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## Measurement of Attitude and Information Changes in Mental Health Concepts Among Seminarians

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MEASUREMENT OF ATTITUDE AND INFORMATION CHANGES IN MENTAL HEALTH  
CONCEPTS AMONG SEMINARIANS

by

Neil John Webb

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

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1959

## LIFE

Neil John Webb was born in Fond du Lac, Wisconsin, June 21, 1929. He was graduated from Waupaca High School, Waupaca, Wisconsin, June, 1947, and from Marquette University, June, 1952, with the degree of Bachelor of Science.

From 1952 to 1954 the author served with the United States Army Medical Corps in the capacity of psychiatric technician. He began his graduate studies at Loyola University in August, 1954, and received the degree of Master of Arts in February, 1958.

The writer was a research fellow at Loyola University from February, 1957 until June, 1957. He has been engaged as a research psychologist with the Loyola University Religion and Mental Health Project since June, 1957.

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## CHAPTER I

### INTRODUCTION

#### Historical Background

The early relationship between religion and psychiatry was often one of opposition and hostility. The anti-religious materialism of psychoanalysis, of psychology, and of dynamic psychiatry provoked antagonism and led to repudiation by many religious groups. Some of the distrust was due to confusion and to misunderstanding; however, there were and still are bases for the antagonism held by religious leaders. It is true that some psychiatrists held that religion was an obstacle to man's freedom and, therefore, to his happiness; that religion is an illusion, and that the practice of religion is in itself a manifestation of a neurosis. Few hold these opinions at the present time; on the contrary, psychiatrists and psychologists are becoming more interested in the role of religion in the preservation of mental health. The current thought of our day reflects a keen interest in the prevalence of mental illness and in its causes. The clergyman and layman alike share this interest in mental health.

In the past few years there has been substantial progress toward a conciliation between religion and psychiatry. Pope Pius XII clarified the Catholic attitude toward psychiatry in statements made during his pontificate. The late Holy Father found no objection on moral and religious grounds to psychiatry in general, nor to psychoanalysis. His objections were to the

pansexual method of certain psychoanalytic schools. (Observatore Romano, 1952). In actual practice individual psychiatrists and priests have in some cases developed a team approach in helping patients. Progress has been slow, often beginning with cooperation between individuals.

More recently cooperative groups have been formed to discuss their mutual problems. In our country evidence of this contemporary trend is the increase in the number of university sponsored pastoral institutes. Outstanding examples of these are the institutes held at St. John's, Fordham, Seattle, Detroit, and Loyola Universities. Catholic chaplain institutes throughout the country are further evidence of this cooperative trend. On the other side, the professional organizations for psychology and psychiatry have reflected a similar interest in closer cooperation. Both the American Psychiatric Association and the American Psychological Association have created committees devoted to clarifying and improving relationships with religion.

The National Institute of Mental Health, which is a division of the United States Public Health Service, has come to recognize the importance of the clergyman in the mental hygiene movement. It has been pointed out that there are over 300,000 clergymen in the United States ministering to over 100 million churchgoers. (Academy Religion and Mental Health, 1956). The majority of these clergymen are consulted frequently concerning all types of emotional disturbance. The clergyman, because of his unique role in the field of mental health, is a vital force in the education, referral, and cooperative treatment of his people. Considering the nine million people (Fein, 1958) who suffer from serious emotional disorders in our country and the millions more who suffer less serious disorders, it is evident that help is gravely needed.

### Need for Training

Partly because of the increased cooperation between psychiatry and religion, educators in seminaries have come to recognize that the training presently offered to seminarians does not always prepare them for some of the pastoral aspects of their work. The priest sometimes finds himself unable to deal effectively with the problems for which people seek his guidance and help. This growing awareness of the need for more adequate training in the field of mental health has prompted the National Institute of Mental Health to award grants to universities representing the three major faiths for developing mental health curricula for seminarians. Separate pilot and evaluative projects have begun at Harvard, Yeshiva, and Loyola Universities representing respectively the Protestant, Jewish, and Catholic faiths.

### Loyola N.I.M.H. Project

Loyola University, by reason of its faculties in the behavioral sciences, has been selected by the National Institute of Mental Health to prepare and collate curricular materials for the clergy of the Catholic faith. The basic purpose of the Project on Religion and Mental Health is to develop educational materials that will make available the contemporary findings of the behavioral sciences to those responsible for training Catholic priests. The aim is to develop in the young priest a conception of the dynamic nature of personality and a knowledge of social processes to assist him in the effective performance of his priestly role. The Loyola project does not propose to make the priest a diagnostician or therapist; rather it is the belief of the project that a broader knowledge of the behavioral sciences will enable the priest to use his own religious resources more positively and effectively in the salvation of

souls. Also with the additional knowledge of the dynamic and motivational factors in man, the priest can be a more effective force in preserving the mental health of his parishioners.

The Loyola University N.I.M.H. Project has adopted an empirical approach in the task of preparing curricular materials for the Catholic clergy. In brief, this approach has been to go to those persons most centrally involved, namely teachers and pastors, priests and seminarians, and appeal to them for information about what they need and want in the finished educational materials. It was felt that priests and seminarians more than anyone else familiar with their problems, training, and work, would be able to provide information useful to the experts in behavioral sciences for the construction of curricular materials.

#### Evaluation of completed materials

The evaluation phase of the Loyola University Project has two major purposes. The first purpose is to investigate the needs, attitudes, problems, and suggestions of seminarians and priests in relation to project goals. As the data is gathered from the seminarians and priests it is analyzed and made available to those concerned with constructing the educational materials. By these methods, the construction of curricular materials is guided by empirical evidence. The second task is to evaluate the effectiveness of the finished educational materials as they are used on sample populations of seminarians. This objective evaluation must include the assessment of trial courses under various conditions including actual introduction into the seminary.

The first section of the proposed curricular materials has recently been completed. The content of this section is contained in a manual titled,

Psychodynamics of Normal Personality Development. The directors of the Loyola Project are now interested in an assessment of the effectiveness of these materials in changing the information or knowledge and attitudes of seminarians. One of the purposes of the project is to prepare materials that will be useful to the priest in enabling him to better understand and accept the people that he meets in his daily priestly activities. It is assumed that the materials in the finished manual will provide the seminarian with new information and ideas that are not contained in any other of his seminary courses. This assumption must be tested and to this end achievement tests will be developed. The achievement test can be used to measure the knowledge of the seminarian before and after the introduction of the educational materials. This instrument should reliably and validly measure changes that may occur and should adequately represent the educational materials. The project is also concerned with the attitudes of seminarians and priests. It is hoped that with increased knowledge and understanding the seminarian will more favorably view the professions involved in treating the mentally ill. The attitudinal changes produced by the course is very important if one accepts the unproven but often accepted relationship between attitude and action. The priest who is favorable toward psychiatry is more likely to be active in the referral, and cooperative treatment of his parishioner. The development of an attitude scale that will assess the attitudes of the clergy toward psychiatry is proposed to fill this project need. This scale must be sensitive enough to detect changes if they do occur, and have the properties of reliability and validity.

This twofold evaluation of attitudes and of achievement necessitates the

development of psychological instruments to measure changes that might occur or provide information about the failure of changes to occur. These instruments will be used with large numbers of seminarians and varying samples to evaluate changes.

The evaluation of completed materials is the main purpose in constructing the two instruments; however, they both have auxiliary or secondary purposes. The attitude scale will also be used to accumulate empirical evidence about the attitudes of the Catholic clergy toward psychiatry. The completed scale will be distributed to large numbers of seminarians throughout the United States and their responses will be tabulated and analyzed. The achievement test also has auxiliary purposes. It will be used in the early trials of the curricular materials to guide revisions. It will accompany the completed and tested curricular materials when they are released to the seminarians. In this use the achievement test will act as an objective instrument which can be used by the seminary teachers as a course examination.

The design and development of the Loyola N.I.M.H. attitude and achievement tests is the problem of the present study. These instruments will also be tested in a series of reliability and validity studies.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

A review of the pertinent psychological literature revealed that there have been many evaluative studies published. Although they have the evaluative aspect in common, the methods, techniques, and populations differ. Some studies are reported in which the evaluation includes either attitudes or achievement; however, none of these research reports closely resemble the present study either in methods or population. A few studies involving attitude assessment employ the pretest, treatment, retest design with varying groups of people. (Aalto, 1956; McGinnies, Lana & Smith, 1958; Staudohar 1956). There are also descriptions and suggestions for research design which pertain to the present study in several of the current general references on research in the behavioral sciences. (Festinger & Katz, 1953; Hovland, Lumsdaine & Sheffield, 1949; Underwood, 1957).

Since the primary focus in this dissertation will be on the construction and validation of the proposed psychological instruments of assessment, the bulk of this chapter will be devoted to the literature related to attitudes, achievement, and their assessment. Although both the attitude and achievement tests have in common the assessment aspect, it seems logical to treat the two topics separately. The balance of this chapter will be divided into two major sections. The first and more extensive section will be on attitude: the definitions and current concepts of attitude, methods of assessing

attitudes, and a brief treatment of attitude change studies will be included. The other major section will contain a review of the literature on testing achievement, consisting primarily of a review of traditional methods used in achievement testing together with some of the more recent innovations.

