

---

17 Ibid., 915.
18 Argyris, p. 28.
important function in the dynamics of group behavior may well be that of maintaining group membership as a satisfying experience for the group and facilitating their action as a unit rather than as separate individuals." This would correspond in some respects to the traits of friendliness and social skill which some studies have investigated as designating a leader.

Within the framework of Catholic social work, Giese describes leadership as a carrying out into social action of one's convictions in an influential way. This necessarily implies a relationship with others.20

Bellows has a good analysis of the subject of leadership under the title Creative Leadership. He feels that the present state of world affairs demands that leadership be regarded as a more creative and functional force. "Creative leadership involves arranging the situation so that mutual goals and understanding meld people into harmonious teams."

He definitely maintains the position that being a manager of a situation does not mean the same thing as being the leader of that situation. The last two sections of this book, entitled "Leadership Methods"

19 Hemphill, p. 100.


and "Measuring and Improving Teamwork," are particularly comprehensive in their coverage of research in these areas. The book also contains an extensive bibliography.

Bellows stresses the importance of the situation in the total leadership picture. He agrees with Gibb's summary of data that there seems to be no single characteristic nor an array of traits that always marks the leader. The leader is too much a part of the individual situation to permit of such rigidity. Whatever might generally characterize the leader is only half the story; leader and situation belong together.

"Leader behavior is characterized by both consideration for others and tendency to initiate structure or bring order into a situation by planning and arranging the situation so the work can go forward in a shared direction."\(^{22}\)

This review gives evidence of the similarity of view regarding characteristics of leadership and of leader behavior. Even though there seems to be no universal and set pattern in which these factors constituting leaders seem to appear, there is some agreement that these are the ones usually in evidence and the ones to be emphasized to a greater or less degree.

Other Techniques Used to Identify Leadership Potential

The final topic in this review concerns the use of socio-

\(^{22}\)Ibid., 294.
metric techniques for identifying leaders. In its original form, a sociometric test is a means of measuring or assessing the relationships among the members of a human group on the basis of feelings or preferences. It attempts to represent variables in as purely social a manner as possible. Each member of the group may indicate his liking or preference for any other member of the group, but he may not specify anyone outside his designated group. In this way the test seeks to describe the interpersonal relations existing in a given group.

The use of this technique in leadership research appears to follow two somewhat different courses. On the one hand are those studies which retain the notion of feeling or preference in the sociometric question: for example, "Whom would you like" or "Whom would you not like" in regard to some past or future particular activity. In what was perhaps the first sociometric study of this kind on leadership, Jennings found an almost perfect correspondence between those girls elected as leaders to represent their groups and those predominantly overchosen on the basis of sociometric criteria. In one of her last publications relating to this study she summarizes some findings that are useful for this subsequent research.

Age, intelligence, and length of residence appear not to account to any appreciable extent for the individual differences in choice-status accorded the individual by the membership of the community as a whole. Moreover, an over-chosen status may be achieved by the individual whether or not he is given exceptional opportunity to know
and be known by others in his community; but individuals who show an over-chosen status are frequently found in situations involving many contacts. The individual apparently seeks out so far as he can the kind of situation which appears to be compatible with his disposition towards interpersonal contact.23

On the other hand, however, it seems to be more and more the case that when a sociometric test is being used to identify leaders the simple feeling or preference question is no longer used. Sociometric research in this field indicates that the accuracy of the sociometric device in defining the leader is greatly affected by the kind of sociometric question asked and the nature of the sociometric criterion. In a significant study Gibb24 obtained correlations of approximately .45 and .42 between observers' ratings on leadership and the sociometric criterion questions of spending leisure time with and working with. However, when he used as the criterion question the person whose removal from the group would bring about the largest group change, the correlation between this question and observers' ratings was about .80.

Rather similar findings were reported by Bales in his

---


study. He used four sociometric questions which referred to contributing the best ideas, guiding the discussion, likes and dislikes, and then also asked the subjects to indicate whom they regarded as leaders. He found that the questions concerning contributing best ideas and guiding discussions were most closely associated with leadership in the opinion of the subjects. Bales also found that there was a marked decrease over time in the percentage of cases in which persons chosen as best liked were also chosen for best ideas and for guiding discussions. This further indicates that at least in terms of sociometric choices there is little correspondence between the notions underlying these two types of questions.

However, sociometric techniques are not applicable without reservations to the study of leadership. Lindzey and Borgatta state that research seems to make it evident that "any comprehensive study of leadership necessitates more information than can be supplied by this technique alone." In their discussion of research on leadership, they point out several of the danger spots in the use of sociometric measures: (1) just any kind

---


of sociometric question will not necessarily tap aspects of leadership since what is identified is very much a function of the nature of the sociometric question and the criterion used, and (2) the center of the group in terms of sociability may not really be the actual functioning leader of the group although the former may be more visible in terms of number of choices.

One of the most practical presentations of sociometric measures is the work by Norman Gronlund. He clearly explains the techniques and has a fine bibliography covering a rather broad area. It is interesting to note that he also devotes several pages to a discussion of the limitations of this method in leadership research, while in no way denying the contributions which it can make.

In one other area closely related to the field of sociometrics there are also several other types of measurement quite similar to the more traditional form of sociometric test. Lindzey and Borgatta state that the most similarity is found in the rating scales, although there is some correspondence in attitude scale, questionnaires, and inventories as well. These other measures seem to offer a broader framework for research in terms of the variables used and the setting in which testing

---

27 Norman E. Gronlund, Sociometry in the Classroom (New York, 1959), pp. 21-25.

28 Lindzey and Borgatta, p. 406.
can take place.

The use of rating scales usually arouses discussion on whose rating is more accurate and reliable. Kubany in his study used peer nominations; he quotes the following argument of Williams and Leavitt to account for the favorable peer nomination results in leadership studies:

group members have more time to observe each other than do superior officers. They know each other in a realistic social context, and they react directly to each other's social dominance. All of these are conditions favorable to informed judgment.29

In regard to leadership studies, Kubany argues for a particular form of sociometry where the primary concern is with individual selection utilizing a criterion outside the individual nominator's personal feelings sphere. The only concern . . . is with the individual member of a group as an unique observer of a complex behavior phenomenon. The individual is asked to evaluate the effectiveness of other group members. The orientation is wholly on individual performance and effectiveness.30

In other words, Kubany is concerned with the same factor in sociometric research that has just been discussed, that is, the special form that the criterion question must take in order to get a more accurate measure of leadership.

And the combination best suited to give a more accurate

---


30 Ibid., 33.
measure is the peer group itself, not the superiors, using this special form of criterion question:

the investigator using peer nominations is not interested in individual feelings and attitudes, per se . . ., but rather he is concerned with selection without reference to the nominator with the nominations by each individual being concerned equally valid. The nominator is expected to think of himself as an objective outside observer who merely happens to be conveniently situated.31

The outcome of Kubany's study upheld the position that in some areas the method of peer nominations is more accurate than superiors' ratings.

Bellows cites a study by Jones and Smith in which again the ratings by the peer group seem to be more closely associated with the identification of leadership than do the ratings by the superiors' group.32 One point, at least, seems to be brought out in many studies - superiors' ratings and peer ratings do not always coincide. In any case, there are arguments and studies to support the use of either method of rating.

This concludes the review of the literature pertinent to this study. The amount of literature devoted to leadership research is large and growing, and obviously this chapter has not covered even a sizable portion of it. It has been necessary to limit the discussion to those areas which seemed most relevant.

31Ibid., 34.
32Bellows, pp. 281-282.
CHAPTER III

METHOD

This chapter will cover the following material: information on the subjects used in this study, a description of the procedure in giving the storytelling test and of the method of sequence analysis in scoring it, and an explanation of the formulation and scoring of the criterion test.

Description of Subjects

Since it is hoped that the method of story sequence analysis will serve as a valuable instrument in the early period of training of young women religious, both for its ability to discriminate between potential leaders and non-leaders and to reveal significant motivational patterns, the question of whom to use for subjects in this study partially answered itself. The findings would be more immediately applicable if it were possible actually to use religious. Accordingly, permission was obtained to use the young religious of a given community of women who were in an extended two-year period of religious and educational training following their first profession of vows in this community. (This is precisely the type of formation of
young religious advocated by the Sister Formation Movement and explained earlier in Chapter I.)

However, the decision to use professed religious was not reached immediately. The first important step was deciding how many subjects to use. Two factors were involved here: the size of the proper groups available within the given community and the nature of the problem being investigated. In the community three groups representing three distinct stages of training were available. The combined total would be approximately seventy-five subjects. While these three distinct groupings would not interfere with the effectiveness of the method of story sequence analysis, the same would not be true for the criterion test being used to determine possible leaders. These three groups live and work so independently of each other that it would be impossible to treat the combined group as a whole; neither would the detailed and intensive statistical techniques to be used permit combining the data. Each of the three groups could be expected to know only the members of her own group. Any criterion test would have to be applied only to each single group. To use the combined group of seventy-five would actually amount to nothing more than repeating the same operations for three separate groups with no possibility of combining the data.

Consequently, it was decided to use only one group, those Sisters in the last stage of their training, since they had been together the longest and would thus be in a better position to
appraise one another as possible leaders. This would reduce the size of the experimental group to twenty. However, with the subjects available, the group boundaries in studying leadership, and the statistical techniques selected, this seemed the most reasonable approach.

In the group of twenty sisters selected as subjects, the range in chronological age was from twenty-one to twenty-four, with a median of twenty-two and a mean of twenty-two. The range of IQ was 87-133, with a median of 112.5 and a mean of 109. Eleven of the sisters had just completed work for their Bachelor's degrees in preparation for teaching, and the remaining nine were approximately at the end of their third year of college work. No attempt was made to control the factor of intelligence since previous studies, notably those of Snider, McCandlish, and Burkard, obtained the same range of good and poor scores from the sequence analysis regardless of whether the groups had high or low IQ's.

Procedure: Story Sequence Analysis

The following procedure was used in this study. The test was administered to all twenty subjects at the same time. Slides were used and the pictures were projected on a screen placed in front of the room. Twelve cards from the standard set of TAT pictures were shown in the following order: 1, 2, 3BM, 4, 6BM, 7BM, 8BM, 11, 12M, 14, 16, and 20. The M pictures were used
here as in most of the earlier studies because they depict a more dramatic scene and therefore might more easily arouse an imaginative production. Each subject wrote her own stories. The instructions given the subjects before the first picture was shown were the same as those stated by Murray in his TAT manual, with two additional points being particularly stressed. The subject is requested to avoid dialogue in the course of telling his story and he is asked to pay special attention that his story has some kind of plot and particularly an outcome. Before both the second and third pictures were shown, the special part of the instruction was repeated; namely, that dialogue be avoided in the stories and that the stories have some kind of plot and an outcome or conclusion. The subjects were allowed approximately seven minutes to write each story. The picture being shown remained on the screen during this entire seven-minute period. The subjects were told that they could complete any stories which they did not have enough time to write down at any point during the test at which they found extra time. The only stipulation regarding the length of the stories was that the subjects try to complete them within the allotted time.

Although the subjects belong to the same religious community as the experimenter, they were not at the time of testing known to her. Complete scoring was done by a blind analysis, the usual procedure for this method. As an additional control,
the scoring was spot-checked by an experienced scorer.

Method and Scoring: Story Sequence Analysis

Since the role of the imagination in sequence analysis has already been explained in Chapter I, it will not be necessary to repeat it here. But the fact that the imagination is such an important factor in storytelling only serves to emphasize that it matters very little what is used to initiate the story. No definite set of pictures is required; in fact, with a person who has a vivid imagination, a verbal description may be all that is necessary to start off a story. However, for research purposes it would be better procedure to have a standard type of test material. Therefore, Murray's pictures from the TAT were used in this study as well as in the other studies mentioned in Chapter II. Although there are twenty cards in the TAT set, as few as twelve, the number used here, are sufficient to obtain an adequate test. Several of the previous studies report varying numbers of cards used: Burkard (12 cards used), Petruskas and Garvin (13 cards used), and Arnold (11 cards used).

The first step in this method is to try to draw out of each story exactly what the storyteller is trying to say, i.e., a kind of moral of the story. This statement is called the import. It is not precisely a summary of the story, nor is it so
general a wording that it loses all the individual characteristics of the story. Rather, the import is an attempt to abstract from the concrete situation of the story exactly what the storyteller is trying to express there without inserting any notions based on theoretical preconceptions. The import is drawn only from the story itself, and not from the meaning that this kind of story and its characters might have in some extraneous theoretical framework.

The imports from each story are then set down in sequence; that is, one right after the other in the order in which the stories were told. From this sequence it becomes possible to follow the storyteller's trend of thought which reveals his habitual dispositions, the way he evaluates human actions and the circumstances of man's life. The story import will show how the storyteller thinks people usually act and how he feels they should act; what actions he thinks are right and which wrong; what will lead to success, in his opinion, and what to failure; what can be done when danger threatens, what are the things to strive for. In short, the story imports, taken in sequence, give us a connected statement of the storyteller's principles of action, his motivational pattern. Obviously, this pattern should make it possible for us to predict his action.¹

Several complete tests are given in the Appendix, including the stories and the sequence of imports obtained from them. In reference to the scoring, it is the import that is scored and not the story since the import carries the precisely worded

¹Arnold, *Story Sequence Analysis*, mimeo., p. 22.
message of the story.

To someone familiar with the method, the sequence analysis itself gives an initial indication of whether the storyteller's motivational pattern is positive or negative, but the formulation of an objective scoring system was the next step in the complete development of the method. The scoring system was derived strictly empirically: those imports are scored positive that were found predominantly among high achievers; and the imports found predominantly among low achievers received negative scores. In the present study, the scoring system as presented by Arnold is used. The scores range from +2 and +1 for positive imports to -1 and -2 for negative imports. The final score for a test is the algebraic sum of the scores given to each import, and this value then is changed through a linear transformation to a Motivation Index (M.I.). This Motivation Index is the score used in all calculations in this study unless otherwise stated.

The scoring criteria were developed from the varying content of the imports. There are four general categories with subheadings under each and with each category containing the four possible plus and minus scores. An outline of the main headings in each scoring category as well as a sample page from one of the categories can be found in the Appendix. Arnold's book, *Story Sequence Analysis*, contains a more complete explanation of the entire method of story sequence analysis, the scor-
ing system, and the scoring categories.

Procedure: Criterion Test

In the midst of a chapter on procedure, it seems fitting to note that Thurstone was probably right when he wrote in one of his articles that the two principles which guide an investigator in the selection of his methodology are experimental convenience and theoretical propriety. The particular situation of the experimental group and the nature of the criterion itself presented certain difficulties in terms of the kind of test to be used, thus making Thurstone's principles most appropriate. The subjects, while in this stage of their training program, did not have a great many opportunities in which they could actually function in some type of leader capacity. Furthermore, their schedule did not permit a series of planned meetings in which the actual evolution of a leader could be observed. Even if this had been possible, it would seem to have limited the data in the sense that the majority of the research on leadership indicates that each different situation may have a different person functioning as the leader of the group. The person who is a leader in one type of activity of the group may not be the leader in a different activity.

The members of the experimental group had lived together for four years or, in some cases, for five years. The technique to be chosen should also take advantage of this sizable
amount of interpersonal information. Although a sociometric technique would seem quite suitable for tapping this kind of information, it does not readily permit the type of quantified scoring that could easily be used in further calculations. Besides, strict sociometric testing usually does not require designations for the entire group, and such a limitation would not fit the design of this study since all the subjects were to be used both in the criterion test and in Arnold's technique. With these points in mind, the following method was devised.

Basically, this might be called a ranking test. In accordance with the directives for formulating sociometric questions, a very important one being that each question should clearly pertain to only one specific type of activity or situation, a set of twelve questions was prepared. Eleven of these questions were composed so as to select some of the activities forming a part of this stage of the subjects' religious life in which opportunity might be afforded for the exercise of possible leadership behavior mentioned earlier in Chapters I and II. The last question was the kind of direct pointer often included in various forms of sociometric research. Each subject was asked to rank each member of the group including herself on each of these twelve questions. The test materials for each subject were a sheet of these questions and twelve identical lists containing the twenty names of every member of the group. The directions printed on the question sheet were as follows:
Rank each of the Sisters in your group on each of the above questions. Give the Sister who fulfills best each question the rank of 1. Give the Sister who is next best the rank of 2, and so on until you have assigned a rank to each one.

These were the twelve questions.

1. Some groups are so closely bound together that the removal of any one person changes its complexion. For which Sisters, if any, in your group would this be the case? For which Sisters would this not be the case?

2. Which Sisters in your group contribute most to recreation?

3. Which Sisters in your group are the best in suggesting and planning activities for recreation periods?

4. Which Sisters are most effective in obtaining the cooperation of others for and in group discussions?

5. Which Sisters are the most effective in obtaining the cooperation of others for feast day programs and recreational activities?

6. Which Sisters adapt themselves best to sudden changes in program?

7. Which Sisters make the best contributions to conversations and group discussions? Which Sisters make the poorest contributions?

8. Which Sisters in your group notice things to be done in their daily obediences and kitchen work and see to it that they are taken care of without waiting to be told?

9. Of those who are appointed by your mistress for special practical jobs, such as extra cleaning or organizing what has to be done for a picnic or an outdoor supper, who does the best job?

10. Of those who are appointed by your mistress for special jobs, such as organizing a panel or giving an oral report on a selected subject, who does the best job?

11. To which Sisters would you entrust the responsibility of taking charge of a difficult and important project?

12. Which Sisters in your group would make good superiors?
A sample question sheet has also been included in the Appendix for the sake of convenience.

A ranking test such as this made it possible to cover the entire group, to utilize the interpersonal information which each subject had, and to offer a variety of situations in which the group could express itself regarding who seemed to do what best in situations requiring some kind of leadership.

Although a method of peer nomination is being used here, it was still thought advisable for the sake of comparison to have the mistress of this group of Sisters who formed the experimental group work out the same ranking test. This would provide two sets of data, one in which peers acted as judges and another in which a superior (one not in the peer group) acted as judge.

Treatment of Data: Criterion Test

At this point, however, the data were not in satisfactory form; two things had to be done. With the subjects acting as judges, one could combine the ranks assigned to each member of the group for every question, and as a result of this a rank position could be given to each person; but this would not be adequate if a more precise measure of relationship could be obtained.

In an article entitled "Rank Order as a Psychophysical Method," which originally appeared in 1931 in the Journal of Experimental Psychology, L. L. Thurstone treats this precise
problem. Although theoretically the constant method may be the best in most experimental problems, in the present study the method of rank order was the most convenient experimentally.

Our present problem is to devise a plan whereby simple absolute rank order may be used as the experimental procedure with the advantages of the much more laborious constant method. Given the data for absolute rank, we shall extract the proportion of judgments "A is greater than B" for every possible pair of stimuli in the given series. These derived proportions will be used instead of the proportions that are obtained directly in the constant method. From these derived proportions the subjective separations between any pair of stimuli can then be readily calculated by the equation of comparative judgment. ²

This procedure will result in actual scale values rather than simple rank positions.

Accordingly, to the data obtained from question one the following formula was applied:

\[ P_{b>a} = \frac{1}{2}(p_{ak} \cdot p_{b>k}) + \frac{1}{2}(p_{ak} \cdot p_{bk}) \]

In other words, we have expressed the proportion of subjects who perceive B higher than A in terms of the frequencies with which the two specimens are placed in the n rank orders. We can now use simple absolute rank order as an experimental procedure, and we can obtain the same results as with the order of merit method and practically the same results as with the constant method with counterbalanced order. It is taken for granted here that the intermediate category is not used.³

These derived proportions were then used in working out the law of comparative judgment, case five. The sigma values cor-

³Ibid., 103.
responding to these derived proportions were obtained first. Then the following formula was applied:

$$(S_1 - S_2) = \frac{\sqrt{2}}{n}(\xi_{1k} - \xi_{2k})$$.

This resulted in a set of twenty scale separations from which the actual scale values were calculated.

For just the one question treated, however, this entailed a great deal of calculation which would not be experimentally convenient if a shorter method could be found which would obtain the same result. J. P. Guilford suggests the possibility of such a shorter method based on his process for dealing with paired comparisons.

The basic assumption again is that each stimulus is judged in comparison with the group as a whole. The group as a whole then becomes a composite standard $CS$, with which every stimulus is compared. It is from the proportions of judgments given to every stimulus as compared with the $CS$ that linear values are derived. This is even more reasonable in the ranking method than with paired comparisons, since in the ranking method the whole series of stimuli is laid out for observation and each stimulus is placed according to its position in the entire scheme. 4

Guilford then applied this procedure to ranked data, under the assumption that he was dealing with comparative judgments.

Accordingly, to the ranked data obtained from question one

the following formula of Guilford's was applied:

$$P_{R_k > CS} = \frac{r_i - .5N}{nN}.$$  

This resulted in a set of twenty derived proportions which were then changed into their corresponding normal deviates. The actual scale values were calculated by determining the distance between the successive deviates.

Naturally, the scale values obtained by Guilford's method were different from those obtained by Thurstone's. Table I contains the two sets of values.

**TABLE I**

**SCALE VALUES FOR QUESTION #1: THURSTONE'S METHOD VS. GUILFORD'S METHOD**

<table>
<thead>
<tr>
<th>Method</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
<tr>
<td>Guilford</td>
<td>.78 1.13 1.63 1.58 .99 1.85 .00 1.25 1.51 1.54</td>
</tr>
<tr>
<td>Thurstone</td>
<td>1.48 2.17 3.02 2.98 1.93 3.44 .00 2.42 2.83 2.89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11 12 13 14 15 16 17 18 19 20</td>
</tr>
<tr>
<td>Guilford</td>
<td>2.23 1.37 2.00 1.95 1.73 1.49 2.93 2.06 1.63 2.12</td>
</tr>
<tr>
<td>Thurstone</td>
<td>4.17 2.62 3.68 3.57 3.23 2.79 5.33 3.78 3.05 3.87</td>
</tr>
</tbody>
</table>

\(^5\)Ibid., 251.
In order to determine whether the two sets of values were comparable, they were plotted against each other. The result was an almost perfect linear relationship. On the basis of this, Guilford's method was used to obtain the scale values from the ranked data on each of the twelve questions. This procedure, however, was not possible in the case of the rankings done by the mistress because here only one person was acting as a judge. Therefore, the data had to be left in the simple form of rank order.

The first step in handling the peer group data would be to average the scale values which each subject received on each of the twelve questions and use this as a final score to correlate with the score each one received from the sequence analysis, but this would not be sufficient. Such a procedure would collapse a sizable amount of data without really utilizing its full potential. The very complexity of the phenomenon of leadership would seem to indicate that these twelve questions might not be tapping the same aspect or qualities of leadership. If they could be broken down into smaller groupings, it would provide more refined variables to correlate with the M.I. scores obtained from the method of story sequence analysis. Not only would a factor analysis accomplish this purpose but it would also map out a more precise field in terms of leadership as viewed in these twelve questions.

Accordingly, from the scale values which the twenty sub-
jects received on each of the twelve questions, a 12x12 correlation matrix was set up. This was a matrix of questions and not of subjects. The centroid method of factoring was used together with the following formula from Thurstone for estimating the communalities:

\[ h_1^2 = \frac{(\xi_{r1} + t_1)^2}{\xi_r + \xi_t} \]

Three factors were extracted from the data and after three complete analyses the obtained communalities had sufficiently stabilized themselves.

The first rotation of axes was worked out by plotting the normalized vectors on a sphere. The adjustment for the second and final rotation was determined graphically. Table II on page 57 contains the following data: the correlation matrix \( R \); the final factor matrix \( F \); the final transformation matrix \( \lambda_{02} \); the matrix of the cosines of the angles between the reference vectors for the second rotation \( \lambda'_{02} \lambda_{02} \); and the final oblique rotated factor matrix \( V_2 \). Graphs of the final rotated solution are given on pages 58, 59, and 60.

The possible significance of each factor, in terms of the sociometric questions which to a greater or less degree define each factor, will be discussed in the next chapter.

---

TABLE II

MATRICES OF THE FACTOR ANALYSIS

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.93</td>
<td>.81</td>
<td>.75</td>
<td>.77</td>
<td>.53</td>
<td>.69</td>
<td>.55</td>
<td>.71</td>
<td>.61</td>
<td>.74</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.93</td>
<td>.85</td>
<td>.61</td>
<td>.71</td>
<td>.45</td>
<td>.57</td>
<td>.56</td>
<td>.68</td>
<td>.45</td>
<td>.59</td>
<td>.58</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.81</td>
<td>.85</td>
<td>.76</td>
<td>.93</td>
<td>.35</td>
<td>.71</td>
<td>.42</td>
<td>.60</td>
<td>.62</td>
<td>.62</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.75</td>
<td>.61</td>
<td>.76</td>
<td>.85</td>
<td>.41</td>
<td>.97</td>
<td>.35</td>
<td>.61</td>
<td>.96</td>
<td>.82</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.77</td>
<td>.71</td>
<td>.93</td>
<td>.85</td>
<td>.32</td>
<td>.78</td>
<td>.30</td>
<td>.52</td>
<td>.75</td>
<td>.69</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.53</td>
<td>.45</td>
<td>.55</td>
<td>.41</td>
<td>.32</td>
<td>.39</td>
<td>.79</td>
<td>.81</td>
<td>.40</td>
<td>.80</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.69</td>
<td>.57</td>
<td>.71</td>
<td>.97</td>
<td>.78</td>
<td>.39</td>
<td>.37</td>
<td>.42</td>
<td>.95</td>
<td>.77</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.55</td>
<td>.56</td>
<td>.42</td>
<td>.32</td>
<td>.30</td>
<td>.79</td>
<td>.37</td>
<td>.90</td>
<td>.30</td>
<td>.72</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.71</td>
<td>.68</td>
<td>.60</td>
<td>.61</td>
<td>.52</td>
<td>.81</td>
<td>.42</td>
<td>.90</td>
<td>.41</td>
<td>.83</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.61</td>
<td>.45</td>
<td>.62</td>
<td>.96</td>
<td>.75</td>
<td>.40</td>
<td>.95</td>
<td>.30</td>
<td>.41</td>
<td>.80</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.74</td>
<td>.59</td>
<td>.62</td>
<td>.82</td>
<td>.69</td>
<td>.80</td>
<td>.77</td>
<td>.72</td>
<td>.83</td>
<td>.80</td>
<td>.98</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.75</td>
<td>.58</td>
<td>.64</td>
<td>.83</td>
<td>.70</td>
<td>.80</td>
<td>.77</td>
<td>.35</td>
<td>.78</td>
<td>.81</td>
<td>.98</td>
<td></td>
</tr>
</tbody>
</table>

Factor Matrix F | Transformation Matrix $\lambda_{02}$ | Rotated Factor Matrix $V_2$

<table>
<thead>
<tr>
<th></th>
<th>A$_2$</th>
<th>B$_2$</th>
<th>C$_2$</th>
<th>A$_2$</th>
<th>B$_2$</th>
<th>C$_2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>.88</td>
<td>.13</td>
<td>.25</td>
<td>.315</td>
<td>.469</td>
<td>.391</td>
</tr>
<tr>
<td>II</td>
<td>.79</td>
<td>.17</td>
<td>.47</td>
<td>.944</td>
<td>.309</td>
<td>.386</td>
</tr>
<tr>
<td>III</td>
<td>.83</td>
<td>.36</td>
<td>.31</td>
<td>.098</td>
<td>.828</td>
<td>.835</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.88</td>
<td>.13</td>
<td>.25</td>
<td>.315</td>
<td>.469</td>
<td>.391</td>
</tr>
<tr>
<td>2</td>
<td>.79</td>
<td>.17</td>
<td>.47</td>
<td>.944</td>
<td>.309</td>
<td>.386</td>
</tr>
<tr>
<td>3</td>
<td>.83</td>
<td>.36</td>
<td>.31</td>
<td>.098</td>
<td>.828</td>
<td>.835</td>
</tr>
<tr>
<td>4</td>
<td>.90</td>
<td>.30</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.82</td>
<td>.40</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.70</td>
<td>.65</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.84</td>
<td>.33</td>
<td>.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.64</td>
<td>.46</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.83</td>
<td>.49</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.81</td>
<td>.27</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.94</td>
<td>.26</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.90</td>
<td>.11</td>
<td>.32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Matrix of Cosines $\lambda_{02}$ $\lambda_{02}$

<table>
<thead>
<tr>
<th></th>
<th>A$_2$</th>
<th>B$_2$</th>
<th>C$_2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A$_2$</td>
<td>.88</td>
<td>.13</td>
<td>.25</td>
</tr>
<tr>
<td>B$_2$</td>
<td>.79</td>
<td>.17</td>
<td>.47</td>
</tr>
<tr>
<td>C$_2$</td>
<td>.83</td>
<td>.36</td>
<td>.31</td>
</tr>
</tbody>
</table>

A$_2$ = .063
B$_2$ = .323
C$_2$ = .389
FIGURE I

PLOT OF REFERENCE VECTORS $A_2$, $B_2$

FINAL ROTATION

$\cos = -.063$
FIGURE II
PLOT OF REFERENCE VECTORS A_2 C_2
FINAL ROTATION
FIGURE III

PLOT OF REFERENCE VECTORS $B_2$ $C_2$

FINAL ROTATION
CHAPTER IV

RESULTS

The preceding chapter has discussed the methods used in scoring the tests and making the data suitable for use in the crucial tests of correlation to determine whether the method of sequence analysis can discriminate between potential leaders and non-leaders as they are designated by the criterion test. This chapter will cover the following points: the correlation between the M.I. scores and an aggregate criterion score, the significance of the factor-analyzed data, the correlations between the M.I. scores and the scores of individual questions or groups of questions as determined by the factor analysis, the correlations between the rankings of the peer group and of the superior on each of the twelve questions, the correlations between the rankings given to each subject by the superior on the twelve questions and the subjects' M.I. scores, the significance of these correlations, and finally, a discussion of various kinds of motivational patterns revealed in the sequence analysis.

Correlation of TAT Scores (M.I.) with Aggregate Criterion Score

For the first correlation it was decided to use some type
of aggregate criterion score to pair with the M.I. The scale values which each subject obtained on each of the twelve questions were averaged, and this average scale value was correlated with the M.I. score. Appendix III contains a table of the scale values for each subject on each question. The following table gives the algebraic score and the transformation score (M.I. = Motivation Index) for each subject on the sequence analysis.

**TABLE III**

**SEQUENCE ANALYSIS SCORES**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Algebraic</th>
<th>Transformation M. I.</th>
<th>Subjects</th>
<th>Algebraic</th>
<th>Transformation M. I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+14</td>
<td>158</td>
<td>11</td>
<td>-17</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>+3</td>
<td>112</td>
<td>12</td>
<td>-16</td>
<td>33</td>
</tr>
<tr>
<td>3</td>
<td>-6</td>
<td>75</td>
<td>13</td>
<td>+7</td>
<td>129</td>
</tr>
<tr>
<td>4</td>
<td>-9</td>
<td>63</td>
<td>14</td>
<td>-3</td>
<td>88</td>
</tr>
<tr>
<td>5</td>
<td>-6</td>
<td>75</td>
<td>15</td>
<td>-3</td>
<td>88</td>
</tr>
<tr>
<td>6</td>
<td>-2</td>
<td>92</td>
<td>16</td>
<td>+5</td>
<td>121</td>
</tr>
<tr>
<td>7</td>
<td>+9</td>
<td>137</td>
<td>17</td>
<td>+4</td>
<td>117</td>
</tr>
<tr>
<td>8</td>
<td>-4</td>
<td>83</td>
<td>18</td>
<td>-7</td>
<td>71</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>100</td>
<td>19</td>
<td>+2</td>
<td>108</td>
</tr>
<tr>
<td>10</td>
<td>-3</td>
<td>88</td>
<td>20</td>
<td>-8</td>
<td>67</td>
</tr>
</tbody>
</table>

The Pearson product moment correlation coefficient was the statistic used. The correlation between the aggregate scores and the M.I. scores was .38.

The next step in the correlational treatment of the data was to analyze the factors embedded in the criterion test. This
was the purpose of the factor analysis.

Meaning of Factor-Analyzed Data

Three factors were extracted from the data obtained from the ranking test; they will be designated factors A, B, and C. As indicated in the $V_2$ matrix on page 57, the following test questions had the highest loadings in each of the three factors; the first question listed in each group is the one that had the highest loading in that factor and an almost zero loading in both of the other two factors. The factor loading is indicated after each question.

Factor A:

6. Which Sisters adapt themselves best to sudden changes in program and to accidental mishaps? Factor loading, .84
9. Of those who are appointed by your mistress for special practical jobs, such as extra cleaning or organizing what has to be done for a picnic or an outdoor supper, who does the best job? .70
8. Which Sisters in your group notice things to be done in their daily obediences and kitchen work and see to it that they are taken care of without waiting to be told? .61

Factor B:

10. Of those who are appointed by your mistress for special jobs, such as organizing a panel or giving an oral report on a selected subject, who does the best job? .86
7. Which Sisters make the best contributions to conversations and group discussions? Which Sisters make the poorest contributions? .76
4. Which Sisters are most effective in obtaining the cooperation of others for and in group discussions? .73

Test questions eleven and twelve occupy a peculiar position
within factors A and B. They both have comparable loadings in these two factors and negligible loadings in factor C. Therefore, they seem to require placement within both factors A and B.

11. To which Sisters would you entrust the responsibility of taking charge of a difficult and important project? In A, .56; in B, .65

12. Which Sisters in your group would make good superiors? In A, .42; in B, .53

The following questions are involved in factor C.