### Definitions of Attitude

There is vast literature in the fields of psychology, sociology, and education dealing with attitude. Several authors have defined attitude, and within these definitions it is possible to find some common elements. Gordon Allport describes some of the properties of attitude which are consistent with many other authors. He maintains that attitude is a form of readiness for response that is individualized, distinctive of its possessor, and guides the course of behavior. He continues,

"the term attitude, furthermore, usually signifies the acceptance or rejection of the object or concept of value to which it is related. Ordinarily attitudes are favorable or unfavorable, well disposed or ill-disposed; they lead one to approach or withdraw, to affirm or negate." (Allport, 1937, p. 280).

Social psychologists have been responsible for most of the research on attitude, and the majority of the descriptions of attitude have come from this group. One social psychologist defines attitude as,

"Broadly conceived, attitude denotes an adjustment of an individual toward a selected aspect of his environment or of his own conduct.. attitudes also may be regarded as predispositions or orientations toward issues, institutions, or people." (Bird, 1940, p. 143-4).

Bogardus (1928) describes an attitude as a, "tendency to act toward or against environmental factors which become thereby a positive or negative value." (Bogardus, 1928, p. 101). The common elements that seem to appear repeatedly in the definition and description of attitude are: (a) attitude

is a predisposition to act in a certain way toward something, and that (b) it is an inference from previous experiences.

Most theorists are not clear on how attitude is formed. Some, like Allport (1937) and Cantril (1945a), admit cognition in attitude formation, while others like Murphy (1937) call it a "set," but do not explain how the set is built up. Allport seems to give the best explanation from a phenomenological point of view. He theorizes that the individual first experiences an object and then on the basis of this experience forms an attitude toward it. This attitude then acts as a predisposition to respond in a certain way to objects and situations with which it is related. Unless the individual has a contradictory experience this attitude will remain.

For many theorists attitude by definition (Smith, Bruner & White, 1956; Peak, 1955; Rosenberg, 1956; and Green, 1954) involves both cognitive and affective components; these components interact so that cognition about attitudinal objects is not meaningful without considering the affective components. Krech and Crutchfield define attitude globally as "an enduring organization of motivational, perceptual and cognitive processes with respect to some aspect of the individual world." (Krech & Crutchfield, 1948, p. 152). This Gestalt emphasis seems to be prevalent in contemporary thinking about attitude. The emphasis on the affective components of an attitude is well taken, the experiences of the individual include an appraisal of the object or situation with reference to the self.

Perhaps the best operational definition of attitude is that of Thurstone who pioneered in the measurement of attitude. His definition provides a rationale for the measurement of attitude. He defines attitude as, "the

degree of positive or negative affect associated with some psychological object." (Thurstone, 1946, p. 41). This definition of attitude will be used in the present study.

### Measurement of attitudes

In measuring attitudes one is trying to assess the degree of positive or negative feeling associated with some psychological object. That is, as a result of previous experience with a particular psychological object what is the attitude at the present time. A psychological object may be any symbol, person, institution, ideal, etc. toward which people may differ on the positive to negative continuum. An individual who through past experience associates positive affect with a psychological object can be said to have a favorable attitude toward it; conversely, negative affect connotes an unfavorable attitude.

There are several techniques for assessing attitudes. Perhaps the most simple technique is to ask individuals questions about an issue in order to get a response which is then interpreted as an attitude. Practically all attempts at assessing attitudes involve a form of verbal response from the subject. As one expert points out (Mc Kumar, 1946) the correlation between verbal and nonverbal is usually assumed and left unknown by investigators in this field.

The form of questioning the individual varies from asking direct questions to attitude scales. In direct questioning it is possible to classify the response of the subjects into favorable and unfavorable replies. Observing the behavior of an individual is another way of surmising attitudes, but both of these methods become impossible when large groups of individuals are involved.

More recently a number of projective techniques have been devised in an attempt to elicit the affective components of attitudes. Burwen, Campbell, and Kidd (1957) used a sentence completion technique in assessing attitudes toward superiors and subordinates. Other investigators have also found the sentence completion technique to be useful. (Gekoski & Isard, 1955; Rotter & Willerman, 1954). The semantic differential test has been used with varying degrees of success in assessing attitudes. More (1957) and Campbell (1950) describe the use of several projective techniques in assessment. Yonge (1956) and Mc Nemar (1946) urge that more use should be made of the open-end interview in attitude and opinion studies.

Attitude scales provide a quick and convenient measure of attitudes of large numbers of individuals. The typical attitude scale consists of a number of scaled statements; the responses of the individual taking the scale enable the tester to have a more sensitive measure than the broad categories of favorable and unfavorable. In attitude scales there is an attempt either to rank individuals or to assign them a position on a continuum of favorableness.

The impetus given by Thurstone is generally acknowledged to have brought attitude scaling to the attention of psychologists. Prior to his time the attempts at attitude measurement were crude and undeveloped. In the 1920's, Thurstone (1927a; 1927b) published two important articles in which he developed his "law of comparative judgments." The statement of this law in a series of articles provided a rational method for ordering stimuli along a psychological continuum. This law has made possible the investigation and ordering of all kinds of subjective experiences. The law of comparative judgments was in the tradition of psychophysical measurement and is now generally expanded to

includes psychological scaling methods. By Thurstone or under his direction a large number of attitude scales were developed for measuring attitudes toward a variety of psychological objects. Perhaps the most famous of the scales was that which he developed in conjunction with Chave to measure attitudes toward the church. (Thurstone & Chave, 1929). Since Thurstone's original contribution there have been a number of developments in scaling, and Thurstone himself remained an important contributor until his death.

In 1932 Likert published a paper in which he presented a method for developing attitude scales. The advent of the Likert method of summated ratings touched off a series of articles comparing the Thurstone and Likert methods. The controversy about the advantages and disadvantages of the two methods has continued to the present time. (Ferguson, 1941; Edwards & Kenney, 1946; Likert, Roslow and Murphy, 1934; Kelly, Person & Haltzman, 1958). Perhaps the best statement on this controversy was made in an excellent review of attitude and opinion methodology by Mc Nemar,

The writer is inclined to believe that some combination of these two competing techniques for scale construction would be better than either one alone. It would seem logical to expect that more reliable scales would result if the Likert method were modified to assure the selection of some items in the middle range of the favorable-unfavorable continuum, or if the equal appearing interval technique, along with internal consistency, were used for item selection and the median check scoring dropped in favor of the simpler scoring technique of Likert. Both methods have merits, both have defects which might be overcome by a combination of the two. (Mc Nemar, 1946, p. 308).

Several new approaches to scaling have been introduced since Likert's paper. An approach which has attracted considerable attention was introduced by Guttman in a 1944 paper. Guttman's method of scalogram analysis eliminates items which are not on the principle continuum in an attempt to

achieve a unidimensional scale.

In brief, there are two general methods used in developing attitude scales once the statements have been selected. In one method a judging group is used; they are asked to judge the degree of favorableness or unfavorableness expressed by a number of statements. The judgments are then used by the scale constructor to determine the scale value for statements on a psychological continuum. Subjects are then asked to express their agreement or disagreement with the individual statements and attitude scores are obtained based on prior knowledge of the scale values of the statements. The judging group method includes the method of paired comparison, the method of equal appearing intervals, and the method of successive intervals. These methods are historically linked with the name Thurstone and differ only in the manner in which judgments and scale values are obtained.

A second method of developing attitude scales is based upon direct response of agreement or disagreement with attitude statements. In this method a judging group is not used and it is called a response method. The method of summated ratings (Likert) and the method of scalogram analysis (Guttman) are of this type. The response methods assume that the response "agree" to a statement indicates a more favorable attitude than the response "disagree," or vice versa.

There are a few technical studies of importance for the present dissertation. The work of Dunnette, Uphoff, and Aylward (1956) on the undecided response in attitude scales is of both theoretical and practical importance. These authors point out that with increased knowledge there are fewer undecided responses marked by the subjects. Other studies (Blood, 1955) indicate the

importance of the respondents' reactions to items on an attitude scale.

It is generally acknowledged that attitude scales can be constructed that are reliable. Attitude scales are also credited with more exact measurement than most of the other techniques for assessing attitudes. An attitude scale tends to reduce variable errors by using a number of questions. Validity is generally neglected in constructing attitude scales. Mc Nemar (1946) maintains that the days of assumed validity are past and research is needed in this area. Mc Nemar also seriously questions instruments which claim to have units which are truly equal. He states,

"The writer sees no way of devising instruments which will yield units which are truly equal. Comparability of units can be attained by the use of standard scores or percentile ranks, perhaps by the method of equal appearing intervals, but such units permit rank ordering rather than true measurement. We would agree that we can secure a reliable and valid ordering of individuals on a single continuum, and that such can prove useful in the scientific study of the attitudes of men." (Mc Nemar, 1946, p. 312).

### Attitude changes

Most logical and comprehensive theories of attitude place great stress on the role of learning. The modification of response tendencies by the impact of experiences seems to be the explanation for attitude change. The very fact that attitudes do change, whether accidentally or experimentally produced, can be taken as evidence that learning is involved. The relation between attitude and learning have been experimentally studied by Garber (1955) and Friedman (1958). Their studies tend to support the close relationship between the two.