Factor C:

2. Which Sisters in your group contribute the most to recreation? .77

3. Which Sisters in your group are the best in suggesting and planning activities for recreation periods? .72

1. Some groups are so closely bound together that the removal of any one person changes its complexion. For which Sisters, if any, in your group would this be the case? For which Sisters would this not be the case? .60

5. Which Sisters are the most effective in obtaining the cooperation of others for feast day programs and recreational activities? .52

These three groups are somewhat interrelated because only three out of the twelve test questions could be considered pure in the sense that they had a high saturation in only one factor. However, a study of the three groupings does reveal a number of characteristics that seem to define the meaning of the factor. Thus, factor A described (1) adaptability, (2) initiative, (3) an awareness of the situation and the needs involved in it, and (4) a practical tendency in doing. Factor B describes (1) communication, (2) expression, (3) an awareness of a problem in its theoretical sense, and (4) an intellectual tendency in
doing by way of analysis and insight. Factor C describes (1) affability, (2) a social effectiveness, (3) an awareness of the rights and potentialities of others, and (4) a social tendency in doing.

Briefly, this can be summarized as follows: factor A indicates initiative; factor B, the ability to see clearly and to say clearly, i.e., a kind of insight/expression capability; and factor C, sociability.

There is a definite correspondence between the meaning of these factors and the characteristics of a leader and a leader's behavior as described in Chapters I and II, which would give some indication that the ranking test is serving the purpose for which it was designed, i.e., to function as a criterion.

Correlation of Variables Derived from Peer Ranking with TAT Scores (M.I.)

The groupings of the best questions as revealed in the factor analysis were then used as the basis for forming a number of individual variables to correlate with the M.I. scores. By this means a clearer picture could be obtained of which aspects of leadership as defined in these questions have the closest relationship with the M.I. scores. The correlational measure used was the Pearson product moment correlation coefficient. In those cases in which only one question constitutes the variable, the score used is the scale value which each
subject received on that particular question. In those cases in which more than one question constitutes the variable, the score used is the average of those scale values which each subject received on each of the questions involved. Table IV gives a listing of the sixteen variables formulated from the data in terms of the question or questions which make up each one. The Table starts with variable two since variable one designates the M.I. scores which have already been given in Table III.

TABLE IV

COMPOSITION OF THE VARIABLES DERIVED FROM THE RANKING DATA

<table>
<thead>
<tr>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociometric Question</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociometric Question</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

In general, variables two to seven are drawn from factor A, variables eight to fourteen from factor B, and variables fifteen to seventeen from factor C. However, the Table shows that, except for question six, ten and two, there is an overlapping of the same questions in variables drawn from different factors.

Table V gives the correlations between the M.I. scores and
the sixteen variables listed in Table IV which constitute the criterion test.

**TABLE V**


<table>
<thead>
<tr>
<th>Variables</th>
<th>r</th>
<th>Variables</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>.43</td>
<td>1 &amp; 10</td>
<td>.40</td>
</tr>
<tr>
<td>1 &amp; 3</td>
<td>.40</td>
<td>1 &amp; 11</td>
<td>.32</td>
</tr>
<tr>
<td>1 &amp; 4</td>
<td>.45*</td>
<td>1 &amp; 12</td>
<td>.38</td>
</tr>
<tr>
<td>1 &amp; 5</td>
<td>.37</td>
<td>1 &amp; 13</td>
<td>.23</td>
</tr>
<tr>
<td>1 &amp; 6</td>
<td>.43</td>
<td>1 &amp; 14</td>
<td>.34</td>
</tr>
<tr>
<td>1 &amp; 7</td>
<td>.43</td>
<td>1 &amp; 15</td>
<td>.17</td>
</tr>
<tr>
<td>1 &amp; 8</td>
<td>.32</td>
<td>1 &amp; 16</td>
<td>.22</td>
</tr>
<tr>
<td>1 &amp; 9</td>
<td>.32</td>
<td>1 &amp; 17</td>
<td>.30</td>
</tr>
</tbody>
</table>

*Significant at the five per cent level (.444 required for significance at this level)*

Two significant points appear in Table V. First, the correlations divide themselves roughly into three groups. The group averaging the highest correlations extends from $r_{12}$ to $r_{17}$. As noted above, this for the most part covers the socio-metric questions constituting factor A. The second group extends from $r_{18}$ to $r_{14}$, covering factor B. The lowest includes the last three correlations and covers factor C. In view of the meaning of the factors, the M.I. scores correlate more highly with those two aspects of leadership designated as initiative and capability (factors A and B). These are the two aspects singled out as more important than the third one, socia-
bility, according to all the literature reviewed in Chapter II.

Second, the only significant correlation in statistical terms is that between variable one and four. Actually the preceding paragraph tends to highlight the importance of this relationship. Variable four is composed of question six, eleven and twelve. Question six is almost pure in factor A and questions eleven and twelve have nearly the same involvement in both factors A and B, initiative and insight/expression capability.

Moreover, something occurred in the process of the calculations which may make the data even more significant. Before each correlation was run, the scores of the two variables were plotted on graph paper. After about ten of these plots, it became quite apparent that one subject was frequently quite far out of line in relation to the general configuration of the rest of the points. This subject had a M.I. score that placed her in the upper fourth of the group, yet she was consistently ranked in the lowest position by her peers on eleven out of the twelve questions. In nine out of twelve questions, she was also ranked lowest or next lowest by the superior.

In order to check on her behavior through actual observation, two people who knew her at the time of the testing were contacted, her superior and one of her college instructors. Both characterized her generally as being very retiring and lacking both initiative and a facility in expressing herself. This in-
formation agrees with the fact that she failed to be ranked high on the criterion test.

Occasionally, though, a subject does obtain a positive algebraic score that does not seem to coincide with other indicators of behavior if one considers only the plus or minus score. However, it is the evaluation of the sequence analysis and not the simple score that is the richest source of information. In such cases, the subject may be expressing positive attitudes, but at the same time these are rather rigid and passive indicating that they are simply reflections of what she has been told. Actually she may do right and positive things, but her attitudes, being reflected rather than strong personal convictions, are not indicators of the kind of actions that will inspire others to do as she does; i.e., she is not a leader. Stories of this kind are very difficult to score since the positive elements have to be credited in spite of the passivity.

As a result this case was termed a false positive. The complete test of this subject, #17, is given in the Appendix and it is also discussed in detail later on in this chapter. Moreover, it seemed quite legitimate because of this situation to see what would happen to the results if this subject's scores were completely dropped from both tests. Accordingly, all of the correlations were run again, this time without #17.

1Quinn, for one, also reports a similar kind of false positive record in his doctoral study.
Table VI gives the results.

### TABLE VI


<table>
<thead>
<tr>
<th>Variables</th>
<th>r</th>
<th>Variables</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>.50*</td>
<td>1 &amp; 10</td>
<td>.55*</td>
</tr>
<tr>
<td>1 &amp; 3</td>
<td>.56*</td>
<td>1 &amp; 11</td>
<td>.47*</td>
</tr>
<tr>
<td>1 &amp; 4</td>
<td>.58**</td>
<td>1 &amp; 12</td>
<td>.53*</td>
</tr>
<tr>
<td>1 &amp; 5</td>
<td>.55*</td>
<td>1 &amp; 13</td>
<td>.41</td>
</tr>
<tr>
<td>1 &amp; 6</td>
<td>.58**</td>
<td>1 &amp; 14</td>
<td>.52*</td>
</tr>
<tr>
<td>1 &amp; 7</td>
<td>.60**</td>
<td>1 &amp; 15</td>
<td>.37</td>
</tr>
<tr>
<td>1 &amp; 8</td>
<td>.42</td>
<td>1 &amp; 16</td>
<td>.40</td>
</tr>
<tr>
<td>1 &amp; 9</td>
<td>.46*</td>
<td>1 &amp; 17</td>
<td>.54*</td>
</tr>
</tbody>
</table>

*Significant at the five per cent level
**Significant at the one per cent level

Again the data reveal the same three groupings according to factors that were evident in Table V. This time, however, there is a notable increase in the number of correlations that are significant at the one and at the five per cent levels of confidence. Also, the highest correlation of .60 for $r_{17}$ involves on the part of variable seven the five questions having the highest loadings in factor A; i.e., those questions that best represent initiative. The two next highest correlations, both .58, also significant at the one per cent level, involve for $r_{14}$ questions six, eleven, and twelve and for $r_{16}$ questions eleven and twelve. It has already been noted that questions eleven and twelve are those which have an almost equal share in both factors A and B, initiative and capacity for ex-
pression and insight. The other three correlations involving factor A are significant at the five per cent level.

Furthermore, five of the seven correlations that involve mostly factor B are also significant at the five per cent level, as well as one of the three correlations involving mostly the sociability factor.

In view of the striking differences obtained by the exclusion of subject #17, it was decided to rerun the first correlation between the M.I. scores and the aggregate criterion scores, this time without #17. As mentioned on page 62, the first calculation produced an \( r \) of .38; this time the \( r \) was .59 which is significant at the one per cent level.

As a result of the patterns revealed by the factor analysis and the way in which factors A and B seemed to carry the heavier weight of leadership content, two further correlations were run using the aggregate criterion score. Since the sociability factor C involving questions two, three, one, and five showed up least favorably, a new average global criterion score was figured, based on only eight questions, excluding questions two, three, one, and five. This \( r \) was calculated first using all twenty subjects, and then only nineteen, excluding subject #17. The first \( r \) using twenty subjects and only eight questions was .43, somewhat higher than the original \( r \) using all twelve questions. The \( r \) with subject #17 withdrawn was .61, which is again significant at the one per cent level.
Correlation of TAT Scores (M.I.) with Ranking by Superior

Actually, the results up to this point constitute the crucial tests between the M.I. and the criterion test. In addition, although the information obtained from only one superior might not be considered adequate, it was decided to use the rankings done by the superior in order to see whether they also tended in the same direction as the peer rankings when correlated with the M.I. Since there was only one superior ranking the subjects, it was necessary to leave the data in rank form without converting it into scale values.

First the superior's rankings were correlated with the peer group rankings on each of the twelve questions. Instead of using the scale values obtained from the peer group data, the material was handled in its simplest form of rank order so that it would better correspond to the form of the superior's data. Table VII shows a very close relationship between the rankings of the peer group and the superior on each question. The correlational measure used was rho, the Spearman rank-difference correlation coefficient. The fact that these correlations indicate a rather close agreement contributes to the value of the ranking test as a criterion, at least in terms of these questions and this particular sample.
TABLE VII

CORRELATIONS BETWEEN THE RANKINGS OF THE PEER GROUP AND THE SUPERIOR ON EACH OF THE TWELVE QUESTIONS

<table>
<thead>
<tr>
<th>Questions</th>
<th>Rho</th>
<th>Probability(^a)</th>
<th>Questions</th>
<th>Rho</th>
<th>Probability(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.81</td>
<td>&lt;.001</td>
<td>7</td>
<td>.85</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2</td>
<td>.48</td>
<td>&gt;.02&lt;.05</td>
<td>8</td>
<td>.72</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>3</td>
<td>.83</td>
<td>&lt;.001</td>
<td>9</td>
<td>.47</td>
<td>&gt;.02&lt;.05</td>
</tr>
<tr>
<td>4</td>
<td>.75</td>
<td>&lt;.001</td>
<td>10</td>
<td>.81</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>5</td>
<td>.67</td>
<td>&gt;.001&lt;.01</td>
<td>11</td>
<td>.78</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>6</td>
<td>.63</td>
<td>&gt;.001&lt;.01</td>
<td>12</td>
<td>.83</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

\(^a\)Based on t distribution with N-2 degrees of freedom

The second use of the superior's material was to correlate it with the M.I. scores. Some precision was lost here since it was necessary to reduce the M.I. scores to rank order. Thus, neither of the variables in this set of correlations has the accuracy aimed at in the first correlations in which scale values and transformed TAT scores were used. Furthermore, since the data had to be left in the form of rank order, it was not considered advisable to group the questions in terms of the factors as had been done earlier; rather, the correlations were simply run on each individual question. This will make impossible a direct comparison with the correlations obtained between the M.I. scores and the criterion tests (based on the peer group rankings), but it will still give some indication of whether they tend in the same direction. In order to make the comparison as close as possible the effect of subject #17 was checked
in this set of data, also. Table VIII describes the results. Rho was calculated first with #17 included in the group (N = 20), and then with #17 excluded (N = 19). Again, the probability value is based on the t distribution with N-2 degrees of freedom.

**TABLE VIII**


<table>
<thead>
<tr>
<th>Questions</th>
<th>Rho</th>
<th>Questions</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 20</td>
<td>N = 19</td>
<td>N = 20</td>
</tr>
<tr>
<td>1</td>
<td>.22</td>
<td>.32</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>.34</td>
<td>.46**</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>.17</td>
<td>.25</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>.23</td>
<td>.34</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>.01</td>
<td>.07</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>.08</td>
<td>.16</td>
<td>12</td>
</tr>
</tbody>
</table>

*Probability: >.05 < .1
**Probability: >.02 < .05
***Probability: >.001 < .01

While these correlations were not expected to be as high as the others, nevertheless they do show similar trends. All of the correlations were higher when subject #17 had been removed from the group. In the total group of twenty, the highest correlation, .50, occurred on question eleven, which is one of the two questions that shares almost equally in factors A and B, initiative and insight/expression capability. In the reduced group of nineteen, three of the four significant correla-
tions were obtained from questions ten, eleven, and twelve which belong almost entirely to the same factors, A and B. Actually the combination of these three questions seems to represent factor B to a greater extent than factor A. Another interesting point is that two of the significant correlations are on questions that are almost pure in their respective factors: question ten in factor B and question two in factor C. In these data, also, the aspects of leadership that the C factor of sociability represent have the least empirically evident relationship with the M.I.

Therefore, whether the data of the criterion test are provided by the peer group or its superior, the M.I. scores show the closest relationship with those characteristics of leadership described by the A and B factors, initiative and a capability for expression and insight, and a more distant relationship with those described by the C factor of sociability.

However, it has already been specially noted at the conclusion of Chapter I that the objective here is the study of leadership potential. The M.I. is not to be regarded as a score for actual leadership in itself, but as an indication of the presence of certain attitudes relating to personal courses of action that would constitute a reasonable disposition or potential for leadership.
Motivational Patterns and Leadership

But, at this point, the value of the data is by no means exhausted. So far, the characteristics of a leader most highly related to the M.I. have been analyzed as initiative and capability. For the next step, it is the sequence analysis itself, and not simply the M.I. score, that can provide further information. The correlation of the criterion scores and the M.I. gives information on only three aspects, two major and one minor, of a leader's profile. Especially valuable now would be possible clues or indicators that would point to potential for that which has been described as the principal act of the leader: ability to move others to action.

This section concerns the various motivational patterns revealed in the sequence analyses. The material will be handled with two points in mind: first, to illustrate the additional information on leadership potential that can be obtained from a sequence analysis, and second, to phrase the information in such a way that its possible usefulness will be evident to those charged with the training of a group such as this.

The first step was to find out which subjects were rated at the two extremes, the top five and the bottom five, on the criterion test. Instead of taking the simple average of all twelve questions, it was decided to retain the groupings set up by the factor analysis, thus obtaining the highest and lowest
ranked on each of the three factors. In addition, questions eleven and twelve were set up as a separate group because of their peculiar position between factors A and B. Then, to make the division even sharper, only those subjects were selected who placed most frequently in the two extremes on these four groupings. Table IX gives the five highest and five lowest ranked subjects in each grouping.

TABLE IX
HIGHEST AND LOWEST RANKED SUBJECTS IN THE MAJOR GROUPINGS

<table>
<thead>
<tr>
<th>Groupings</th>
<th>Five ranked highest</th>
<th>Five ranked lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor A</td>
<td>8, 1, 6, 7, 4</td>
<td>11, 17, 16, 18, 14</td>
</tr>
<tr>
<td>Factor B</td>
<td>7, 1, 10, 8, 16</td>
<td>17, 14, 19, 20, 9</td>
</tr>
<tr>
<td>Factor C</td>
<td>7, 1, 5, 8, 12</td>
<td>17, 20, 18, 14, 11</td>
</tr>
<tr>
<td>Questions</td>
<td>7, 1, 8, 15, 6</td>
<td>17, 11, 14, 19, 9</td>
</tr>
</tbody>
</table>

According to this breakdown, subjects seven, one, and eight were chosen to represent those ranked best; and subjects seventeen, fourteen, and eleven, those ranked poorest. The next step was to study and compare the sequence analyses of these two groups. (The sequence analysis of each subject used in this study, imports and scores but not the stories, is given in the Appendix.)

M.I. differences. Notable differences appeared in three different areas: the M.I., the scoring categories in which the imports were located, and the dominant tones evident in the
sequence analyses. First, two of the three top ranked subjects had highly positive M.I. scores (#7, 137; #1, 158). The sequence of the third one, although it was slightly negative (#8, 83), had several significant characteristics that will be discussed later. Two of the three bottom ranked subjects obtained negative M.I. scores (#14, 88; #11, 29) and the third, despite a positive score (#17, 117) has already been described as a peculiar case of a false positive.

Scoring category differences. Second, there were interesting differences in the scoring categories in which the imports were located. Each group had a total of thirty-six imports, twelve for each of the three subjects. From the top group, only two imports were located in the fourth category, Reaction to adversity, one plus and one minus import, while eight of the imports from the bottom group were located in the same category, two plus and six minus imports. In combining the third category, Human relationships, with part D, Influence of others, from the first category, the top group placed twelve imports, nine plus and three minus, and the bottom group had only six, three plus and three minus. Although the bottom group outweighed the top, thirteen to ten, in the number of imports placed in Category I, part B, Means taken toward goal, the latter had a better picture as to scores with seven plus and three minus imports, to nine minus and four plus for the bottom group. Finally, in Category I, part A, Goals and purposes, the bottom group had two minus im-
ports while the top had three plus and two minus.

Table X lists the total plus and minus scores for the imports placed in these significant scoring categories and repeats the actual number of imports found in each section.

**TABLE X**

**COMBINED SCORES OF TOP AND BOTTOM RANKED GROUPS FOR IMPORTS LOCATED IN SIGNIFICANT SCORING CATEGORIES**

<table>
<thead>
<tr>
<th>Group</th>
<th>Scoring Categories</th>
<th>Top Three</th>
<th>Bottom Three</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reaction to adversity</td>
<td>+1, -1</td>
<td>+2, -7</td>
</tr>
<tr>
<td></td>
<td>Human relationships; Influence</td>
<td>+14, -5</td>
<td>+4, -5</td>
</tr>
<tr>
<td></td>
<td>Means taken toward goal</td>
<td>+8, -3</td>
<td>+4, -11</td>
</tr>
<tr>
<td></td>
<td>Goals and purposes</td>
<td>+3, -3</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2 imports)</td>
<td>(8 imports)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12 imports)</td>
<td>(6 imports)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10 imports)</td>
<td>(13 imports)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(5 imports)</td>
<td>(2 imports)</td>
</tr>
</tbody>
</table>

These numerical totals further highlight the differences between the two groups on the basis of the scoring categories themselves.

**Attitudinal differences.** In the third area of difference, at least two pairs of characteristics emerge. The first might be termed activity vs. passivity. There is a dominant note of activity that runs through the sequence analyses of each of the three top ranked subjects. Even in the record of subject #8 who had a low score of 83, it is significant that three of the imports scored minus, numbers eleven, twelve, and fourteen, show some kind of activity as the main theme, even if this activity
is poorly directed or slowed down by extraneous influences. On the other hand, the bottom group displays a passive note. With little or no action taking place, outside forces prevent development or bring ruin, or timely but unsolicited help arrives at just the right moment. The imports show much reflection and decision-making without subsequent action, or with inadequate or insufficient personal action.

The second pair can be described as a positive vs. a negative involvement with others. This was already partly evident in the greater number of imports to be found in the top group that dealt with relationships with others, as mentioned several paragraphs earlier. This difference does not simply mean that the top group as a whole tells more stories with two or more characters in them, for this is not the case in these data. It is more a matter of the kind of relationship or involvement that exists between the main character and others in the story, i.e., a really qualitative kind of difference. Even though the sampling is small, this kind of difference is indicated. For example, the top group has more positive scores given to those imports placed in categories dealing with relations with others. Furthermore, imports from the bottom group tend to depict "the others" as passive or a kind of crutch, as an obstacle or foil, or as a tool to be used. Generally, this does not at all fit "the others" as portrayed by the top group. Here there is more evidence of understanding, of working out relationships, of
moving toward others for some reason or another.

What does all this mean in regard to leadership potential? Since the top group had the higher M.I. scores, this would indicate that their motivational pattern was more positive, constructive, and achieving, all important characteristics to note in a potential leader. Also, the imports of the top three do not generally fit under the scoring category of Reaction to adversity. This could be very significant. The leader is not usually thought of as reacting to something but as acting toward something. He is not trying to extricate himself from some difficult or unpleasant situation, but is a person primarily on the offensive toward an objective, while at the same time handling whatever problems may arise. Furthermore, the subjects in the top extreme make more positive and effective use of means than do the others, a trait also important in a potential leader.

Finally, the leader of necessity is involved with others; he moves others toward a goal. This would seem to require a certain kind and degree of rapport between himself and the others before this would be possible. The attitudes shown by the top group in their sequence analyses give evidence of a kind of rapport or involvement with others that could certainly be considered the potential basis for this aspect of a leader's profile. This same characteristic is missing from the imports of those in the bottom extreme.
Motivational Patterns and Vocational Aspects

The last part of this chapter contains a presentation of the motivational patterns revealed in the sequence analyses in a manner directly intended for superiors and mistresses. It highlights both leadership and vocational aspects. Three different types will be discussed: a false positive, a very negative, and a highly positive record. For each of these, the complete test, including the stories, imports and scores, can be found in the Appendix. Only the imports will be given here, for they are needed in the discussion. In sequence analysis it is important to remember that often it is not so much the individual import as the sequence of imports that is of primary importance in revealing the real tenor of the motivational pattern.

False Positive Record

The first record is that of subject #17 (algebraic score, +4; M.I., 117), which was described earlier as a false positive record. The first two imports are perhaps the strongest part of the entire sequence.

1. You may try to get out of a job you dislike by wrecking the

---

2. The number of the import corresponds to the TAT card that was used. Any skip in the numbering indicates that the cards with these numbers were not used, but the imports are still consecutive according to the order in which the cards used were presented.
tools, but you have to pay for it when your elders find out. (+2, II.A.1.a.)

2. Sometimes you may have several responsibilities and you cannot decide which should take precedence, so you decide to do the job that needs to be done most, here and now, and then you can see what to do next. (+2, III.A.1.d.)

The subject is certainly acknowledging that impulsive and destructive action is not the means to avoid something disliked; such a procedure will definitely be found out and punished. There is a way to handle a situation in a reasonable manner by deciding where the greatest responsibility lies, taking care of that first and then attending to the next thing, even if it means putting one's personal preference in a secondary place.

However, the next import expresses a rather passive attitude to possible difficulty.

3BM. But when it seems that things are going badly, it may turn out after a time that nothing is really lost at all. (-1, IV.A.1.a.)

Here, difficulty is not met and handled; it simply goes away by itself after a period of time with no personal effort needed. In the next two imports a more constructive attitude appears again, but the note of passivity begins to be quite evident even in these positive ones.

4. You may want to escape from just punishment but those you love soon convince you and you go back and take it. (+2, II.C.1.a.)

6BM. Sometimes all you can possibly do is stand by and wait while those you love are experiencing difficulties, but in the end despite your worry things turn out doubly well. (+1, IV.A.1.e.i.)
The passivity expresses itself in two ways here. In the first import it takes the persuasion and the encouragement of others to start bringing about a reasonable course of action. Of course, there is nothing unreasonable in following good advice, but it implies a dependency that is going to become more characteristic of this sequence. This is followed by another situation in which now there is absolutely nothing that can be done, but here the subject expresses herself as content to wait for the outcome.

The next three imports form a group of negative and passive attitudes to problems of various kinds.

7BM. Sometimes it is difficult to decide what has real merit, even though one alternative obviously has more external attraction.

(-1, I.B.5.c.)

8BM. You may accidentally harm those you love, and despite the fact that you and others try to do something about it, it is too late to prevent a serious loss.

(-2, I.B.3.b.)

11. It may also happen that something out of the past returns and causes a great deal of damage and no one can do anything about it, but finally it goes away again by itself.

(-1, IV.A.1.c.)

The person seems almost unable to decide what is really worthwhile, although external appearances certainly are attractive. And should trouble in one form or another arise, either things come to a sad end no matter what is done to prevent it, or the whole situation just clears up after a time never to cause trouble again. None of these attitudes has a positive or constructive tone. Action is either useless or unnecessary, or the
situation is left in doubt.

The last four imports also form a pattern of several approaches to a given state of affairs.

12M. But when you take it easy instead of doing what you have been given to do, you will soon have to leave and do much harder work. (+1, I.B.2.c.)

14. In fact, circumstances may continually prevent you from doing the one thing you really want, and you end up doing a lot of other things. (-1, I.B.4.b.)

16. You may not even feel like doing what you have to do, but finally, when duty calls, you follow the call. (+1, I.B.4.a.)

20. And if you do your job and find unexpected difficulties because others take sides against you, you can always succeed in finding another job without such hindrances. (+1, I.E.1.b.)

It is all very well to be checked up for a kind of laziness on the job, but the passive note is struck again in that the person only gets busy because of being checked up, not because of any personal sense of duty and initiative. When the person does not get what she wants, it is the fault of circumstances but there is no active effort to counteract this. She does what is required because duty calls for it; it is true that at least the job will get done, but it does not connote much active responsibility. And at this point difficulty on the job is solved almost naively simply by finding another job that does not have such problems.

On the whole, the entire sequence expresses a very passive and almost naive way of looking at things. Some of the attitudes are appropriate and well taken, but there is a decided
tendency to expect the proper thing to take its course. The passivity is not sufficiently pronounced to make this a negative record, but it is certainly evident enough to see why this person would not be judged a leader by her superior or her peers but might be judged a good, innocent and docile subject to her superior.

Nevertheless, this is precisely the kind of docility that it is so important to distinguish adequately from active and responsible virtue. Quinn in his work with religious also emphasizes the importance, almost the necessity, of recognizing this distinction, as his statements quoted in Chapter II, pages 26, 27, and 28, clearly show. Religious life, regardless of its appearance to the world, is not the place to foster a spirit of dependency and a lack of initiative, although this is what the framework of the life could do if it were not carefully guarded against. If such characteristics were noted early in the course of a candidate's training, the superior could take them into account during early religious training and guidance. This is not to say that a candidate or novice with these traits has no place in religious life, or that religious training is going to alter radically her particular temperament. Rather, it means that such a young woman can be helped to develop to the fullest the good that is in her and especially, in this case, to minimize the extent to which these tendencies to passivity and dependence are allowed to control action. The longer such tend-
encies are allowed to go unchecked or are mistaken for quiet virtue and uncomplaining obedience, the more serious the effects once the novice becomes a regular member of the religious community.

The important point is that such passivity and a tendency to follow as shown in this record are not usually characteristic of leaders. Here, and in similar cases, a careful study of the sequence analysis might prove a closer indicator of leadership potential than the simple score.

Negative Record

The second record chosen for discussion is that of subject #11 (algebraic score, -17; M.I., 29). Table III shows that this is the most negative record of the entire group; in fact, this record does not have a single positive import. The first three imports suggest a rather uncertain, indefinite attitude toward accomplishment.

1. If you find something fascinating that belongs to others you examine it and later on you may become somewhat accomplished at it.  
   
2. And this means that after you have had some training, you will have to leave the familiar simple things and you suppose that you will have to use your talents.  
   
3B. But despite the fact that you have tried repeatedly, you just don't know how to fit in; you will have to think of something better for next time.

Here the person turns over various possibilities, but nothing is decided upon; whatever happens will happen at some future
time. Even when she apparently does do something, she cannot seem really to fit into the situation, and again, any further action is relegated to some future time. It should be noted that both these characteristics, inability to settle on some action here and now and a feeling of not fitting in, are not proper to a leader.

The next two imports are crucial in the attitudes they express toward her present situation.

4. You may be worried that an urge to be free will cause trouble after you are settled, and it makes you sick that you run away from facing this problem. (-2, IV.A.3.a.)

6RM. But are you able to stay in an old place that is no longer of any value and that is a burden to others just so the dream can go on? (-2, III.F.2.a.)

The person no longer sees any value in the place where she is, she is undecided about whether she should stay, she is worried that if she does stay she will still want to be somewhere else, she admits she is running away from the problem, and somehow whatever the ideal was in the beginning it is now little more than a dream. This person is in a very unpleasant and unsettled state. The fact that she has already lived for one year as a professed member of a religious community makes the situation even worse. What she is actually doing is questioning her vocation and the whole reason for her being in religious life. There is good reason to infer that whatever motives brought her here no longer have any meaning for her.

In the next four imports she suggests a possible solution
to her problem.

7BM. Sometimes others may give you sage advice because they are determined that you will do better than they in a kind of life to which they have never wholly adjusted. (-1, I.F.1.a.)

8BM. And this example of others makes you think you might want to be like them; (-1, I.B.5.a.)

11. so you go on, despite the destruction and terror all around you, not so much because you know the comfort and peace that lies ahead, but dazedly, out of habit, too tired to care what awaits you. (-2, I.A.5.a.)

12M. But if the end did come, you couldn't take it and would continue to act as though it had actually not happened. (-1, IV.A.5.a.ii.)

The advice and example of others may stir her up a bit, so she decides this life really might be for her and that she will go on. The whole thing is a drudgery, done routinely and out of habit, without even a minimum of joy and satisfaction, and perhaps she really does not care. Yet, if something should call a halt to the whole procedure, she may feel that she could not take that either, so she may end up trying to deny the facts.

However, in the last three imports she proposes another solution and expresses quite a different attitude toward various aspects of the situation.

14. Yet it was thrilling to think of running away from it all, of being missed by others, of doing what you want and not being pushed around any more; and though such plans don't work, you may still remain dissatisfied with things as they are. (-2, II.A.1.a.)

16. Actually you will be satisfied after you can exercise authority yourself; when even your kindness is tempered by the fact that you possess such authority. (-2, III.F.1.c.)
20. You would rather go where you want, be whom you want, and be free from long-time worries (that is, be a bum), away from the unpleasant recognition given you by your sponsors, even though sometimes things may then be uncomfortable and dreary for you.

(-1, I.A.l.a.)

Here it is beginning to sound as if the obedience and the voluntarily accepted restraints of religious life are becoming almost intolerable. Authority in others has become distasteful to her. She wants to run her own life, and maybe that of others, also, and it seems to matter very little how satisfactorily things work out. Freedom is desired not for the sake of the good that could be accomplished with it, but almost for the sake of rebellion.

These attitudes, together with those expressed in imports four and six, are more than sufficient to make one question this subject's suitability for religious life, or at least her chances of persevering. Were such information available to the superior, it would certainly offer her several leads for immediate action in dealing with this Sister's problem as well as provide supportive evidence for her own personal judgments in the matter.

In view of such a sequence analysis, it was not at all surprising that the subject in question later obtained a dispensation from her vows and left the religious community. Nor is it surprising that in seven out of the twelve leadership questions, she is ranked in the lowest quarter of the group. Certainly there is not the same passivity that was evident in the pre-
ceeding record, but there is a lack of decisiveness, a plodding, and a profitless activity that seems to have no real objective. Such are not the characteristics of a potential leader.

Positive Record

The last record to be discussed is that of subject #1 (algebraic score, +14; M.I., 158). The difference in the motivational pattern between this record and that of the other two is rather striking. The first two imports begin to set the tone of the sequence.

1. You may miss your fun but you willingly go to your work, and although you don't realize all the pomp and success of your dreams, your determination sees you through the difficult times to your goal and you are happy. (+1, I.B.1.d.)

2. You may not want to leave your hard-working elders to further your education, but you know it is for a purpose and they insist, so you set out and your determination will carry you through to the end. (+1, I.D.1.d.)

This shows a reasonable positive approach to an objective, neither glamorizing it nor setting it aside once its purpose is known. Here there seems to be a determination to see things through to the end.

Yet the person seems fully aware of the difficulties that could arise because of impulsive action. She considers this in the next two imports.

3BM. Yet you may resent the overprotection of others but you eventually recover from your emotional outburst and with the help of another, you are reconciled with them—each realizing the real intent of the other. (+1, III. B.1.a.)
4. But if you have never learned to control your anger and are determined to get revenge despite the pleas of others, you will deserve the penalty you receive. (+2, II.A.1.a.)

In other words, she realizes that an emotional outburst is no way to handle a situation that she may not like. After controlling herself, something reasonable can be worked out. But if emotions such as anger are not properly managed, they will only lead to trouble and possible punishment and that is exactly what should happen.

In the next group of imports she expresses her attitudes toward others as they relate to her work.

6BM. Despite the disappointment of others, you carry out your own plans for your work in life. (+2, I.D.1.d.)

7BM. But when faced with a difficult decision, you seek professional help which enables you to arrive at the solution to your own problem. (+2, I.D.1.b.)

First, she does not intend to let the simple feelings of others deter her from her life's work. She must take the responsibility for the course of action which she thinks is right. Yet she is not so self-confident that she fails to realize the value of special help when it is needed. Not only does she realize its value but she is sensible enough to seek it out. These attitudes are certainly indicative of a potential leader, a person who knows where he is going and also knows how to utilize the available means. At the same time there is no persistent clinging to things in the past that are no longer of any use. When they are right, the circumstances are to be taken advantage of but a change is always possible. This last note is added in the
next two imports.

8BM. Later on when you have been engaged in your work for some time you may find that the old source of inspiration no longer has any effect on you; but you are still grateful for what it did in the past to help you get started. (+1, I.C.1.a.)

11. After all the situation was so ideal that you were not at all surprised to see it taken full advantage of. (+1, III.F.1.a.)

But things do become difficult at times, and then it is necessary to know what to do to help oneself. The last four imports form a good picture of just such a situation.

12M. But at times you may not be able to tell whether things are still going on or whether this might be the end, and when your actions bring no result and nothing more happens, you may walk sadly away. (-1, I.E.2.a.)

14. Then you need a little respite in order to concentrate better, and when your thoughts are somewhat clear again, you go on with what you were doing. (+1, I.B.5.d.)

16. Otherwise when you don't get just what you want, you may give vent to your impulses, do something rash, and then have to pay the full penalty. (+2, I.B.2.d.)