The typical change study involving attitude scales uses a pretest, treatment, retest design. The significance of the difference between the pretest and retest means are usually taken as evidence that a change has occurred. In

studies of this type it is important to establish the stability of the attitude scores before undertaking an experimental trial. Mc Nemar (1946) indicates that the experimenter is on much safer grounds if he evaluates group changes in attitudes rather than individual changes.

Some problems arise in relation to the design of experimental studies on attitude change. There have been some recent suggestions that the traditional pretest-treatment-retest design should be altered. The suggestion has been made (Underwood, 1957) that pretesting any group acts as a "sensitizer" and produces spuriously inflated changes. Underwood and Campbell describe several designs to overcome this problem. In 1958, Lana completed a carefully designed experiment to test the hypothesis that pretest treatment interaction effects the results of attitude change studies. His results indicated that the pretest did not significantly effect the results in attitude change studies.

There are some statistical hazards in the usual attitude change design. Mc Nemar (1946) indicates that it is not sufficient to test the significance of the difference between an experimental and control group pre- and post-test means. The proper thing is to test the significance of the net change, that is, the difference between the changes of the experimental and control groups, to indicate that a change has occurred. This procedure makes allowance for the pretest standing of both groups as well as factors which occur during the intervening time.

#### Achievement testing

In sheer numbers, achievement tests probably surpass all other types of tests. Despite the wide spread use of these tests relatively little has been added to the traditional approach of testing achievement. Exceptional

references on the traditional approach to the construction and analysis of achievement tests are Adkins (1947), Loevinger (1947), and Thorndike (1949).

The main objective in constructing tests to measure achievement is to appraise the effects of a specific course of instruction. Achievement tests generally measure the effects of a relatively standardized set of experiences. In achievement testing the effects of learning are measured under partially known and controlled conditions; they are most often used to evaluate the terminal status of an individual upon the completion of training. (Anastasi, 1956).

Adkins (1947) outlines the steps which she considers to be important in constructing achievement tests. Of crucial importance is a careful definition of the purpose of the test and the areas that are to be tested. Once the field to be tested has been defined it is important to secure the services of individuals who are competent to construct items representative of the content to be tested. In order to insure that the content is adequately sampled by the test items, Adkins suggests the use of a test outline detailing the number of items which will be drawn from each section. The type of test item to select depends upon the use that will be made of the test. Adkins explains,

"There are many types of limited-response or so-called objective test items.....large-scale testing programs are coming to use the multiple-choice form or its variants almost exclusively." (Adkins, 1947, p. 39).

The multiple choice test item consists of a question plus several possible answers or responses, only one of which is to be accepted as the best one. Test items, if they are to be effective, must have the properties of a good test. Adkins maintains that a good test item must have validity, reliability,

face validity, and practicality if the item is going to contribute to the general effectiveness of the entire test. After a number of items have been constructed it is desirable to have an item review. In the review, consideration of the item from the viewpoint of content, measurement, and grammar should be given. According to Adkins proper test, editorial reviews save considerable time, money, and effort in the construction of achievement tests. After preliminary items have been selected it is most desirable to have a test or tryout of the completed instrument using a population sample which resembles the final group for which the test is intended. During this tryout such things as an analysis of item difficulty, discriminative value of items, and equivalence of the items can be accomplished. The test can be improved on the basis of the tryout by adjusting the methods of administering the test, adjusting the methods of scoring the test, improving the test with respect to difficulty, reliability, and validity. Adkins also gives examples of how to improve the validity and reliability of the test using item analysis procedures. If two forms are to be prepared, the tryout is also an opportune time to ascertain the equivalence of the two forms. Tests which are equivalent should test the same function, yield the same type of distribution, yield score distributions with the same central tendency and dispersion, and should correlate highly on total score.

Other authors supplement the work of Adkins and offer valuable ideas on the construction and validation of achievement tests. The works of Jordan (1952) and Travers (1950) are helpful in the writing of test items. A general survey of the problems of test construction is provided in the basic texts of Anastasi (1956) and Cronbach (1949).

Technical problems of achievement test construction and analysis with particular reference to validity and reliability are crystallized in the manuals published by the American Psychological Association (1954) and the National Educational Association. These technical recommendations for achievement tests were prepared to set standards for test users and producers. The recommendations set forth in these publications will be followed in reporting the reliability and validity studies in this dissertation.

## CHAPTER III

### DESIGN OF THE RESEARCH INSTRUMENTS

#### Loyola N.I.M.H. Attitude Scale

It should be recalled at this point that the definition of attitude as given by Thurstone was chosen to be used in this study. Thurstone defined attitude as, "the degree of negative or positive affect associated with some psychological object." (Thurstone, 1946). The psychological object of interest in the present study is psychiatry, and the aim of the Loyola scale is to assess the degree of affect of Catholic seminarians toward psychiatry. The finished scale should be sensitive enough to permit a rank ordering of individuals as to their favorableness and should be able to detect attitude changes if they occur.

The assessment of attitudes using scales has a brief history in the N.I.M.H. Project at Loyola. Two attitude scales were previously used, and both scales were unsatisfactory for a number of reasons. The first scale was developed to assess attitudes toward the currently used methods in the promotion of mental health. The methods included in a single scale were Psychiatry, Psychology, Psychological Counseling, and Mental Health training. This scale was administered to groups of seminarians, college students, graduate students in psychology, and psychology faculty members. The results were disappointing in that each of the groups received much the same mean score and the scale was

unable to differentiate these diversified groups. An analysis of the scale suggested that perhaps the scale was actually measuring an attitude toward mental health, rather than the professions involved in mental health work. The results seemed to indicate that most people have similar favorable feelings about mental health, much the same as one might expect them to have in relation to physical health. Those who took the scale also voiced a confusion in trying to rate statements which applied to the separate disciplines included in the single scale. In order to test this criticism of the first, a second scale was developed. The main feature of the second scale was that it required the individual to rate separately each of the disciplines which had formerly been included in one scale. One new variable was introduced by the addition of psychoanalysis which was not included in the former scale. Although the results of this research were inconclusive, they seemed to support the contention that only one discipline should be included in any single scale.

With this experience as background, work on the present scale was begun. It was clear that before any scale could be accepted, it would have to be tested for reliability and validity. As in most psychological tests, the first step in attitude scale construction is the selection of items, or statements. A statement is anything that can be said about a psychological object, and the class of all possible statements that can be made about a psychological object is called the universe. Several techniques have been traditionally employed to obtain attitude scale statements. The current literature may be searched for relevant statements, subjects may be asked to write statements for the scale, or the statements may be "created" by the author of the scale. There has been much criticism of the intuitive approach to statement selection (Mc Nemar,

1946), but little has been done to remedy the situation. With this criticism in mind a clinical-empirical approach was devised to obtain attitude scale statements.

An exploratory study was planned and conducted in which the attitudes of 55 Catholic seminarians were intensively investigated. This group represented three different seminaries in the mid-west and included seminarians of various ages, and levels of training. Each of the seminarians in this group was intensively tested and interviewed during a two month period. Several clinical-empirical techniques for eliciting attitudes were developed by the project staff to be used in this assessment. All of these techniques are commonly employed in clinical practice and had to be specifically modified and adapted to fit the purpose and the population. A brief description of the techniques as they pertain to the attitude scale statements will be given:

**A. Open-end interview.**

Each of the seminarians was interviewed individually by members of the project staff. The interviews were tape recorded and later transcribed to manuscript form. The interview was open-end and semidirrective to provide for free expression of attitudes. The procedure followed by the interviewer was to suggest a general topic, and permit the seminarian to exhaust the topic before asking more specific questions. For example, a question such as, "How do you feel about psychiatry" might be followed by a more specific question such as, "Is there any real conflict between religion and psychiatry."

### **B. Rosenzweig-type balloon drawing test.**

In addition to the interview each seminarian was asked to take a battery of specially prepared tests. The balloon drawings were designed to present the seminarian with actual life situations in graphic form. In each of the six pictures the subject is required to respond as if he were in the situation shown in the drawings. The "balloon" above one of the people depicted contains the words they have spoken, while the "balloon" above the priest or seminarian is vacant. A typical scene shows a young woman sitting across the desk from a young priest and the woman is saying, "But Father, the only person to whom I can go is a psychoanalyst."

### **C. Sentence completion test.**

The incomplete sentence technique is often employed by clinicians in testing patients. As used in this study the sentence leads were selected to provide for expression of attitude. Twenty incomplete sentences were presented to each subject and he was asked to complete the sentence with a word, series of words, or a complete sentence. Space was provided for the seminarian to write in his completion to the incomplete sentence. One of the incomplete sentences used was, "Psychiatry is mostly....."

### **D. Religious Apperception Test.**

The Loyola Religious Apperception Test (shortened to R.A.T.) is an adaptation of the thematic apperception technique originally developed by Murray. (1943). Ten pictures were specially prepared and drawn for the project. Priests and seminarians are

depicted in each of the pictures in situations involving meaningful problems of a mental health nature. The subject is instructed to tell stories about each of the pictures; these stories are to have a plot, a past, present, and future. In telling stories the seminarian revealed his attitudes and feelings about psychiatry. A pertinent picture that was used shows a priest waiting in the outer office of a psychiatrist. Each R.A.T. was individually administered and tape recorded for transcription to script.