20. The work may be difficult and at times inconvenient, but you are doing your share and you are glad for what awaits you at the day's end. (+1, I.B.4.c.)

This person certainly may be tempted to give up when her work produces no result, but, on the other hand, she also seems to know what would be most effective to remedy such a situation and get started again. She realizes the value of a change of pace. Without such a reasonable approach to work, any number of unpleasant things could happen; and when a mistake has been made, there is no alternative but to pay for it. She is certainly realistic enough to know that doing one's job can be difficult,
but she also realizes that doing the work well has its satisfaction and its reward.

A sequence analysis such as this one shows much that would recommend a young religious. With this kind of information a superior could, if she knew, give such a person the opportunity to exercise the leadership of which she gives evidence. It is interesting to note how effectively this storyteller uses means to an end in her stories—a trait which surely marks a leader (note imports 1, 3, 7, 14, 20). Apparently these things were also noted by her peers, for she was ranked in the upper fourth of her group on all twelve questions, and in one of the two top positions on eight of the twelve questions.

The motivational pattern of each of these subjects is certainly different. It presents a picture of each one's attitudes toward present or possible situations that according to the rationale of sequence analysis is necessary for prediction—a fact which was definitely borne out by the subsequent actions of subject #11. She acted exactly as she had expressed herself some time earlier in this test.

These three cases not only illustrate the kind of information that would be made available through sequence analysis, but also its importance particularly for the early stages of religious training. First, within the context of this study, sequence analysis would provide a more precise picture of the subject in regard to her leadership potential after the actual
numerical score had served as a first indicator. Second, the material provided by this method of analysis would greatly assist the superiors and mistresses of young religious in reaching crucial points more quickly in their task of formation and guidance.
CHAPTER V

SUMMARY

The purpose of this study has been to investigate whether the method of story sequence analysis can discriminate between potential leaders and non-leaders among a group of young women religious who had not yet completed their formal period of religious training and formation; and secondarily, to illustrate the kind of information that this method would make available about each testee for the use of those charged with the direction of such a group.

With the aid of factor analysis, the ranking test which served as the criterion of leadership provided sixteen different variables. This breakdown of the ranking test was intended to give a more precise picture of which aspects of leadership were contained in the criterion. Then, by correlating each of these variables separately with the scores obtained from the sequence analysis, the same precision could be obtained in determining which aspects of leadership had the closest relationship with the sequence analysis scores.

The findings, as shown in Table V, indicate a definite tendency for the M.I. scores to discriminate potential leader-
ship under two aspects, initiative and capability for insight and expression. These factors, A and B, were further described in Chapter IV as involving adaptability, an awareness of the situation and the needs involved in it, a practical tendency in doing, communication, expression, an awareness of a problem in its theoretical sense, and an intellectual bent for planning action.

Even before the refinement of factors provided by the factor analysis, an average global criterion score for each subject correlated .38 with the M.I. scores. Then, including only those questions comprising factors A and B, a second global criterion score yielded a correlation of .43 with the M.I. (A correlation of .444 is required for significance at the five per cent level.)

When the combined data provided reasonable justification for eliminating one of the subjects from the group in order to study the effect of this upon the total group results, the discriminating ability of the story sequence analysis grew even sharper. As shown in Table VI, the M.I. scores again had the closest relationship with the same two aspects of leadership mentioned in the preceding paragraph, but this time twelve of the sixteen correlations were statistically significant at either the five per cent level or the one per cent level.

The correlation between the average criterion scores and the M.I. scores also responded to the exclusion of subject #17.
with a similar increase. Whether the average score covered the entire criterion test or only that part comprising factors A and B, in both cases the correlation with the M.I. was now significant at the one per cent level.

In following the secondary purpose of this study, the first task was to examine carefully the sequence analyses of the three top rated and the three lowest rated subjects. Notable differences between these two groups appeared in three areas: the M.I. score, the particular scoring categories in which the imports were placed, and the dominant tones evident in the sequence analyses. Each of these areas contained something significant for the potential leader, and certainly presented a more complete picture of the potential for leadership that could be detected in the sequence analysis itself than was possible using only the correlation with the factors revealed in the criterion test.

Second, the motivational patterns of three subjects, as revealed in the sequence analysis, were carefully considered point by point. Again this clearly demonstrated the ability of the sequence analysis to provide a sharp picture of the subjects' attitudes in a number of situations, and consequently their principal patterns of motivation. It also supplied the very kind of material that adapts itself well to a search for leadership qualities.

The degree of accuracy and validity in the motivational
patterns revealed in the sequence analysis was further enhanced by the fact that in two of the three cases studied (those of the false positive and of the very negative), the subsequent actions of the subjects months after the test had been given coincided closely with the pattern given in the analysis. Not only does this give evidence of the accuracy of the sequence analysis but it further substantiates its ability to serve as a predictor of human behavior.

In the beginning of this study, the hope was expressed that the tools of psychology might be of assistance to those charged with developing to the fullest the spiritual and intellectual potentialities of young religious. The over-all outcome of this research has shown that the method of story sequence analysis is capable of fulfilling such a purpose. It can serve as a valuable instrument in the training of young religious in two principal ways. First, it can spot those gifted with qualities of potential leadership with a degree of accuracy that is comparatively high, particularly if one remembers that this method of analysis taps individual attitudes in relation to personal courses of action. It is not a record of real situations in which a person actually had an opportunity to function as a leader. Therefore, this study gives evidence that at least the seeds of leadership can be detected by the method of story sequence analysis.

Second, this method provides a picture of the individual's
motivational pattern that is of crucial importance to those responsible for the formation and training of a young religious. The word crucial is used deliberately; it is vital to the welfare of the individual and of the group as a whole that the stability of a vocation be established as soon as possible. An instrument that can bring to light so clearly instability and doubt regarding vocation is of unquestionable value. When the problem is not one of vocation, the method can also function as a valuable adjunct in the ever-continuing process of individual guidance because of the individual portraits which it provides. The sooner weaknesses and unfavorable attitudes are brought to light and challenged, the more fruitful will be the period of training. The sooner the superior or mistress can be made aware that some members of her group already possess, either by nature or by grace, a strong motivational pattern of constructive and positive attitudes, the earlier she will be able to capitalize on this material by providing opportunities for continued strengthening and development.

With the encouragement of a study such as this, there is every reason to hope that further research in this area will establish the method of story sequence analysis as a valuable asset to those entrusted with the weighty task of training young religious in the early stages of their spiritual and intellectual formation.
BIBLIOGRAPHY


Fiedler, Fred E. Leader Attitudes and Group Effectiveness. Urbana, Ill., 1958.


Hemphill, John K. Situational Factors in Leadership. Columbus, Ohio, 1949.


-----. Multiple-Factor Analysis. Chicago, 1947.


APPENDIX I

I. SCORING CATEGORIES: OUTLINE OF CONTENTS

I. ACHIEVEMENT, SUCCESS, HAPPINESS, ACTIVE EFFORT (OR LACK OF IT)
   A. Goals, purposes
   B. Means taken toward goal
   C. Adaptability as to goals and means
   D. Influence of others on success, achievement, etc.
   E. Consequences of success (failure)
   F. Attitudes connected with success (failure)

II. RIGHT AND WRONG (well-intentioned, reasonable, responsible action vs. ill-intentioned, impulsive, harmful, irresponsible action)
   A. Actions
   B. Intentions, attitudes, emotions
   C. Effects (consequences) of punishment

III. HUMAN RELATIONSHIPS
   A. Good (friendly) relations (including friendship, love, marriage)
   B. Bad relations (including quarrels, enmity, etc.)
   C. Influence of others
   D. Influence of others on success, achievement, etc.
   E. Influence on others
   F. Attitudes (toward people and things, God, Nature, Life, etc.)
IV. REACTION TO ADVERSITY

A. Loss, harm, danger, terror, separation, disappointment, difficulties

II. SCORING CATEGORIES: SAMPLE PAGE

I. ACHIEVEMENT, SUCCESS, ETC.

E. Consequences of success or failure

+2

1. Failure overcome by active effort or adequate means, implying
   a. personal effort
   b. personal initiative
   c. positive attitudes (persistence, courage, etc.)
   d. emotional control
   e. reasonable action

+1

1. Failure overcome by active effort, aided by incidental factors:
   a. with another chance
   b. by changing to another (more realistic) goal
   c. through learning from mistakes
   d. by drawing good from evil
   e. for the sake of a loved one

2. Failure brings punishment and increased work
   a. but some encouragement for having done the right thing

3. Work is appreciated but has undesirable side effects; it
   a. is rewarded
   b. has advantages; idleness has disadvantages

-1

1. Failure is overcome with little or no positive action;
   a. by the efforts or prayers of others
   b. by making less than the required effort

2. Failure is not overcome; but is tolerated by
   a. making the best of it, being resigned to it, doing nothing
APPENDIX II

SAMPLE QUESTION SHEET

1. Some groups are so closely bound together that the removal of any one person changes its complexion. For which Sisters, if any, in your group would this be the case? For which Sisters would this not be the case?

2. Which Sisters in your group contribute the most to recreation?

3. Which Sisters in your group are the best in suggesting and planning activities for recreation periods?

4. Which Sisters are the most effective in obtaining the cooperation of others for and in group discussions?

5. Which Sisters are the most effective in obtaining the cooperation of others for feast day programs and recreational activities?

6. Which Sisters adapt themselves best to sudden changes in program and to accidental mishaps?

7. Which Sisters make the best contributions to conversations and group discussions? Which Sisters make the poorest contributions?

8. Which Sisters in your group notice things to be done in their daily obediences and kitchen work and see to it that they are taken care of without waiting to be told?

9. Of those who are appointed by your mistress for special practical jobs, such as extra cleaning or organizing what has to be done for a picnic or an outdoor supper, who does the best job?

10. Of those who are appointed by your mistress for special jobs, such as organizing a panel or giving an oral report on a selected subject, who does the best job?
11. To which Sisters would you entrust the responsibility of taking charge of a difficult and important project?

12. Which Sisters in your group would make good superiors?

Directions:

Rank each of the Sisters in your group on each of the above questions. Give the Sister who fulfills best each question the rank of 1. Give the Sister who is next best the rank of 2, and so on until you have assigned a rank to each one.
APPENDIX III

TABLE OF SCALE VALUES: GUILFORD'S METHOD

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Questions 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.78</td>
<td>.73</td>
<td>.08</td>
<td>.66</td>
<td>.00</td>
<td>.06</td>
<td>.68</td>
<td>.48</td>
<td>.06</td>
<td>.75</td>
<td>.08</td>
<td>.00</td>
</tr>
<tr>
<td>2</td>
<td>1.13</td>
<td>.61</td>
<td>1.03</td>
<td>1.89</td>
<td>1.19</td>
<td>.37</td>
<td>1.85</td>
<td>.68</td>
<td>.91</td>
<td>2.15</td>
<td>1.18</td>
<td>1.34</td>
</tr>
<tr>
<td>3</td>
<td>1.61</td>
<td>.97</td>
<td>.66</td>
<td>1.62</td>
<td>.99</td>
<td>.82</td>
<td>1.60</td>
<td>1.42</td>
<td>1.40</td>
<td>1.92</td>
<td>1.57</td>
<td>1.53</td>
</tr>
<tr>
<td>4</td>
<td>1.58</td>
<td>1.25</td>
<td>1.56</td>
<td>2.10</td>
<td>1.62</td>
<td>.07</td>
<td>2.01</td>
<td>.55</td>
<td>.66</td>
<td>2.19</td>
<td>1.05</td>
<td>1.22</td>
</tr>
<tr>
<td>5</td>
<td>.99</td>
<td>.55</td>
<td>.05</td>
<td>1.30</td>
<td>.03</td>
<td>.75</td>
<td>1.59</td>
<td>1.38</td>
<td>.78</td>
<td>1.85</td>
<td>1.07</td>
<td>1.20</td>
</tr>
<tr>
<td>6</td>
<td>1.85</td>
<td>1.57</td>
<td>1.20</td>
<td>1.73</td>
<td>1.42</td>
<td>.37</td>
<td>1.60</td>
<td>.00</td>
<td>.38</td>
<td>1.90</td>
<td>.83</td>
<td>1.19</td>
</tr>
<tr>
<td>7</td>
<td>.00</td>
<td>.00</td>
<td>.24</td>
<td>.00</td>
<td>.04</td>
<td>.46</td>
<td>.00</td>
<td>.44</td>
<td>.28</td>
<td>.00</td>
<td>.00</td>
<td>.06</td>
</tr>
<tr>
<td>8</td>
<td>1.25</td>
<td>.61</td>
<td>.00</td>
<td>.90</td>
<td>.33</td>
<td>.10</td>
<td>1.08</td>
<td>.43</td>
<td>.00</td>
<td>.84</td>
<td>.43</td>
<td>.47</td>
</tr>
<tr>
<td>9</td>
<td>1.51</td>
<td>1.17</td>
<td>.92</td>
<td>2.04</td>
<td>1.01</td>
<td>1.10</td>
<td>2.13</td>
<td>.82</td>
<td>.74</td>
<td>2.44</td>
<td>1.56</td>
<td>1.80</td>
</tr>
<tr>
<td>10</td>
<td>1.54</td>
<td>1.29</td>
<td>.47</td>
<td>.75</td>
<td>.31</td>
<td>.79</td>
<td>.53</td>
<td>1.26</td>
<td>1.35</td>
<td>1.00</td>
<td>1.03</td>
<td>1.09</td>
</tr>
<tr>
<td>11</td>
<td>2.23</td>
<td>1.58</td>
<td>1.16</td>
<td>1.83</td>
<td>1.38</td>
<td>2.07</td>
<td>1.61</td>
<td>2.00</td>
<td>2.34</td>
<td>1.79</td>
<td>2.42</td>
<td>2.55</td>
</tr>
<tr>
<td>12</td>
<td>1.37</td>
<td>1.01</td>
<td>.35</td>
<td>1.90</td>
<td>.16</td>
<td>1.27</td>
<td>2.20</td>
<td>1.47</td>
<td>.95</td>
<td>2.24</td>
<td>1.53</td>
<td>1.57</td>
</tr>
<tr>
<td>13</td>
<td>2.00</td>
<td>1.69</td>
<td>.98</td>
<td>1.65</td>
<td>.67</td>
<td>.51</td>
<td>1.57</td>
<td>.51</td>
<td>.71</td>
<td>1.44</td>
<td>1.03</td>
<td>1.07</td>
</tr>
<tr>
<td>14</td>
<td>1.95</td>
<td>1.47</td>
<td>1.63</td>
<td>2.49</td>
<td>1.86</td>
<td>1.21</td>
<td>2.55</td>
<td>1.54</td>
<td>1.27</td>
<td>2.92</td>
<td>2.00</td>
<td>2.17</td>
</tr>
<tr>
<td>15</td>
<td>1.73</td>
<td>1.56</td>
<td>1.17</td>
<td>1.46</td>
<td>1.01</td>
<td>.86</td>
<td>1.44</td>
<td>.84</td>
<td>.66</td>
<td>1.58</td>
<td>.74</td>
<td>1.06</td>
</tr>
<tr>
<td>16</td>
<td>1.49</td>
<td>1.33</td>
<td>.55</td>
<td>.93</td>
<td>.36</td>
<td>1.41</td>
<td>.87</td>
<td>1.68</td>
<td>1.56</td>
<td>1.13</td>
<td>1.24</td>
<td>1.56</td>
</tr>
<tr>
<td>17</td>
<td>2.93</td>
<td>3.05</td>
<td>2.65</td>
<td>3.17</td>
<td>2.46</td>
<td>1.39</td>
<td>2.98</td>
<td>2.41</td>
<td>2.48</td>
<td>3.00</td>
<td>2.50</td>
<td>2.71</td>
</tr>
<tr>
<td>18</td>
<td>2.06</td>
<td>2.31</td>
<td>1.71</td>
<td>1.20</td>
<td>1.04</td>
<td>.89</td>
<td>1.54</td>
<td>2.06</td>
<td>1.56</td>
<td>.99</td>
<td>1.01</td>
<td>1.10</td>
</tr>
<tr>
<td>19</td>
<td>1.63</td>
<td>1.14</td>
<td>1.16</td>
<td>2.55</td>
<td>1.43</td>
<td>1.05</td>
<td>2.37</td>
<td>1.06</td>
<td>.84</td>
<td>2.69</td>
<td>1.73</td>
<td>2.17</td>
</tr>
<tr>
<td>20</td>
<td>2.12</td>
<td>2.04</td>
<td>1.76</td>
<td>2.30</td>
<td>1.90</td>
<td>1.02</td>
<td>2.36</td>
<td>1.10</td>
<td>1.29</td>
<td>2.48</td>
<td>1.58</td>
<td>1.47</td>
</tr>
</tbody>
</table>
APENDIX IV

SEQUENCE ANALYSIS OF EACH SUBJECT: IMPORTS AND SCORES

A. Subject #1 (See Appendix VII, pp. 141-142)

B. Subject #2

1. When you simply cannot get interested in what others want you to do, your elders allow you to discontinue it because you had been so obedient and tried your best. (+1, I.B.1.b.)

2. When you are depressed over a difficult situation, you may quarrel, but later you realize how selfish you have been and are sorry and decide to apologize and again try to devote yourself to your work. (+1, III.A.3.c.)

3BM. Or you could remain in your lonely state becoming more and more depressed despite your material success and eventually it could mean the end of everything for you. (-2, III.A.4.a.)

4. Lack of material success leads to crime, and long after the culprit, having rejected good advice, has been caught and punished, another decides to make reparation for him. (+2, II.A.1.f.)

6BM. When you feel that you are being neglected and are not receiving the attention you used to get, you decide you can stand no more and give it up, until someone finally gets you to realize how childish you have been so you return and live very happily. (-1, I.D.1.f.)

7BM. When you are having a hard time getting along with others, you receive some good suggestions from your elders which you then try to carry out and before long things really get better. (+2, I.D.1.c.)

8BM. Beforehand you may be afraid and imagine that the cure is going to be terrible, but when it is all over you are sure it had not been as you pictured it. (+1, IV.A.1.e.i.)
11. Sometimes, although you may be almost miraculously saved from disaster, you are left in a sad state; then someone comes along to take good care of you, but you never forget those you have lost and hope soon to rejoin them.  
(-1, IV.A.7.b.)

12M. When you want something very badly you may do almost anything to get it until someone finally prevents you from going any further in your wrongdoing.  
(-2, II.B.1.b.)

14. You may keep planning for a special event but something always goes wrong until finally your dream comes true.  
(-1, II.B.2.b.)

16. Beforehand you imagine all kinds of things, but when you get at it you find out that the work is not nearly as bad as you had anticipated, and you are even willing to do it again if necessary.  
(+1, I.B.4.d.)

20. When you are dissatisfied with your life you seek advice and after thinking over the suggestions given you, you decide to give your life to the service of God.  
(+2, I.D.1.b.)  
(Score: +3; M.I. 112)

C. Subject #3

1. If you think hard enough you will get just what you want to finish your work, but it still needs to be accepted by others.  
(-1, I.E.3.b.)

2. And after a time you think of something you will do to show your gratitude to others.  
(-1, I.B.5.a.)

3BM. You may regret your wrongdoing when you are caught, and years later you give all the credit for your present success to the patient help of others at that time.  
(-1, I.D.1.d.i.)

4. You may have always worked hard at your job when suddenly your whole future and reputation seem lost until someone clears up the misunderstanding for you and all is well.  
(+1, III.B.1.b.)

6BM. You may find yourself in great difficulty and unable to meet your obligations, but just when your pleas seem useless you suddenly find all your debts cancelled.  
(-1, IV.A.1.a.)

7BM. When you have to make a decision between two alternatives, you find a way of obtaining them both.  
(-1, I.A.2.b.)
8BM. Gradually, after a long time, you may be able to exert a good influence on others. (-1, III.E.1.b.i.)

11. When danger looms up in your path, you may decide not to go ahead, but rather just stand and watch and then do something else. (-1, I.A.1.a.)

12M. But if you are clever enough, you can fool others into thinking you really accomplished something. (-1, III.E.2.a.)

14. You may be restless waiting for something, but when it finally arrives late, all is quickly cleared up by an explanation. (+1, III.A.3.a.)

16. Or you may dream about having something and remind others of it and one day your dream comes true. (-1, I.B.2.b.)

20. But sometimes no matter how long and hard you ask, you realize you cannot always have what you want and you resign yourself to the will of God. (+1, IV.A.2.a.)

(Score: -6; M.I. 75)

D. Subject #4

1. You are not interested in your task and sullenly sit without doing it until you realize that others will be checking on you so you start to do it. (-1, I.B.6.b.)

2. However, when you are caught doing something you like but of which others do not approve, you are afraid of the reprimand you will get. (-1, III.C.3.e.)

3BM. You may be overcome with sorrow and loneliness at a sudden loss and wander around trying to find something for yourself, until someone becomes interested in you, takes care of you, and all turns out well. (-1, IV.A.1.a.)

4. Out of a sense of failure and shame at what you have done, you may want to get away, but another’s love for you wins out and you start anew, determined now to do better. (-2, I.D.1.a.)

6BM. But sometimes you may do things your own way in the face of unreasonable opposition from others because you feel you are capable and able to act according to your own mind. (+1, III.C.4.a.)

7BM. And when you start out you may receive good advice which you always remember and you become successful. (-1, I.D.1.d.i.)
8BM. When you have suffered a great loss, you may recall to mind the whole event and wonder how it will affect your future. (-1, IV.A.7.b.)

11. But still it may be impossible to reconstruct anything out of the wreckage, so everything will just be cleared away. (-2, IV.A.4.b.)

12M. However, through the devoted and tender care of others, all might be brought back to life again. (-1, IV.A.1.a.)

14. Then you recall the loved ones you have left behind, and someday when it is possible, you will rejoin them. (-1, I.B.5.a.)

16. Meanwhile, it is surprising how much one can say and do about nothing when others ask you for something. (-1, I.F.1.b.)

20. But when you actually do something wrong, you are caught despite all your preparations because the law always triumphs. (+2, II.A.1.a.)

(Score: -9: M.I. 63)

E. Subject #5

1. A sudden loss may cause you to wonder if you should give up your work, but after a while you overcome your sadness and begin all over with a new determination and eventually you do succeed. (+2, I.B.1.d.)

2. Others provide you with the means to further your education, and as you set out you realize how much they are really sacrificing for you. (+2, III.A.1.d.)

3BM. When it seems there is nothing left to live for, someone gradually gets you going again; you begin to have confidence and to study about what is important and eventually you find a new purpose in life and engage in useful work. (+1, I.D.1.c.i.)

4. You may do something wrong and afterward realize that it wasn't right; finally through the pleas and understanding of another you repent and do better. (+1, II.A.1.c.i.)

6BM. But sometimes your efforts to start out on your own despite the pleas of others lead only to disaster for you. (-2, I.D.3.e.)

7BM. After a long time you finally begin to realize that
your elders are right, and afterward you become successful because you learned to listen to advice. (+1, III.C.1.b.)

8BM. But sometimes even your efforts to help another lead to impractical plans, and later, despite your search for a means, you never succeed. (-2, I.D.3.b.)

11. Everything around you is in ruins; everyone is lost, and although you suddenly find yourself being taken care of by others, it is too late to save you. (-2, I.A.7.)

12M. And the same is true for others; no matter what you try to do to help them, it is of no avail. (-2, I.D.3.b.)

14. Even your efforts to help yourself, just when they seem to succeed, also end in failure. (-2, I.D.3.e.)

16. In the end you may not even stay to help another when you both have suffered a loss because you prefer to continue with your other interests. (-2, III.E.3.a.)

20. But still you may pray and hope that all this trouble really can't be true and in the end everything turns out right. (-1, I.B.2.a.)

(Score: -6; M.I. 75)

F. Subject #6

1. While resting after work, you dream of success, so in order to reach it you intend to go on with the work which you really don't mind since you can't join in anyway with the fun the others are having. (+1, I.B.4.e.)

2. When others don't go along with your plans, you can't decide whether it is their own idea or the result of another's influence, but you are determined to give them another chance. (+1, III.C.1.g.)

3BM. When faced with a sudden loss, you may feel like giving it up, but you are reminded of your duties and by chance you remember you have a Faith and it pulls you through. (-1, IV.A.1.a.)

4. Sometimes you can't get what you want because others see through the cheapness of your ways, but you may still keep trying. (-1, III.E.2.a.)

6BM. You are stunned by the sudden loss of loved ones and
others try to comfort you; however, you finish your work and later on keep in touch with those who are left. (+1, IV.A.1.e.)

7BM. Sometimes you may not be able to prevent injustice, but you still decide to do what you can to help in some other way. (+1, III.E.1.b.)

8BM. A chance scene leads you to begin thinking about your future work and your ambition is encouraged by others. (+1, III.F.5.a.)

11. When danger comes, you may be able to protect yourself if you have sufficient warning until others come to rescue you. (-1, IV.A.1.a.)

12M. At times your attempt to do something may fail, but you don't lose faith in your purpose or method because you figure that the failure was due to someone else's influence. (-2, IV.A.5.c.)

14. But sometimes after you make plans to achieve your ambition, you may actually set out to begin doing something. (+1, I.B.3.b.i.)

16. But just when everything is all ready, an accident may interrupt your plans and you may have to change everything, but as a result things turn out to be twice as good and a real success. (-2, I.A.2.d.)

20. Yet sometimes you may never reach your destination because you are overcome by something of which you were not even aware. (-1, I.B.4.a.)

(Score: -2; M.I. 92)

G. Subject #7

1. Sometimes dreamworld imaginings spur you on to forsake all in order to obtain the ideal, even though you may have to pay for it with your life. (+1, I.B.1.c.)

2. A person who turns her back on her family to follow the man of her choice into a gay life will soon realize that she had a false sense of values, become reconciled to her family and start to work. (+2, III.B.1.c.)

3BM. Even if you get involved in serious wrong, you can still renounce the past, and live far away as a decent citizen. (+2, II.A.1.d.)
4. And when temptation becomes too strong for you, you can go away from that particular situation and so keep on the right path. (+2, II.A.1.d.)

6BM. There comes a point when a person has to become independent and lead her own life; once the decision is made, she will be stronger and more disposed to make decisions and act upon them. (+2, III.C.1.b.)

7BM. Of course, if you have been treated cruelly at home, you may in bitterness use every means at your disposal to reach your goal, and become hardened despite external respectability. (-2, III.C.2.c.)

8BM. Or you may do something wrong to prove that you are not a sissy—and then be out of your mind until experts show you the nature of your deed and the nature of a real sissy. (+1, III.C.2.c.)

11. Sometimes people are gullible and look for pie in the sky—but bitter experience will teach them that only their own effort and initiative can keep them alive. (+2, I.C.1.a.)

12M. But in spite of your effort and care, what you love best may be lost. (-2, III.A.2.a.iii.)

14. Yet the wonder and mystery of nature can inspire you to a paean of praise, (-1, I.B.2.)

16. in which nothing exists for you but the Almighty—an experience which ever after colors your life and actions. (+1, I.A.3.a.)

20. And though your love may be lost, you must go on and do things for others. (+1, IV.A.1.b.)

H. Subject #8

1. When the work becomes difficult, you wonder if it is worth it, but you realize that nothing worthwhile is easy so you start again, determined to do whatever is necessary to become successful. (+1, I.B.4.c.)

2. But you may want one thing and someone else another, and neither one can prevail, so you decide to part and each go your own way. (+1, III.B.1.b.)
3BM. However, after trying your best, you may end up in trouble, overwhelmed and exhausted, but someone will come along and give you hope for the future. (-1, III.C.3.a.)

4. Or when you just can't make ends meet, you may give in to your impulses but this only leads to more trouble; you can't seem to begin again until suddenly luck comes and everything begins to turn out well. (-1, I.B.1.f.)

6BM. When there is no hope of averting a loss you just have to talk to someone, and when one person fails you, another will suddenly come along to share your grief. (-1, IV.A.4.a.)

7BM. You want to start out on your own in order to have things better for yourself, but you are told never to forget that other things are important besides the material, so you determine to take this value with you. (+1, I.A.4.)

8BM. So you labor diligently and untiringly to be able to do what others were not able to do for you. (+1, I.B.3.b.i.)

11. But in your imagination you may picture many big things to encounter and as you quietly get away from them, you hope someday to return when you are bigger and braver. (-1, I.B.6.e.)

12M. When you think another has deprived you of something, you may try to harm him, but suddenly you are prevented from carrying it out and you may end up calling on that very one for help. (-2, II.B.1.b.)

14. In a mysterious place your imagination may work overtime; when you see a light you refuse to let any obstacles hinder you from reaching it and you appreciate it all the more because of the darkness you had been in, but then you still have to return through mystery to reality. (-2, I.A.2.a.)

16. At times, after performing your duties, you stand in awe of the powers for good that you have been given and just exercised. (+1, I.A.4.)

20. You may want to help out but the nature of the matter is so uncertain that you find it prudent to stay away and forget that you ever saw anything at all. (-1, I.A.1.a.)

(Score: -4; M.I. 83)
I. Subject #9

1. You may find your work too hard but the success you dream about makes you go at it now as never before and someday your dream may come true. (+1, I.B.3.b.i.)

2. Although you may have hard times, you know that material success is not everything; with all your hard work you are happy and close to those you love and that is all that matters. (+1, I.A.4.)

3BM. And should you lose a loved one you may be heartbroken and inconsolable, but finally you pull yourself together and try to resume your work alone. (+1, IV.A.1.c.)

4. Sometimes you may take advantage of another for a long time until finally a threatened separation, prevented only by your pleas and another's love for you, brings you to your senses, and you now try to make up for your past life of selfishness. (+1, III.A.3.c.)

6BM. You can hardly believe it when sudden tragedy strikes, but although there is little to be said each one does what he can to help those who are left. (+2, IV.A.2.a.)

7BM. Only when it is too late do you realize how foolish you were not to take advice from experienced and loving elders who are now trying to console you in your failure. (-1, III.C.2.b.)

8BM. But when your elders continually refuse your requests you may lose control of yourself and do something fatally wrong for which you feel little remorse at the time; only long after do you realize the reason for their constant refusals. (-2, III.B.3.b.)

11. The situation may seem so bad that you wonder if anyone even remembers what peace is like, but, impossible as it may seem, within a short time the trouble ceases and peace is restored. (-1, IV.A.1.c.)

12M. But suddenly without warning, disaster may strike again, and although you try to go on despite your loss, it proves too much for you. (-2, IV.A.4.b.)

14. In the midst of your happiness you know that sorrow may come, so you do all you can now to be what you should and ask for help to accept the sorrows when they do come. (+1, I.A.3.a.)
16. But sometimes the very thing that gives you pleasure is indirectly the cause of your ruin. (-2, IV.A.6.d.)

20. Still, when you do your work as best you can in spite of difficulties and you are close to your loved ones, no matter how bad the situation seems, you know that somehow everything will work out. (+1, I.B.3.b.i.)

(Score: 0; M.I. 100)

J. Subject #10

1. After a short time your work no longer may look easy, but you decide you are going to keep at it. (-1, I.B.5.b.)

2. Reunion may be joyful after a long separation, but the work is as hard as ever and now you feel strangely out of place, yet you feel you will get to know them. (-1, I.B.5.c.)

3BM. But despite your determination to overcome your feelings of strangeness, your effort fails but you still intend to show the others the next time that you can do as well as they can. (-1, I.E.2.b.)

4. But the time may come when you realize that things have gone far enough so you break off your improper conduct and start back where you belong. (+2, II.B.4.a.)

6BM. The sudden accidental loss of a loved one may prompt you to turn away from following the same career although it had been your life's ambition. (-2, IV.A.5.e.)

7BM. Or, in a similar situation, you may decide that soon you will go yourself into that field and take the place of the one who was gone. (-1, I.B.5.b.)

8BM. When disaster strikes, you stay and help immediately wherever you are needed, all the while hoping that your loved ones will be all right wherever they are. (+2, III.A.4.a.)

11. You may be temporarily helpless as danger approaches; but at last you are able to get away to safety; (-1, I.B.1.a.)

12M. and since you had been thought lost, the reunion with your loved ones is a joyful occasion. (-1, III.A.4.d.)

14. After watching and praying, you are finally told that the danger has passed; you are grateful and quietly let in the light. (-1, I.B.2.c.)
16. Sometimes when you are successful at a thing, you have to admit that you did it just for fun because you really had other plans all the time, and the others understand.

(+1, III.F.5.b.)

20. When you have lost a loved one, you consider the possibility of drowning your sorrows, but then you decide rather to offer your services where you might be of some help to others.

(+1, IV.A.2.e.)

(Score: -3; M.I. 88)

K. Subject #11 (See Appendix VI, pp. 136-137)

L. Subject #12

1. You may begin your work but you are too tired and lazy to make the effort to continue it so you begin to dream and to sleep.

(-2, I.B.5.a.)

2. Others may be hesitant about letting you go ahead with your plans, but you don't let it bother you too long for you are "in love."

(-2, I.D.1.a.)

3BM. When you suffer a grievous loss you are inconsolable for a long time until you remember that there is still one person who will give you comfort.

(-1, IV.A.4.b.)

4. When you do something wrong, you may realize it but you can't face the punishment if you give yourself up so you decide the only way is to hide and run.

(-2, I.E.2.d.)

6BM. You are certain things are going to turn out for the worse, but suddenly you find that all is well.

(-1, IV.A.1.b.)

7BM. Sometimes when you ask others for help and advice, they only oppose your plans, so you decide you are old enough to know what you are doing and you resolve to go ahead anyway.

(+1, III.C.4.a.)

8BM. You daydream about what you would like to do in the future until you are called away to something else.

(-1, I.B.5.d.)

11. And if you plan well, you can successfully carry out some wrongdoing and rid yourself of what you dislike.

(-2, II.A.3.a.)
12M. But when you lose someone dear to you, you cannot contain your grief. (-2, IV.A.5.b.)

14. In your daydreaming about the future, you may take a spill but you thought it thrilling so you stayed where you landed. (-1, IV.A.3.c.)