The data from the exploratory study was then assembled and analyzed for the purpose of selecting attitude statements. Tabulations were made of the most frequently occurring attitudes as expressed in the tests and interviews. In some cases, it was felt that an individual seminarian was exceptionally expressive and some of his ideas would be selected regardless of frequency. However, the frequency criterion was adhered to rather rigidly. The statements were phrased in the subjects' own words whenever possible; sometimes ideas were expressed rather than complete statements. As a result of this analysis over 200 items were obtained.

The statements were then edited following informal criteria suggested by Wang (1932), Thurstone and Chave (1929), Likert (1932), Bird (1940), and summarized by Edwards (1956). These criteria are given below:

1. Avoid statements that refer to the past rather than to the present.
2. Avoid statements that are factual or capable of being interpreted as factual.
3. Avoid statements that may be interpreted in more than one way.

4. Avoid statements that are irrelevant to the psychological object under consideration.
5. Avoid statements that are likely to be endorsed by almost everyone or by almost no one.
6. Select statements that are believed to cover the entire range of the affective scale of interest.
7. Keep the language of the statements clear, simple, and direct.
8. Statements should be short, rarely exceeding 20 words.
9. Each statement should contain only one complete thought.
10. Statements containing universals such as "all," "always," "none," and "never" often introduce ambiguity and should be avoided.
11. Words such as "only," "just," "merely," and others of a similar nature should be used with care and moderation in writing statements.
12. Whenever possible statements should be in the form of a simple sentence rather than in the form of a compound or complex sentence.
13. Avoid the use of words that may not be understood by those who are to be given the completed scale.
14. Avoid the use of double negatives." (Richards, 1956, p. 13-14).

The editorial review of the statements reduced the number to 157. The statements were then divided into two classes, favorable and unfavorable. Two psychologists divided the statements and those which could not be classified were eliminated. Actually only three statements could not be classified. The method of summated ratings requires that there are available a large number of statements for which the scale value on a psychological continuum are unknown. These statements were then prepared in a pretest scale and administered to 50 seminarians from a different seminary than those used in the exploratory study.

The purpose of this administration was to eliminate obviously poor statements before the preliminary scale was constructed. The subjects were given specific instructions to criticize and clearly mark items that were not easily understood. Also at this time instructions for the scale were clarified and the form of presentation was agreed upon. The pretest trial of the scale reduced the number of items to 125. Items were eliminated when several seminarians were unable to understand the statement, found it ambiguous, or in other ways faulty. Those statements which were eliminated clearly did not meet the criterion of clarity.

A pretest scale of 125 items was then constructed and 268 seminarians took the scale. There were approximately an even number of favorable and unfavorable statements included in this preliminary scale. The subjects were requested to respond to each statement in terms of their own, personal agreement or disagreement with the statement. In obtaining responses from this group the seminarians were permitted to use any one of five response categories: strongly agree, agree, agree and disagree equally, disagree, and strongly disagree. The responses were weighted for scoring so that the individual giving the most favorable category would receive the highest positive weight. For the favorable statements, the assumption was made that the "strongly agree" category was most favorable, and for the unfavorable statements the "strongly disagree" response was assumed to be most favorable. In his original monograph Likert (1932) used a complicated system of weights based on the normal deviate system of weighting. The proportion of subjects falling in each response category was calculated and "z values" were obtained from the normal curve. The weights were the rounded "z values." In a later study Likert (1937)

reported that a much simpler assignment of integral weights correlated .99 with the more complicated normal deviate system. The integral weights system has been used since Likert's study.

The integral weight system was applied to the completed test in order to obtain a score for each of the 268 subjects. For favorable statements the "strongly agree" response received the weight of four, the "agree" response was weighted three, the "agree and disagree equally" received a weight of two, the "disagree" a weight of one, and the "strongly disagree" the weight of zero. For unfavorable statements the scoring was reversed with the "strongly agree" response receiving the weight of zero, the "agree" response the weight of one, the "agree and disagree equally" a weight of two, the "disagree" a weight of three, and the "strongly disagree" response the weight of four. The total score for each subject was obtained by summing the integral weight corresponding to the rating of each statement.

Statements for the final scale in the method of summated ratings are obtained by some type of item analysis. Murphy and Likert (1937) suggest an item analysis technique which requires that two criterion groups be selected from the frequency distribution of the total scores. The top 25 per cent of the seminarian group were selected as representing the most favorable group and the lower 25 per cent in terms of total score were selected as representing the least favorable group. The magnitude of the difference between the mean of the high and low group provides a difference value for each statement. The use of this method assumes that the standard deviation of the items is the same.

The difference values for each statement were ranked with the largest

difference receiving the rank of one. From the ranking of the difference values, 16 of the top favorable and 19 of the top unfavorable statements were selected. The advantage in having both positive and negative statements in the final questionnaire is to minimize the possibility of a response set which might be generated if the subjects respond only to one type of statement.

In order to have a rational basis for accepting the questionnaire as a scale, and to check on some of the assumptions made in the method of summated ratings, the final 35 statements on the questionnaire were scaled using the multiple category method reported by Rimoldi and Hornscho (1955). The multiple category method of scaling provides a standard deviation and scale value for each statement. This method also enables one to obtain normal deviate weights for each of the response categories to verify the integral assignment of weights used in the summated ratings method of scoring. The responses of a sample of 156 seminarians were used in scaling the items by the multiple category method.

In the multiple category method of scaling, the origin of the scale is defined as  $\sum_j S_j = 0$ , and the unit of measurement is  $(\sum_j \sigma_j^2)^{1/2} / N = 1$ , where  $S_j$  is the modal discriminial process for stimulus  $j$ , and  $\sigma_j^2$  its discriminial dispersion. The following operations were performed: a) Frequencies and corresponding proportions were derived for each of the five response categories (i.e., 0,1,2,3,4). b) Cumulative proportions were calculated and the corresponding normal deviates were obtained for each cell. Appendix I contains the tabulations for step a and b. c) The standard deviation for each statement was calculated; these values are given in Table 1. The formula used was:

$$\sigma_j = \sqrt{V_j \sum_j (1/V_j)}$$

(Rimoldi and Hormasche, 1955, p. 310)

d) The stimulus value for each statement was acquired. The scatter of these values is shown graphically in Fig. 1. The scale value for the 35 items in the instrument is given in Table 1. In the formula  $L_i$  is the upper limit of the interval,  $x_{ij}$  is the normal deviate, and  $M$  is the number of intervals:

$$S_j = (\sum_i L_i - \sigma_j \sum_i X_{ij}) / (M-1)$$

(Rimoldi and Hormasche, 1955, p. 309)

e) As a final check that the definitions made in using the multiple category method had been met, the sum of the standard deviations should equal the total number of items, and the sum of the stimulus values should equal zero. The calculations were performed and the results indicated the definitions were adhered to in the scaling. (Table 1). f) Accepting the five response categories for each statement as mid points of intervals on a psychological continuum, it is possible to obtain scoring weights for each of these mid points. The five intervals theoretically extend from minus infinity to plus infinity on a psychological continuum. Only the three middle intervals can be known since the width of two extreme intervals theoretically extends to infinity. It is possible to estimate the mid point of the extreme intervals under the assumption that the subjects who chose this interval were normally distributed throughout the interval. With this assumption it is possible to obtain the mid point of the extreme intervals using the proportion of subjects who choose this interval. The values for the upper limits and mid points for the intervals designated zero and four were estimated following this assumption.

The normal deviates weighted by sigma to be used for rescoreing the questionnaire are given in Table 1. These weights were obtained by multiplying the normal deviate value for each interval by the standard deviation for the item. This was done since the standard deviations as shown in Table 1 were different for each statement. The values obtained are designated values in Appendix II, and are actually the upper limits of the interval. Mid points for the intervals were determined by taking the difference between the adjoining upper limits as the width of the interval and adding half of the width of the interval to the value which represented the upper limit of the adjoining lower interval. Values for the two extreme intervals were estimated from the data giving the proportion of subjects in each interval. Half of the proportion was added to the normal deviate for the "4" interval, and half of the proportion was subtracted from the "0" interval. These values were then multiplied by the appropriate standard deviation. The final scoring weights, given in Table 1, were obtained by adding to every cell value the lowest negative cell value in the table. This eliminated the negative numbers, and set the lowest interval equal to zero. This entire process is a standardization process using the sample of 156 seminarians as the standardization group.

The scaling provided evidence that the statements in the final questionnaire met the requirements of a scale. The scatter of scale values, as shown in Fig. 1, is acceptable. A number of the questionnaires (30) were rescored using the normal deviate weights. The relationship between the two methods of scoring (normal deviate and integral weighting) is graphically depicted in Figure 2. These results substantiate the findings of Likert and Murphy (1937).

and the integral weighting system was retained. The scale was designated the Loyola N.I.M.H. Attitude Scale.