16. But sometimes you are afraid that your efforts to rid yourself of a nuisance have accidentally spoiled your work, but you find instead that it has contributed to its beauty so you try to bring about a similar opportunity. (-2, I.A.2.d.)

20. And if the going gets rough when your expected help doesn't arrive, someone else will come along to rescue you. (-1, IV.A.1.a.)

(Score: -16; M.I. 33)

M. Subject #13

1. You don't want to do your work because it has no value for you and you miss your fun until you realize what you can really do for yourself and others if you succeed, so now you go on with your work happily and willingly and eventually you do succeed. (+2, I.B.4.a.)

2. With the companionship of those you love, you work at your daily tasks and hope that your efforts will be fruitful both for yourself and others. (+1, I.B.3.b.i.)

3BM. But when disaster strikes, you may be despairing until someone comes along to take care of you. (-1, IV.A.4.c.)

4. After a great loss, you may think only of seeking revenge, but you are gradually quieted by others and eventually your principles lead you to aid the very ones who caused your loss. (+1, III.C.1.f.)

6BM. Despite the anxieties of others, you do the kind of work you want and later you are grateful for the experience you gained from it and from your earlier life as well. (+2, I.D.1.d.)

7BM. But still you may not be sure if you should follow your own ideas; your elders reason with you to do otherwise and finally you accept their advice. (+1, III.C.3.b.)

8BM. Sometimes the service that others are able to render inspires you to want to do the same, and in time you realize this ambition. (-1, I.B.1.b.)
11. But if sudden disaster should strike, nothing remains but silence.  
(-2, IV.A.5.b.)

12M. Or things may go on regularly for some time when suddenly others may seem able to influence you in so compelling a manner that you lose contact with your surroundings, until someone finally comes along to snap you out of it.  
(-1, IV.A.1.a.)

14. But if you act quickly and courageously you can come to grips with the difficulty and with the added help of others, overcome it.  
(+2, IV.A.1.a.)

16. If you insist on living your own life, your elders may at first give in reluctantly, but later as your happiness increases, so does theirs.  
(+2, III.C.1.d.ii.)

20. You simply have to stay at it until you reach a decision even if others are waiting, and then everything will quiet down again.  
(+1, I.B.1.d.)

(Score: +7; M.I. 129)

N. Subject #14

1. You may not care for a task but you feel you should do it; you know you won't do too well when you are so discouraged and distressed, so you relax for awhile and then come back to it feeling much more capable.  
(+1, I.B.5.d.)

2. But sometimes when you are not especially fond of working so hard you may find a way to entertain yourself while others do the work.  
(-2, I.B.6.c.)

3BM. You may be very distressed and annoyed at being refused your request, but when you quiet down, you realize the others are right—you really don't need what you had wanted so badly.  
(+1, III.A.3.c.)

4. Or you may be emotionally disturbed by new and added responsibilities and feel unable to cope with it all, but it happens that you get straightened out, and things are better all around.  
(-1, I.B.1.a.)

6BM. You may be worried about having to make an important decision, but finally you may decide yourself and choose the way that offers you the greatest opportunity;  
(+1, I.B.1.a.)

7BM. or you may decide to seek advice from others which you follow and in time become successful.  
(+1, I.D.1.e.)
8BM. When an accident occurs, there really may be little that can be done, but you still provide all the help and comfort you can until the end comes. (+1, IV.A.2.a.)

11. But sometimes there may be a lack of adequate assistance and for many it will be the end, but some will get out safe and sound despite the hardship. (-1, IV.A.1.b.)

12M. When your environment has been lacking the proper helps, you may have to face many situations with which you are unable to cope, but you are cured by treatment and all turns out well. (-1, IV.A.1.a.)

14. But sometimes you may attempt to show your independence by going off on your own, but you decide to return when you find that there isn’t much you can do without your elders—and all profit from the experience. (-1, I.B.1.f.)

16. You may resolve an important decision by setting aside the two alternatives and deciding to enter an altogether different way, the religious life, in which after a time you complete your time of preparation and are happy to serve God. (-1, I.F.1.)

20. When you don’t have much you depend on others, but they may not notice you because of your poor appearance, so you continue to remain lonely and unwanted. (-1, I.D.3.a.)

(Score: -3; M.I. 88)

O. Subject #15

1. When you are tired and bored with your work, you may stop and begin to daydream of more pleasant things, and when the time set for work is up, you hurry away to do what you had been wishing to do. (-1, I.B.6.e.)

2. But sometimes when you are caught with it, you are deprived by others of the one joy you have amidst your hard work. (-2, I.A.7.)

3BM. When something unpleasant happens, you dread the thought of what it might mean, but someone will come along and fix up everything for you. (-1, IV.A.1.a.)

4. Or something may remind you of unpleasant scenes and friends you have lost, and you become sad and dejected as you think about all this. (-2, IV.A.7.b.)
6BM. But finally you may take courage and break the news of your mutual loss to another, and although you are both sad, you realize that now you must go on living without your loved one. (+1, IV.A.2.e.)

7BM. You may be concerned about the result of your long training, but when the test comes, your efforts are shown to be fruitful, and you celebrate your success. (+1, I.B.1.b.)

8BM. Sometimes the actions of others may prompt you to want to imitate them, and you resolve to tell your elders about your wish. (-1, III.C.3.b.)

11. When danger threatens, you attempt to save yourself, and eventually you find at least a temporary refuge. (+1, IV.A.2.a.)

12M. At first you are not sure how serious the damage has been, but the lack of response leads you finally to decide that the accident has been the cause of great loss. (-2, IV.A.6.e.)

14. You may be very excited about what is to come, but after some restlessness, you finally settle down until the proper time. (+1, I.A.3.a.)

16. As yet you are not too familiar in your new surroundings, but soon with the help of others and after finishing your duties, you join in their activities and are happy to be with them. (+1, I.D.1.c.i.)

20. But after much labor you realize that you have obtained only part of what you had planned for, and you discover that there is much more to it than you had originally imagined. (+1, I.B.4.e.)

(Score: -3; M.I. 88)

P. Subject #16

1. When you are talented and wholly interested in your work, you may spend a great deal of time at it and soon become very successful. (-1, I.B.1.d.)

2. Sometimes you may decide to turn away from the old familiar life which you dislike for its monotony to seek a new and more exciting way, but you find that, in difficulty, the former life has your only true friends so you resolve to prepare yourself well so you can go back there and be of service. (+1, I.E.1.c.)
3BM. When others disappoint you, you may want to leave; but as long as you feel there is some good left you decide to stick by them. (+1, III.E.1.b.)

4. But sometimes you may be totally unsuccessful in your attempts to help another, and things end badly. (-1, III.E.1.a.)

6BM. Or you could meet opposition by patience and friendly efforts to help at just the right time, and eventually you will succeed. (+2, III.E.4.b.)

7BM. You may reject the advice of others only to find out later that they were right, but although it is too late to get yourself out of trouble, you have time to acknowledge your wrong before you are done in. (+2, II.A.1.d.)

8BM. When you are brought up in distorted surroundings, you may do serious wrong without being at all troubled by it until you are eventually confined. (-2, II.A.2.a.)

11. And it may take a lot of weird twistings and turnings to produce something constructive. (-1, I.B.1.a.)

12M. But when trouble keeps recurring and you are determined to get to the bottom of it, you finally discover that you yourself, under the influence of another, are the cause of it. (+1, I.B.1.d.)

14. But the freedom to act may give you your chance to start out anew and you make good. (+1, I.D.1.f.iii.)

16. You may long for something and recall the words of others about it, and then all too soon the time comes and it is given to you. (+1, I.A.3.a.)

20. At times you may consider the many avenues of escape but none would really be the answer so you decide to go back and this time face life, and once and for all conquer. (+1, I.E.1.a.)

(Score: +5; M.I. 121)

Q. Subject #17 (See Appendix V, pp. 132-133)

R. Subject #18

1. When you are disappointed with your work because it involves doing what seems ancient and trite, you think about
changing it and eventually you will produce material having greater value. (-1, I.B.5.a.)

2. Although leaving has a tinge of sorrow, you are resolute about starting your lonely journey into adult life, and despite the impersonal tone you acquire, in the end you combine what is of worth in the past and the present into a successful life—all because of your determination. (+1, I.D.1.f.i.)

3BM. The taunts of others may greatly disturb you, but as you mature their effect lessens and eventually you have a relationship with others such that understanding—rather than taunts—rules. (-1, I.B.1.b.)

4. After you have been punished for your wayward ways, you may find (as the story usually goes) that others have left you, and although you don't return to your former life, you never become much of a success. (-1, II.C.1.c.)

6BM. You may be determined to get away from those who don't understand you and begin your own life, but in later years you remorsefully seek them again and are united with them. (+1, III.A.3.c.)

7BM. But when you are set in your own selfish ways and disdain the words of your elders, you may bring disgrace and sadness to them, although they still believe that some day you will heed their advice—and eventually you do just that. (-1, III.E.1.b.i.)

8BM. It may take the brave efforts of another to save someone close to you, but later on you are the better for the fact that your guide in life has been spared. (-1, I.B.1.e.)

11. And eventually you will end up with the prize which has proved the ruin of many other seekers; then you can live happily ever after. (-1, I.B.1.a.)

12M. But if you are unlucky in your search for the prize, you may still chance upon something you think might be of value, but upon closer inspection you find it has no life in it at all, and you turn away from it in horror and go back where you came from. (-2, I.A.2.e.)

14. You may be tired of the responsibilities and sorrows of life and contemplate escape but the beauty of nature attracts your attention to the beauty in human life also, and you no longer seek such an escape from your problems. (-1, IV.A.1.b.)
16. Or you may not like others telling you what to do so you set out on your own to become your own boss, but the fear of actually being alone makes you happy when your elders bring you back and you never attempt that again. (-1, II.A.1.a.)

20. When you have made something in such a way that you think it will endure, it becomes for you a symbol of achievement, a spur to do something with your own life that will endure and this you do by trying to improve your life and the lives of others. (+1, I.B.3.b.i.)

(Score: -7; M.I. 71)

S. Subject #19

1. You seem to resent your work but you decide that if you do a good job at it and work hard, you may become great someday. (+1, I.B.3.a.ii.)

2. While you go about your school work, you keep thinking of the other kind of work you would rather be doing to help your elders. (+1, I.B.4.d.)

3BM. When your requests are continually refused, you feel alone and disheartened, for the one who might have let you do these things is gone and the others won't cooperate. (-1, I.D.3.a.)

4. So you may insist that you want to be on your own, and finally the others cease their objections and go along with you. (+2, III.C.1.d.ii.)

6BM. You want to get out on your own and you are worried about how to tell your elders, but you find that they understand perfectly. (+1, III.C.1.c.ii.)

7BM. Yet sometimes you may just keep wondering if the day will ever really come when you will be your own boss instead of having to do what you are told. (-1, I.B.5.a.)

8BM. And while you wonder and hope, skilled workers do their job and finally you are told that everything will be all right. (-1, I.B.1.e.)

11. Yet in spite of your fear you may go in search of your objective, but when you finally come in sight of it, you also see the great danger there is in trying to approach it. (-2, I.A.5.c.)
12M. But things may still turn out well, even if they seem to slip away before you have completely finished your work. (+1, I.B.1.d.)

14. But sometimes you do go ahead before it is too late and eventually you are free at last. (+2, I.B.1.b.)

16. Then you may think others have forgotten you and you are disappointed but you awaken to find a pleasant surprise waiting for you. (-2, IV.A.1.b.)

20. Sometimes you may wish you hadn't taken the job because the whole thing is rather frightening, but you stay where you are and soon the others come to join you. (+1, I.B.3.a.1.)

(Score: +2; M.I. 108)

T. Subject #20

1. You are determined to do something, so you begin and become even greater at it than others. (-1, I.B.2.f.)

2. When your requests are always refused by one, another will come to console you and after you present your problem to the latter, things are much improved. (-2, I.E.5.b.)

3BM. While you are being punished for an impulsive action that harmed another, you determine to help others to profit from your mistakes, and later on you are successful at this. (-1, I.B.2.f.)

4. You may constantly blame yourself for what was really an accidental loss until someone finally persuades you to replace what was lost and then you change your whole outlook for the better. (+1, III.C.1.f.)

6BM. And sometimes when you yourself go to others and talk sense to them, you can change their attitude and prevent a bad separation. (+2, III.E.1.b.)

7BM. But it may also happen that, after a grievous loss, the efforts of others fail to relieve your grief until one day you find just the right person that matches your memory and then your lonely life ceases. (-1, IV.A.4.a.)

8BM. The example of another inspires you to decide on your future career and later you become successful at it. (-1, I.B.2.f.)

11. Sometimes, however, you may think that you will like
something, but after you begin you encounter the very thing you have always feared and, frightened, you give it up for good. 

(-2, I.A.5.b.)

12M. But you can still get around when others use you to demonstrate their accomplishments.  

(-1, I.D.2.b.)

14. When you try to do what you are not supposed to do, you may fail, but after talking things over with your elders, you find that their advice would really be worth obtaining and following. 

(+1, I.E.1.d.)

16. It seems you would not be happy away from your loved ones, but you choose a career in which you do leave them, since happiness is for the next life and you want that as your eternal reward. 

(-1, III.F.4.)

20. But even if you give vent to your impulses and quit your work, you can always take up another kind of work to supply your needs. 

(-2, I.A.1.b.)

(Score: -8; M.I. 67)
APPENDIX V

SEQUENCE ANALYSIS: FALSE POSITIVE RECORD #17

Stories:

1. This little boy disliked "high-brow" music especially violin music. But most especially he disliked to practice playing his violin when he could be outside playing baseball with the other fellows. So one day he got an idea. He would destroy the violin. He took the strings, plucked them loose and twisted two together. At first he was very happy as he considered what he had done thinking he never would have to play it again. But after his parents discovered what he had done to the expensive violin he was made to pay for part of it from his allowance.

2. Ellen was born and raised on this farm. But she wanted to leave now and go away to school. Her parents insisted that she stay home and help. She could not decide where her responsibility lie—if her parents really needed her or if she should go to college and develop her talents. There were three younger children than herself at home, one just a baby and her mother was ill. Ellen decided to stay home and help for a year and see how her mother's health will be then. And then she will decide definitely.

3BM. Iris Fabian received bad news. Her husband and children went out on a hunting expedition and one of her children was lost for three days. They found the boy, however. He ran way to his gr

4. Big Bob escapes from the state prison. The first place he went after he got out was to a boarding home where his wife was living with an old girlfriend of his. She wanted Big Bob to go back to prison. She knew that Big Bob could have been released sooner if he hadn't done this "crazy thing." Big Bob was sorry he had done it too. So he went back. The warden wasn't too happy, but after a few years he was released for good behavior, anyway.

6BM. John Brown's wife is going to have a baby. He and his
mother-in-law are waiting impatiently in the hospital's waiting room. John and his mother-in-law are very worried because Sally, the expectant mother, is not very well. However, Sally gave birth to a pair of twins and her health has been improving.

7BM. Kent Kurkwood, the older, was an actor—one of the most famous in the silent film days. His son, Kent Kurkwood, Jr. is now also making acting his career. The reviews and movie critics can't decide who is the better actor and if Kent junior is liked as much by movie fans today as his father was in the twenties. One thing everyone decided on, however was that Kent Kurkwood, Jr's profile is much more handsome than Kent Kurkwood Sr's ever was.

8BM. Tom Jones and his friend went deer hunting. They got up early that day and left home expecting to have a good trip. When they were in the woods they loaded their guns. Tom's shot off accidentally and shot his friend in the ribs. Panic stricken Tom dragged his wounded friend to a cabin that was fortunately near-by. Two men were living there. One of them tried to take the bullet from Tom's friend, but it was too late. He died from loss of blood.

11. Maine, situated on the Northeast coast, is the scene of many disasters, especially hurricanes. However, something occurred that was more devastating than any hurricane had ever been in Maine. A great sea monster emerged from the Atlantic Ocean. The monster was believed to have been a descendant of the prehistoric dinosaurs. It completely demolished cities and several hundred people were killed. No one knew how to kill the monster. But the sea monster returned to the Ocean of its own accord and never threatened Maine again.

12M. A father and his son have lived together alone in a shabby hut. The father worked most of the day and the son was expected to take care of things at home. But he always insisted on taking it easy. This day the father returned home and found his son sleeping again. The old man was fed up. He made his son leave and find a job for himself.

14. Bill Roberts has lived in a cottage on the lake for almost a month now. He can hardly wait to go swimming. But he has never had the time. His wife is always making him do some work around the cottage and she'd rather stay indoors most of the day. Bill really wanted to go for a swim. This night at about 11:30 he decided to get up and go for a swim in the lake. But when he opened the cottage door and looked up he noticed to his displeasure that it was raining. Bill never got to go swimming that summer.
16. Two little boys were walking along the road on their way to the country school house. Neither of them felt much like attending school that beautiful spring day. But they decided to go anyway as they heard the familiar sound of the school bell.

20. Nick Bradford was fired from his job. He used to play the piano at one of the restaurants on Broadway. One day he got in an argument with the singer. She didn't like the way he played. She felt he was stealing her show. So he had to roam the streets looking for a new job because the owner took sides with the singer. Nick found another job. He now plays the piano in a different restaurant that has no singer.