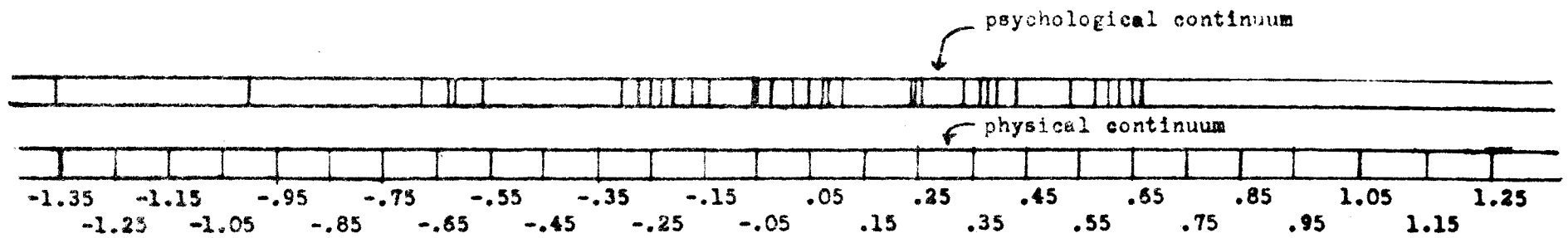


Fig. 1. Distribution of Scale Values in the 35 Items of the Loyola N.I.M.H. Attitude Scale

Table 1

Standard Deviations, Scale Values, and Normal Deviate Weights for Items  
on the Loyola N.I.M.H. Attitude Scale

Item	Standard Deviation	Scale Value	<u>Normal Deviate Weights</u>				
			0	1	2	3	4
1	1.2181	.075	.35	1.54	1.61	2.76	4.14
2	1.0209	.077	.15	.91	1.94	2.98	3.97
3	.9682	.115	.00	.98	2.01	2.90	3.91
4	.9604	.260	.43	.92	1.63	2.69	3.78
5	.9292	.542	.38	.72	1.26	2.41	3.63
6	1.3057	.040	.12	.99	1.79	2.81	4.13
7	1.0192	-.032	.29	1.12	2.11	3.00	3.95
8	1.0477	-.052	.22	1.18	2.17	2.98	3.95
9	.9136	-.187	.53	1.21	2.15	3.21	4.11
10	1.0837	.692	.00	.63	1.42	2.85	3.33
11	.9651	-1.350	1.27	2.30	3.40	4.14	4.75
12	.8945	.575	.20	.77	1.44	2.36	3.48
13	1.3143	-.590	.17	1.52	2.72	3.43	4.44
14	.9249	.665	.12	.65	1.34	2.29	3.44
15	.7793	-.255	.52	1.19	2.23	3.34	4.21
16	.7703	-.312	.54	1.30	2.28	3.33	4.28
17	.8393	-.625	.79	1.54	2.48	3.58	4.53
18	.9574	.010	.43	1.08	1.69	2.93	4.12
19	.7814	-.235	.51	1.20	2.19	3.30	4.22
20	1.0532	-1.003	.80	1.92	3.03	3.85	4.65
21	.9713	.250	.40	.91	1.51	2.68	3.93
22	1.0916	.610	.35	.76	1.13	2.17	3.60
23	1.0996	-.282	.30	1.18	2.25	3.30	4.27
24	.9776	.260	.26	.83	1.70	2.76	3.86
25	1.0157	-.140	.40	1.11	1.98	3.12	4.22
26	.9857	-.622	.55	1.54	2.53	3.58	4.46
27	.9713	-.060	.40	1.03	1.91	3.06	4.15
28	.9825	-.695	.75	1.65	2.53	3.54	4.60
29	1.0262	.357	.27	.82	1.47	2.58	3.81
30	1.1415	.630	.29	.81	1.09	2.06	3.59
31	1.0459	.370	.33	.76	1.41	2.60	3.80
32	.8417	.337	.35	.73	1.58	2.81	3.74
33	.9335	.435	.37	.75	1.38	2.56	3.73
34	.9988	.362	.44	.88	1.33	2.50	3.85
35	1.1797	-.202	.31	1.06	2.10	3.22	4.23
	35.0009	.002					

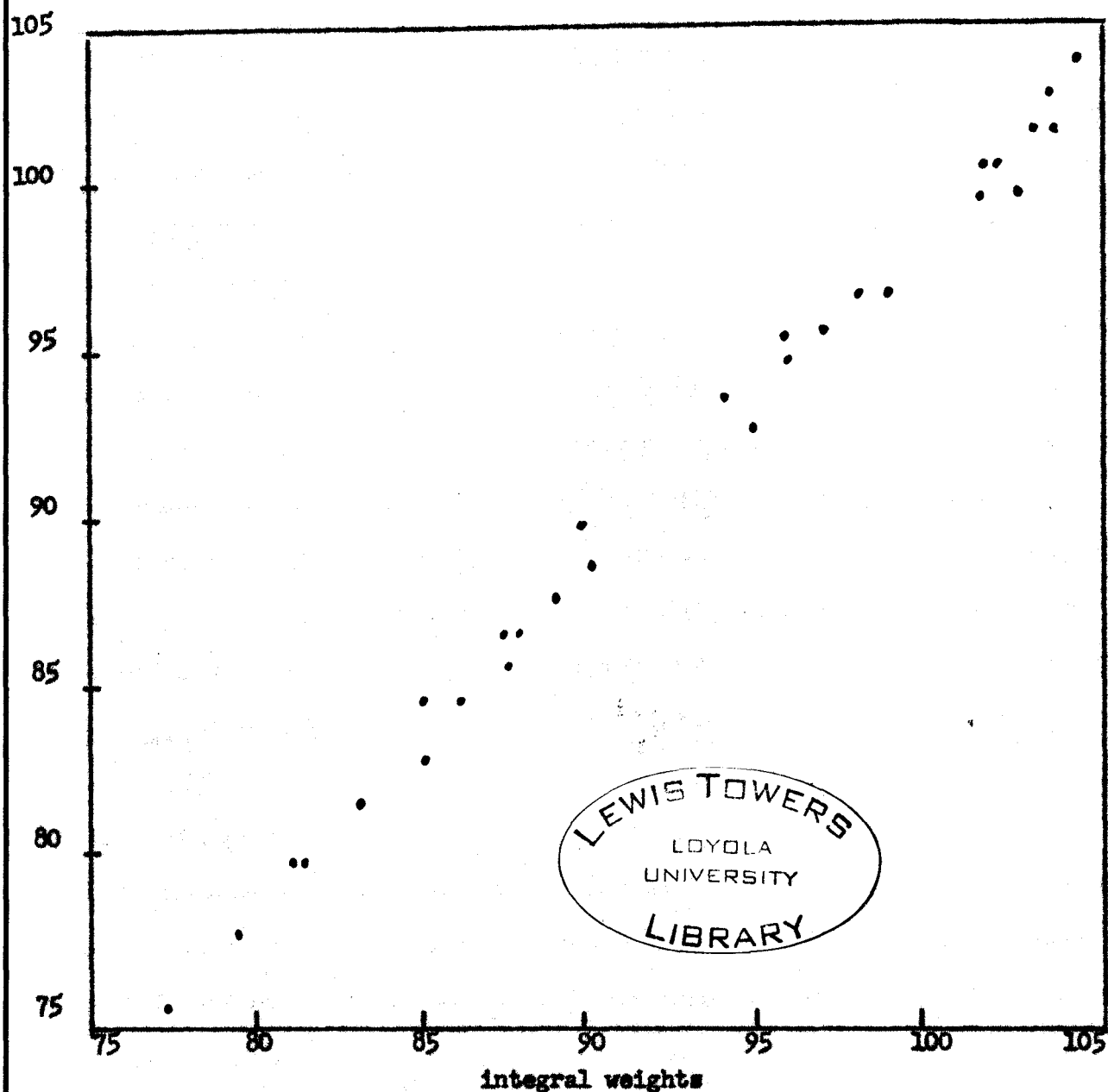


Fig. 2. Relationship Between Normal Deviate and Integral Weights Method Scoring the Loyola N.I.M.H. Attitude Scale

### Loyola N.I.M.H. Achievement Test

Before constructing an achievement test it is important to define the purpose for which the test is intended. Tests usually are constructed to provide an answer to a question or a solution to a problem. The question to be answered by the achievement test prepared for the Loyola Project is how effective have the educational materials been in changing the information of groups of seminarians in relation to the contents of the prepared educational materials. The primary purpose of the test is evaluative; however, subsequent purposes might be evaluative in a different sense. In evaluating the finished materials the test results will be used to estimate the effectiveness of the course; in future uses the test may be used to evaluate the individual student in a terminal examination after the course materials have been given.

The task of defining the field to be measured by the achievement test is relatively clear cut. The educational materials that have been finished are contained in a manual for seminarians, which is titled Psychodynamics of Normal Personality Development. The contents of this manual is defined as the universe, and test items should constitute a representative sample of the universe of content.

The anticipated widespread use of the completed test precludes the use of a limited response type of objective item. Adkins (1947) points out that in large-scale testing programs multiple choice form is used almost exclusively. In a multiple choice item the subjects are required to choose the best of a number of possible answers to a question. The procedure suggested by Adkins is to have an expert review the finished items to prevent the possibility of having no "right" answers or more than one "right" answer. Five alternative

choices were planned for each question with only one "right" answer.