Imports and scores:

1. You may try to get out of a job you dislike by wrecking the tools, but you have to pay for it when your elders find out. (+2, II.A.1.a.)

2. Sometimes you may have several responsibilities and you cannot decide which should take precedence, so you decide to do the job that needs to be done most, here and now, and then you can see what to do next. (+2, III.A.1.d.)

3BM. But when it seems that things are going badly, it may turn out after a time that nothing is really lost at all. (-1, IV.A.1.a.)

4. You may want to escape from just punishment but those you love soon convince you and you go back and take it. (+2, II.C.1.a.)

6BM. Sometimes all you can possibly do is stand by and wait while those you love are experiencing difficulties, but in the end despite your worry things turn out doubly well. (+1, IV.A.1.e.i.)

7BM. Sometimes it is difficult to decide what has real merit, even though one alternative obviously has more external attraction. (-1, I.B.5.c.)

8BM. You may accidentally harm those you love, and despite the fact that you and others try to do something about it, it is too late to prevent a serious loss. (-2, I.B.3.b.)

11. It may also happen that something out of the past returns and causes a great deal of damage and no one can do anything about it, but finally it goes away again by itself. (-1, IV.A.1.c.)
12M. But when you take it easy instead of doing what you have been given to do, you will soon have to leave and do much harder work. (+1, I.B.2.c.)

14. In fact, circumstances may continually prevent you from doing the one thing you really want, and you end up doing a lot of other things. (-1, I.B.4.b.)

16. You may not even feel like doing what you have to do, but finally, when duty calls, you follow the call. (+1, I.B.4.a.)

20. And if you do your job and find unexpected difficulties because others take sides against you, you can always succeed in finding another job without such hindrances. (+1, I.E.1.b.)

(Score: +4; M.I. 117)
APPENDIX VI

SEQUENCE ANALYSIS: VERY NEGATIVE RECORD #11

Stories:

1. The boy is daydreaming. He is fascinated by the violin. He will come away from the violin and sheet of music with a lasting interest in this instrument. He will become, if not a virtuoso, a sensitive artist of the violin. The violin belongs to an older brother. He has found it when his brother was out, and after experimenting with it, he, worn out, puts it on the floor and begins to examine it.

2. Suzanne is almost full-grown. She is on her way to school. It is shortly before graduation which means that soon she will be leaving home and all that is dear and familiar about it to take up a new way of life. She is uncertain. She loves the country and her dear simple parents, but she is in awe and admiration of city folk and city life. She supposes that she will have to use her talents in the city since she has, unlike her parents, been taught reading and writing and a good deal more at the progressive school she is now attending.

3BM. Barb was broken-hearted. What a creep she was. She knew she couldn't face the gang again. She just didn't know how to fit in. Hadn't she tried to again and again. Heavens! She even planned what she would say to Jerry if he stuck his blond, curly head around the corner in time tonight after school. But even Nancy had commented on how silly she had sounded. No wonder, the words weren't the right ones after all and she had almost stumbled off the edge of the curb when she said them--stammeringly. She was broken-hearted but would think of something better for next time.

4. Donna could see the uneasiness in Jeff's eyes. Oh he loved her, she knew but what was this force that made him want to postpone their marriage, want to run like a colt. She worried that this urge to be free would cause trouble after they were married. She would have to get to the bottom of it first. Perhaps if he could sit down with her and explain it she could help him to face his craze to run free. How sick she felt when he ran from

134
her when she confronted him with his problem.

6BM. Roy didn't see why his mom had to be so demanding all the time. Heaven knows, he thought, we've tried to take good care of her since Dad died. Now he had a family to support and the finances were no small worry. Sure, she would miss the old homestead. So would he. But why did she have to keep brooding out loud at his plans to sell it. There she stood at the window reminiscing over the old orchard as though it were her dearest son. He felt his temper rising. He knew that he was about to say something to end this whining. What could he do about it, anyway; could they keep this ramshackle place forever just so that she could dream?

7BM. Julius bent forward and whispered sage advise into the ear of his son. He had been watching after the growth of his boy for twenty-five years now. He was very proud of him. He didn't want him to make all the mistakes which he had made and from which he had suffered all his life. He had made out fairly well since he had come to America and married, but he never felt that he had wholly gotten adjusted to American society, but this boy of his who had all of his father's brains and his mother's wonderful American personality, would go much farther than he, would see to that.

8BM. All the way home, Jacky daydreamed about the movie, especially the scene that showed the druggist doing an emergency appendectomy on board the submerged submarine. Gosh those seamen were fearless fellows. That sailor probably hadn't expected to see daylight again. Of course, this druggist wasn't like the rest of them. He was quieter, more deliberate, a real hero. Mom says a druggist gets almost as much training as a doctor. It must be something to be like that guy. I'd kind of like to be a druggist.

11. The rubble, the glare, the destruction, the terror, the decay of all that is good and warm and human. War! I passed down the once peaceful country road towards a small Pyrenees town shortly after one of those idiotic, pointless raids had taken place. Fires could still be seen in the valley ahead. Loose boulders frightened me several times by crunching and crumbling and falling in front of me or beside me as I walked along. Yet I would not turn back. Not so much because I knew comfort and peace awaited me in the village, though I sorely needed these. Rather I walked this way dazedly, out of habit. I was too tired to care what awaited me. I was reaching home.

12M. Tod was pitifully young when he died. His dad just couldn't take it. In fact, he kind of lost his mind over the thing. It
broke my heart to hear him refuse to have him buried. Tod had always been a charming youngster and his Dad was a very sensitive man. Tod got consumption and just got thinner and thinner and finally died. But he loved to sit by the window seat and look outside. When he died his Dad carried him to the window seat. He stayed there for days talking with him.

14. Fred had been planning this runaway very carefully. He was full of mixed emotions. No getting away from it, it was thrilling. He savored the thought that he would be missed. It was about the only way he could get his ma and pa to care what happened to him. Too bad he wouldn't be here to see their faces when they found his empty bed and his note. It read:

"Goodbye forever. I'm gonna be a farmer or get a job so I don't hafta get pushed around by you no more."

The police found Fred and brought him back but he was still a surprisingly disgruntled boy even after 48 hours.

16. Nancy reached over and grabbed her doll by the arm. She spanked it hard and slammed her onto a chair. After scolding the doll fiercely for five minutes she yanked it out of the chair again and gave it a second spanking. Then, with a look of deep satisfaction on her face, she sat the doll on her knee and began "feeding" it with a spoon speaking to it in a lighter tone than before, yet still full of authority.

20. Tony shoved his hands into the holes at the bottom of his pants pockets. His suit was still damp from the rain. He liked to walk down Broadway. It may him feel like big stuff. The people never gave him any sign of recognition, but at least it wasn't the unpleasant recognition that his "patrons" sometimes gave him. A bum can go where he wants and even be who he wants. He has no long-term worries especially if he can get enough cash for a bottle of whiskey. But sometimes the nights get kind of long and cold and sometimes a guy gets quite wet.

Imports and scores:

1. If you find something fascinating that belongs to others, you examine it and later on you may become somewhat accomplished at it. (-1, I.B.5.a.)

2. And this means that after you have had some training, you will have to leave the familiar simple things and you suppose that you will have to use your talents. (-1, I.B.5.c.)

3BM. But despite the fact that you have tried repeatedly, you
just don't know how to fit in; you will have to think of something better for next time. (-1, I.E.2.b.)

4. You may be worried that an urge to be free will cause trouble after you are settled, and it makes you sick that you run away from facing this problem. (-2, IV.A.3.a.)

6BM. But are you able to stay in an old place that is no longer of any value and that is a burden to others just so the dream can go on? (-2, III.F.2.a.)

7BM. Sometimes others may give you sage advice because they are determined that you will do better than they in a kind of life to which they have never wholly adjusted. (-1, I.F.1.a.)

8BM. And this example of others makes you think you might want to be like them; (-1, I.B.5.a.)

11. so you go on, despite the destruction and terror all around you, not so much because you know the comfort and peace that lies ahead, but dazedly, out of habit, too tired to care what awaits you. (-2, I.A.5.a.)

12M. But if the end did come, you couldn't take it and would continue to act as though it had actually not happened. (-1, IV.A.5.a.ii.)

14. Yet it was thrilling to think of running away from it all, of being missed by others, of doing what you want and not being pushed around anymore; and though such plans don't work, you may still remain dissatisfied with things as they are. (-2, II.A.1.a.)

16. Actually you will be satisfied after you can exercise authority yourself; when even your kindness is tempered by the fact that you possess such authority. (-2, III.F.1.c.)

20. You would rather go where you want, be who you want, and be free from long-time worries (that is, be a bum), away from the unpleasant recognition given you by your sponsors, even though sometimes things may then be uncomfortable and dreary for you. (-1, I.A.1.a.)

(Score: -17; M.I. 29)
APPENDIX VII

SEQUENCE ANALYSIS: HIGHLY POSITIVE RECORD #1

Stories:

1. Bobby was told by his mother to practice his violin. Before he began, he started dreaming his usual dream, that someday he would be a great musician. It was his one great desire in life, yet he did mind the long practices each day since they took him away from his playmates. Nevertheless, he willingly took up the violin, adjusted it securely under his chin, and began his practice.

True to his dream, Bobby became an accomplished musician, but not with all the pomp and success he had always dreamed about. There were many difficult times—as there are in most musicians' lives—but his determination saw him through to his desired goal—and he was happy in his work.

2. As Ann walked away from the farm, she glanced back, wondering why things were as they were. Why did her mother have to work so hard? Ordinarily her father and brother should be able to take care of the small plot of land they called their farm. But the land was so poor—that was it! Yes, the poor land. She felt like a heel leaving them there—working so hard. Here she was going to school. But it was for a purpose, she thought. She was going to get the best education possible—her folks would be proud of her. Then she would get a good job, she’d help out at home, then. At first she didn’t want to leave them, but her mother had insisted. She wanted her daughter to have everything which had been denied her. So with a determined mind, Ann set out. Her determination, her purpose would carry her through to the end.

3BM. Louise sat on the floor of the large room, her head resting on the edge of the sofa. What seemed like an empty bottle of aspirins, or the like, lay at her side. Louise's father was dead. There was only she and her mother. Naturally her mother wanted to protect her . . . she loved her. Yet Louise resented this almost over-bearing protection of her mother. They had talked about it often enough . . . even to the
point of quarrelling. This latest argument had ended in Louise near hysteria.
She recovered eventually, and with the help of an advisor, she and her mother were reconciled again—each realizing the love of the one for the other.

4. Frank's anger rose to such a pitch that even his wife, Mary, saw that things were dangerous. He had had a terrible argument with his step-brother. Mary knew that his temper, which he had never learned to control, not even for her sake, would never be quelled. She pleaded with him, but all in vain. He had sworn revenge—and he meant to take it.
Take it, he did, later that same day. But in injuring another person, Frank had to pay the penalty and he ended up in jail for a short time. Not even Mary could pity him, for she knew that he deserved much more than he received.

6BM. Mrs. Brown listened to her son. He was trying to explain why he must leave the town. Yes, she knew he loved her, but he also loved his work. As he talked on and on, Mrs. Brown recalled the many dreams and hopes she had for her son; how after he graduated from medical school he would settle down and be a very efficient doctor—right here in his home town. But things don't always work out the way we had planned, she thought. She knew that it was more than work which attracted her son to the city.
He went—and not without knowing that he had somehow disappointed his mother. But she would get over it—he knew. Besides, he had a right to be happy, didn't he? He set up his practice in a large city, married a girl he had met while in school. He hoped now she would be happy since it was her idea not to return to the "small town". Yes, a man's place is by his wife, he decided—and nowhere else.

7BM. Jim had come to Doc Brown because he was troubled. Doc, he knew, would know just what to do. It helped—talking to him. He always seemed to have the right answer. Jim couldn't decide what he should do, quit school and help his dad in the store or finish school and let his dad suffer from over-work. Doc listened attentively to everything Jim said. He stopped him, now and then; asked him a question or two, then let him talk some more. Towards the end of the session, Jim had come up with the solution to his problem. Since his dad definitely needed help, it was up to him to help him. He thanked Doc Brown, and walked slowly home. "He's a great guy," he thought—without realizing that Doc had really not solved the problem for him—but that he only helped Jim arrive at the answer which he had been afraid to come to—but which had been there all the time.
SBM. Tom put down the book he was reading. As he stared off into space, his imagination pictured for him all that he had just read. He saw the man who had just been shot. But even more clearly he saw Dr. Rex bending over the wounded man, trying with what equipment he had to dig out the bullet and dress the wound. It didn't seem like the type of story Tom would read—or did it? Doctor Rex was the hero, he had saved a man's life and that was Tom's main ambition in life.

Many years later, after several years of practice in the medical profession, Tom again picked up the book entitled: Dr. Rex. The story no longer thrilled him—but he was glad he had read it earlier—for it had led him to his present profession—and he was serving his fellowmen.

11. The old mill was a perfect sight in the late afternoon sun. The splashing of the water as it gently spilled from the heights above, the green of the trees and shrubs, the lazy position of the rocks on the river's shore were enough to tempt even the amateur artist into painting a masterpiece. Was it so strange then, that within a few short minutes, a group of youngsters arrived on the scene singing, "Down By the Old Mill Stream?" They had a very nice picnic there.

12M. Dave had been resting for quite some time now. His uncle, who was his guardian, entered the room and looked at him. He couldn't tell whether the young man was really sleeping or whether he was dead. He was going to shake him, but instead, he merely passed his hand back and forth in front of the youth's face, thinking that if he were awake, that would be enough to make him open his eyes. His eyes didn't open, and he responded to no shaking. Sadly, his uncle walked away... knowing that Dave has passed from this life to eternity.

14. Though it was only 3:30 A.M., Joe was up and at the window. He stood there. He liked that sight—and it was a familiar one, for he did this often—or at least, whenever he had any really serious thinking to do. He found he could concentrate much better, looking out into the starry night or down into the valley. And this time, just as he always did, when his thoughts were somewhat clear, he returned to his room, climbed into bed and slept for several more hours.

16. She had always had everything she wanted in life. Maybe that was Betty's problem. She insisted, now, that her father leave his work and drive half-way across the country just to pick her up. It was not asking too much, she reasoned. But she did not realize that her father's position would not allow him to leave his post at the drop of a hat. When he refused her request, Betty went into a tantrum. She stormed out of her room,
borrowed her girl friends car, and raced at top speed down the road. She was in such a rage, that she failed to see the sharp curve just ahead. She saw it too late. The car rolled over several times and she was killed instantly.

20. At twelve o'clock any night of the week, except Tuesday, you could look out and see Mike returning from his job. He was the night watchman at the bank, he had the four to twelve shift. He didn't like the hours, but it was a good enough job. At least it kept his family fed and dressed. He wishes he could do more for them, but at least he was doing an honest days work. As he made his way through the dark streets he thought of what waited for him at home—and hurried on where he could find nourishment and rest.

Imports and scores:

1. You may miss your fun but you willingly go to your work, and although you don't realize all the pomp and success of your dreams, your determination sees you through the difficult times to your goal and you are happy. (+1, I.B.1.d.)

2. You may not want to leave your hard-working elders to further your education, but you know it is for a purpose and they insist, so you set out and your determination will carry you through to the end. (+1, I.D.1.d.)

3BM. Yet you may resent the overprotection of others but you eventually recover from your emotional outburst and with the help of another, you are reconciled with them—each realizing the real intent of the other. (+1, III.B.1.a.)

4. But if you have never learned to control your anger and are determined to get revenge despite the pleas of others, you will deserve the penalty you receive. (+2, II.A.1.a.)

6BM. Despite the disappointment of others, you carry out your own plans for your work in life. (+2, I.D.1.d.)

7BM. But when faced with a difficult decision, you seek professional help which enables you to arrive at the solution to your own problem. (+2, I.D.1.b.)

8BM. Later on when you have been engaged in your work for some time you may find that the old source of inspiration no longer has any effect on you; but you are still grateful for what it did in the past to help you get started. (+1, I.C.1.a.)
11. After all the situation was so ideal that you were not at all surprised to see it taken full advantage of. 
(+1, III.F.1.a.)

12M. But at times you may not be able to tell whether things are still going on or whether this might be the end, and when your actions bring no result and nothing more happens, you may walk sadly away. 
(-1, I.E.2.a.)

14. Then you need a little respite in order to concentrate better, and when your thoughts are somewhat clear again, you go on with what you were doing. 
(+1, I.B.5.d.)

16. Otherwise when you don't get just what you want, you may give vent to your impulses, do something rash, and then have to pay the full penalty. 
(+2, I.B.2.d.)

20. The work may be difficult and at times inconvenient, but you are doing your share and you are glad for what awaits you at the day's end. 
(+1, I.B.4.c.)

(Score: +14; M.I. 158)
The dissertation submitted by Sister M. Rosaire Lucassen, O.P. has been read and approved by five members of the Department of Psychology.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the dissertation is now given final approval with reference to content, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy.

_________________________  __________________________
Date                                Signature of Adviser