The task of writing test items was given to four psychologists, all of whom were familiar with the contents of the manual. Three of the psychologists had acted as critical readers for the manual in its initial draft. Two of the psychologists were priests. Each of the psychologists was asked to prepare a number of test items; parallel items were created at the same time. The construction of good test items is essentially a creative task which requires a comprehensive knowledge of the field of content, skill in applying principles of measurement, and facility in using words to express ideas. (Adkins, 1947) These combined abilities are rarely found in a single individual; consequently a team approach, as used in this study, is advocated.

The combined efforts of the group resulted in the production of 350 preliminary items. The items submitted by each psychologist were polled and the total group of items was submitted to a rigorous editorial review. The items were analyzed to insure correct English usage, face validity, and general readability. Items which were prepared by different individuals, but which were found to be essentially similar, were combined by selecting the agreed upon best parts of each item. Items were eliminated and revised during the editorial review. The final test consisted of two forms, designated "a" and "b," each consisting of 115 items arranged in random order.

Before the two forms of the test were reproduced for use, they were presented to the author of the manual for a final review. The final review was to verify correct answers and to insure the general readiness of the test for reproduction.

Adkins recommends a tryout with the test before it is put into general

use. The primary purpose of the tryout with this test was to gather evidence on the equivalence of the two forms. The ideal conditions for testing two parallel forms of a test are to have the same subject take both forms of the test, and compare the scores. This procedure was used in a reliability study which will be reported in the next chapter; however, it was important to have an estimation of equivalence before beginning the reliability and validity studies with the test. The length of the test (115 items) made it difficult to secure subjects who would take both forms of the test, so an alternative plan was adopted. Two psychology classes at Loyola University provided the subjects for the tryout. The assumption was made that the students in the two courses would be balanced as to their ability to answer the test items if the tests were randomly distributed in the classes. Forms "a" and "b" were equally distributed at random between the 36 members comprising the two classes. The calculations performed and the results obtained will be given in the next two chapters. It is sufficient to indicate here that the tests were considered equivalent on the basis of the tryout.

## CHAPTER IV

### RELIABILITY AND VALIDITY STUDIES

The preceding chapter was devoted to the design of the psychological instruments; now it is important to know how well these instruments perform the function for which they were designed. The primary purpose for developing the instruments was to evaluate the effects of the completed curricular materials. With this goal in mind, the reliability and validity experiments were devised.

The stability of the scores obtained on the two tests is an important factor to consider, since the instruments will be used to detect change after an elapsed period of time. It is important to know the stability of scores in order to estimate whether the observed changes resulting from the course were due to the course experience or to the unstable nature of the scores. The coefficient of stability provides an estimation of whether the same individual would receive the same score on the same items under similar conditions if the tests were repeated. (American Psychological Association, 1954). It is recommended that this coefficient be obtained by administering the test to the same subjects using a test, retest plan with an intervening period of time. In Technical Recommendations for Psychological tests and diagnostic Techniques, the American Psychological Association further recommends that the changes in mean score and the correlation between the two sets of scores should be reported.

The general meaning of the term reliability is dependability of the results obtained. This meaning encompasses not only the idea of accuracy but also that of sampling adequacy and that of validity. The concept of error underlies all of the current ideas about reliability and all measurement is filled with error. The estimation of reliability is an attempt to ascertain the possible extent of the error. It is well known that the nearer the reliability coefficient is to unity, the more accurate the measurement and the less the error involved in the measurement. One estimation of the accuracy of measurement is the coefficient of stability described above. Another widely used estimation of reliability which is often confused with validity is the coefficient of internal consistency. The coefficient of internal consistency is important if the instruments are assumed to represent a sample of items from a relatively homogeneous universe. This assumption appears to have been made in selecting the items for both of the instruments to be tested in this section. It is recommended (A.P.A., 1954) that the coefficient of internal consistency be determined by the split-half or methods of the Kuder-Richardson type.

Although reliability and validity are closely related concepts, validity as used in this dissertation will be defined to mean the extent to which the test taps the variable it was intended to measure. Validity in the traditional sense implies a correlation with an outside criterion. It is very difficult to find an outside criterion to test the instruments developed in this study. The problem then becomes one of supplying evidence that the test measures what it was designed to measure. The evidence should be external to the test itself since internal measures are actually estimations of reliability. Evidence for validity can be obtained by comparing the scores of groups of individuals who

should on a priori grounds obtain different scores.

In order to facilitate treatment of the results of the reliability and validity studies, several hypotheses are proposed to be tested. The hypotheses will be numbered consecutively and the numbering will be retained in presenting the results.

### Loyola N.I.M.H. Attitude Scale

#### I. Reliability experiments.

Hypothesis 1: If the Loyola N.I.M.H. Attitude Scale is a reliable instrument, then there will be a high correlation between the scores obtained by the same individual on two halves of the test.

Method 1: In order to determine the coefficient of internal consistency the attitude scale was given to 134 seminarians from a major Catholic seminary in the midwest area. This group represented a different seminary than any used in the exploratory study (cross validation). Each of the tests from the single administration was divided into two halves using an odd-even split. The two halves of the test were scored separately and the scores were correlated using the Pearson product-moment coefficient of correlation for grouped data. (Tate, 1955, p. 253). The Spearman-Brown formula (Adkins, 1947, p. 151) was then used to compensate for reducing the test to half of its true length by the split-half method. This formula provides an estimation of reliability for the entire test.

Hypothesis 2: If the Loyola N.I.M.H. Attitude Scale is a reliable instrument, then there will be a high correlation between the scores obtained in a first testing and those obtained in a retest with two

weeks intervening.

Method 2: In order to determine the coefficient of stability, the attitude scale was given to a group of 111 Catholic seminarians from a major seminary in the midwest area. The pretest was administered avoiding any indication that there would be a retest. The group was retested two weeks later under similar testing conditions. The two sets of scores obtained for each seminarian were correlated using the Pearson product-moment coefficient of correlation for grouped data. The pretest and retest mean were also determined and the differences compared.

## II. Validity experiment.

Hypothesis 3: If the Loyola N.I.M.H. Attitude Scale is a valid measure of attitudes toward psychiatry, then the mean score obtained by a group of seminarians who have had two weeks of daily contact with a priest-psychiatrist should be significantly higher (more favorable) than the mean score of the group prior to the introduced experience.

Method 3: The assumption made in this hypothesis is that the experiences with the priest-psychiatrist will be favorable and on a priori grounds will provide optimum conditions for an attitude change to occur. The subjects for this experiment were 44 seminarians from a major Catholic seminary in the midwest. Half of the total group (22) volunteered to act as subjects for a trial of the completed educational materials. The other half of the group (22) was selected to act as a control group during the experiment. The subjects

comprising the two groups were matched on the basis of age, level of training, and religious order. Subjects in the experimental group attended classes taught by the priest-psychiatrist daily for a period of approximately two weeks. Besides their daily class contacts with the priest-psychiatrist they also were given opportunity for informal, more personal contacts. The experimental and control groups were tested using the following design: both groups were tested, followed by treatment for the experimental group, with no treatment for the control group, and retest for both groups. The treatment was the experiences with the priest-psychiatrist that occurred during the two weeks of classes. The mean was calculated for both groups pre- and post-testing. The net change for the total group was determined following the suggestion of Mc Nemar (1946). The net change was acquired by subtracting the total change in the control group from the total change in the experimental group. The significance of the net change was determined using a "t" test of significance due to the small size of the sample. (Tate, 1955, p. 467). This formula does not assume that  $\hat{\sigma}_x = \hat{\sigma}_y$ ; the only necessary assumption is that the sample of differences is randomly taken from a normal population of differences. The null or chance hypothesis will be accepted or rejected at the .01 level of confidence.

#### Loyola N.I.M.H. Achievement Test

##### I. Reliability experiments.

Hypothesis 4: If the two forms of the achievement test are parallel and the instrument is reliable, then there will be a high correlation

between the scores obtained in a first testing using form "A" and those obtained in a retesting using form "B" with two weeks intervening.

Method 4: The coefficient of stability and equivalence (Cronbach, 1949) was obtained by giving the achievement test to a group of 22 Catholic seminarians. The pretest was given using form "A" and the retest two weeks later using form "B." The scores for each subject, one from each form, were correlated using the Pearson product-moment correlation coefficient. (Tate, 1955, p. 238). Other evidence of equivalence of the two forms was gathered by administering only one form of the test to each subject and making the assumption that by randomly distributing the forms in a class of students the ability to answer test items would be equally distributed. This procedure was necessary because the length of the test and the time required to complete both forms made it prohibitive to obtain a larger number of subjects to take both forms. Three psychology classes at Loyola University were used to secure data under this assumption. A total of 80 psychology students acted as subjects in this part of the experiment. Both forms of the test were randomly distributed to the members of each class; 40 subjects took form "A" and an equal number took form "B." The mean score was calculated for each form and the significance of the difference between them was calculated using a critical ratio. (Tate, 1955, p. 434).

Hypothesis 5: If the Loyola N.I.M.H. Achievement Test is a reliable instrument, then there will be a high correlation between the scores

obtained by the same individual on two halves of the test.

Method 5: In order to procure a coefficient of internal consistency, the achievement test was given to 87 subjects. Assuming that the forms were parallel, only form "A" was used. Each of the tests from this single administration was divided into two halves using an odd-even split. The half tests were rescored tabulating separately the number of correct responses to odd and even items. Pearson product-moment coefficient of correlation for grouped data and Spearman-Brown formulas were used.

## II. Validity experiment.

Hypothesis 6: If the N.I.M.H. Achievement Test is a valid measure of curricular content, then the mean score obtained by a group of seminarians following a course covering the curricular content should be significantly higher than the mean score obtained prior to the course.

Method 6: The same group of 44 seminarians who composed the experimental and control groups in the attitude validity experiment were also the subjects for this experiment. The design was essentially the same as that used with the attitude scale. Each seminarian was tested before and after the course, with only those comprising the experimental group having the intervening treatment of the course. Besides the formal lectures which were taken directly from the prepared manual on Psychodynamics of Normal Personality Development, each seminarian was provided with a manual to study on his own. The net change and significance were obtained using the

formulas and procedures described in Method 3.

## CHAPTER V

### ANALYSIS OF RESULTS

The results of the reliability and validity studies will be presented following the same consecutive numbering of hypotheses that was begun in the previous chapter.

#### Loyola N.I.M.H. Attitude Scale

##### I. Reliability

Hypothesis 1: As planned, a coefficient of internal consistency was acquired by correlating the scores on split-halves of the attitude scale. A Pearson product-moment correlation coefficient of .90 ( $p < .01$ ) was procured by correlating the score on the odd numbered items with the score on the even numbered items. The results of this experiment are shown graphically in Figure 2. The Spearman-Brown correction raised the correlation to .95 ( $p < .01$ ). This value compares favorably with split-half reliabilities usually obtained with attitude scales. Mc Nemar (1946), for example reports that split-half reliabilities usually range in the 80's or low 90's. Perhaps the somewhat higher value derived here is attributable in part to the greater number of statements in the Loyola scale than are usually employed. The results of this experiment indicate a satisfactory coefficient of internal consistency and suggest that a generalized, homogeneous trait is measured by the scale.

Hypothesis 2: The attitude scale was administered pretest and retest with two weeks intervening to the same individuals. A coefficient of stability was obtained by correlating the scores received by the same individual on the two testings. The resulting Pearson product-moment coefficient was .93 ( $p < .01$ ). The relationship between the two sets of scores is shown graphically in Figure 3. The results indicate that the scores are very stable over a two week period. The stability is consistent enough to warrant using the instrument in test retest designs.

## II. Validity.

Hypothesis 3: Evidence for the validity of the scale was gathered using the method of a priori expected differences between groups. The experimental group was exposed to the daily contacts with the priest-psychiatrist over a two week period, while the control group remained without the treatment over the same period. The results indicate that a change did occur, and more importantly that the attitude scale was able to detect the change. The results of this experiment are presented in Table 2. From this Table it is clear that the experimental group changed on the average of 17 points in a more favorable direction, while the control group mean score remained constant. Both the gross and net changes were highly significant ( $p < .001$ ). Before claiming validity for the instrument it would seem advisable to conduct further studies; however, on the basis of this experiment the outlook is favorable. The stability of the change after a number of weeks or months would be of interest, as

well as an analysis of the statement on the scale which changed or did not change as a result of the experience. The experimental group mean of 113.68 is the highest group mean recorded in the project files.

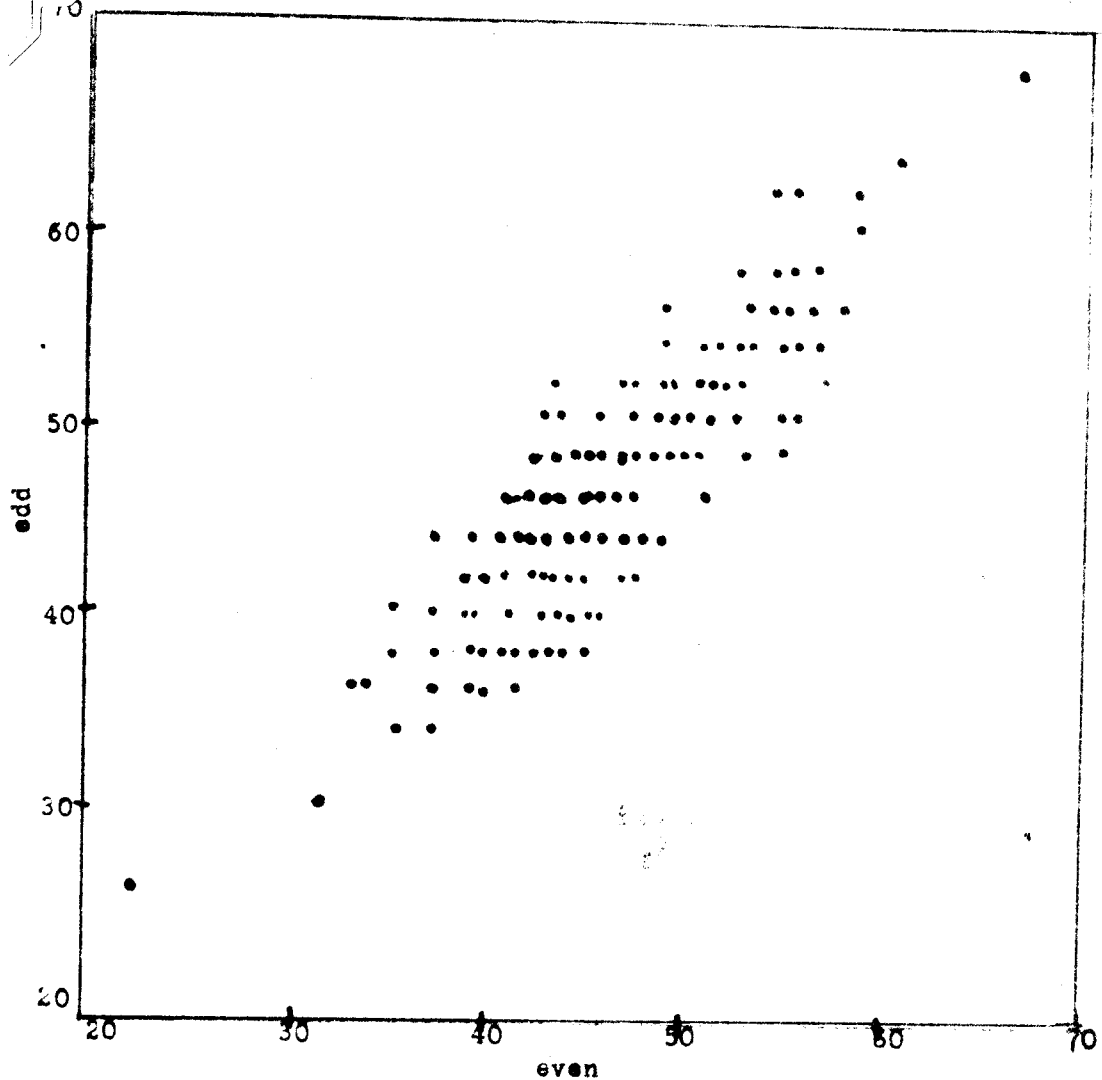


Fig. 3. Coefficient of Internal Consistency for Loyola N.I.A.H. Attitude Scale.

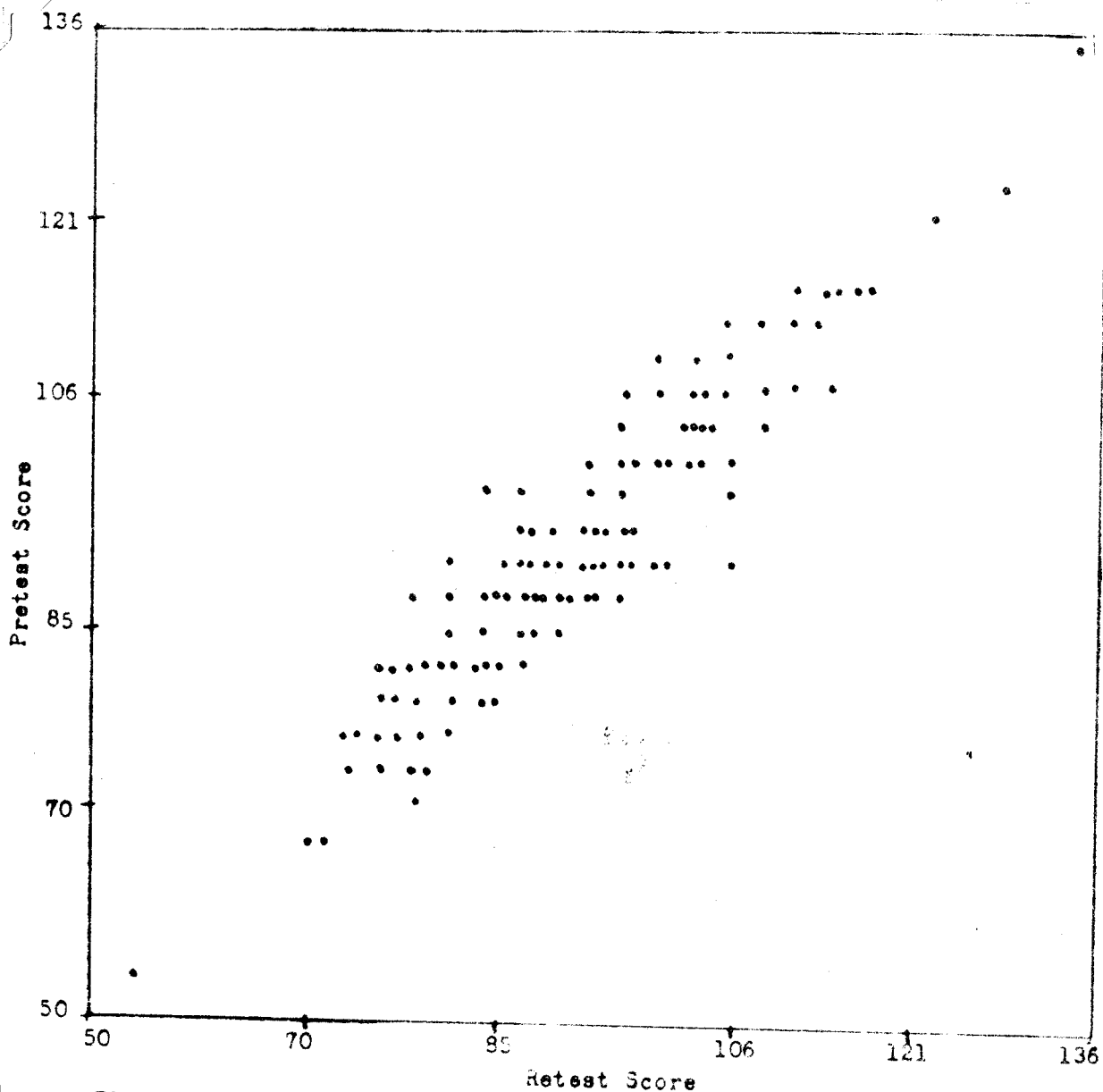


Fig. 4. Coefficient of Stability for the Loyola N.I.H. Attitude Scale

Table 2

Change in Mean Score on the Loyola N.I.M.H. Attitude Scale as a Result of Two Weeks of Daily Contact with a Psychiatrist-priest

Group	N	<u>Mean Score</u>		<u>Difference</u>	
		Pretest	Retest	Gross	Net
Experimental	22	93.75	113.68	17.95*	
Control	22	90.31	90.91	.60	
Total	44				17.35*

\* Significant at the .001 level of confidence

Table 3

Reliability of the Loyola N.I.M.H. Achievement Test

Type of Reliability	N	<u>Sigma</u>		r
		x	y	
Internal Consistency	65	5.34	5.88	.90*
Stability & Equivalence	22	12.31	12.92	.93*

\*  $p < .01$

Loyola N.I.M.H. Achievement Test**I. Reliability.**

Hypothesis 4: According to plan, form "A" of the achievement test was given to a group of subjects, followed in two weeks with form "B." The coefficient of correlation between the scores for each individual on both forms was .93 ( $p < .01$ ). In Table 3 the results of the experiment are given. The coefficient of stability and consistency that was obtained is acceptable. Considering the small sample involved (N=22), it seems advisable to repeat the experiment using a large number of subjects.

Other evidence of the equivalence of the forms was gathered by giving the achievement test to psychology students at Loyola University. The results of the testing are given in Table 4. Although three separate classes were tested, the Table shows only two classes. The two upper division psychology classes were combined because of the small number of subjects in each class; the combined group is designated "advanced psychology" in Table 4. It is evident from an inspection of the results that the tests proved to be parallel for the groups tested. The difference between the mean for the two forms was not significant in either group. The test forms were therefore accepted as being parallel. It is of incidental interest to notice that the mean score for the upper division students was considerably higher than that of the general psychology students. The difference is in an expected direction.

Hypothesis 5: The coefficient of internal consistency was found

using a sample of 65 subjects. The test for each subject was divided by an odd-even split of the items and the resulting two halves of the test were correlated. The correlation was .82 ( $p/.01$ ) which, when corrected for reducing the test to half of its length, was .90 ( $p/.01$ ). The results of the experiment are detailed in Table 3. The coefficient of internal consistency is an acceptable indication of the test's reliability.

## II. Validity.

Hypothesis 6: Evidence for the validity of the achievement test was gathered using a course in Psychodynamics of Personality Development as the treatment condition in a test, treatment, retest design. The changes that occurred are shown in Table 5. Both gross and net changes were significant ( $p/.001$ ). The mean change for the experimental group of 18.46 is considerably greater than would be expected from chance. The change in mean for the control group of 2.36 could be attributed to chance. Of course one would expect that a group of subjects would improve on their ability to answer achievement test items following a course upon which the test was based. However, the magnitude of the change, averaging 16.10 points per subject, is encouraging evidence that the test measures what the course teaches.

## Discussion

The Loyola N.I.M.H. Attitude Scale is acceptable for use in its present form; however, as mentioned previously, it is desirable to continue gathering evidence for the validity of the scale. It would be possible to reduce the

Table 4

Equivalence of the Two Forms of the Loyola N.I.M.H. Achievement Test  
as Obtained from Psychology Classes at Loyola University

Class	N		Mean		Sigma		Difference
	A	B	A	B	A	B	
General Psychology	22	22	39.6	36.6	6.49	9.45	2.95*
Advanced Psychology	18	18	60.3	58.1	6.41	8.47	2.28*

Note - Designations "A" and "B" refer to the two forms of the test.  
\* Not significant at the .05 level of confidence.

Table 5

Change in Mean Score on the Loyola N.I.M.H. Achievement Test as a Result  
of a Course in Psychodynamics of Personality Development

Group	N	Mean Score		Difference	
		Pretest	Retest	Gross	Net
Experimental	22	48.22	66.68	18.64	
Control	22	50.59	52.95	2.36	
Total	44				16.10*

\*Significant at the .001 level of confidence

length of the scale, but this does not seem advisable for two reasons. First, any revision would make it necessary to report evidence for the new form of the scale. The advantage in shortening the test would be that it would then require less time for the subjects to complete the scale. The saving in time required to administer the scale does not seem to warrant the revision since the scale in its present form requires only 10 to 20 minutes to complete. Secondly, the Loyola Project plans to use the scale for survey purposes in gathering information about the attitudes of Catholic seminarians throughout the country. Each item will be analyzed to secure evidence about the Catholic seminarian's attitude toward psychiatry. The present length of the scale would in all probability make this analysis more meaningful.

Future uses for the attitude scale include a national sampling of the attitudes of Catholic seminarians. The survey has already begun; the plan is to ask seminarians throughout the country to complete the scale and return it to the Loyola Project. The data obtained in this survey will be tabulated and analyzed to provide national norms for the scale. Besides the useful data that will result from analyzing the scale items, the total scores can be used to compare seminaries as to their degree of favorableness. Using the results of the testing before courses from the Loyola Project have been offered to seminaries, it will be possible to evaluate the changes made after the courses have been released.

The scale will also be used in the series of pilot courses planned by the project. It will be of interest to compare changes that occur under different conditions. For example, one of the problems that is suggested is, will the changes in attitude occur if a different teacher offers the course. The

project directors are concerned about whether it is the personality of the teacher or the content of the educational materials that produces the greater influence in changing attitudes.

The Loyola N.I.M.H. Achievement Test is likewise acceptable in present form. The length of the test is more of an impediment than it was with the attitude scale. Reducing the test length while maintaining the reliability and validity of the test would be desirable. Further studies related to the stability of the scores and the equivalence of the forms are to be desired.

The future plans involving the achievement test include a continued use in evaluating information changes resulting from the trials of the educational materials. Another trial is planned for the near future involving a larger number of subjects. It was pointed out previously that the test might also be used to accompany the finished and tested educational materials when they are released to the seminaries. A test manual should be prepared which provides information for the test user on the development of the test, its reliability and validity, and the uses for which it can be employed. The preparation of a manual of this type should be delayed until more evidence about the test has been gathered.

#### Other considerations

Apart from the conclusions about the instruments which have been developed, there are also theoretical and methodological contributions which are by-products of the development of the instruments. The attitude scale, in particular, has given rise to this type of contribution.

The clinical-empirical techniques used to select attitude statements seem to offer promise for general use in attitude studies. The advantage to be

gained in using the method and techniques is that they provide an empirical basis for attitude scale statements. This is an advantage since the intuitive method of selecting statements for attitude scales has been criticized for a number of years. The clinical-empirical method combines the flexibility of the open-end techniques with the precision of the scaling techniques. In using projective techniques to assess attitude, it is claimed that a more "personal" attitude is secured, as contrasted with interview or direct questioning techniques which are said to produce a more "social" response. However, a drawback in using projective techniques is the loss in quantifiable data that occurs, and the lack of precision of measurement. The combination of these two important areas in attitude measurement is utilized in the clinical-empirical method.

The utilization of the method of summated ratings and the multiple category method of scale construction in this dissertation seems to retain the good points of both methods. It may be recalled that Mc Nemar (1946, p. 308) suggested that combining the good points of the Likert and Thurstone methods of scale construction would make better scales. He stressed the importance of selecting items in the middle range of the favorable-unfavorable continuum when using the Likert method. The multiple category method of scaling permits one to observe whether the statements are distributed throughout the psychological continuum. Mc Nemar also argues that internal consistency should be retained in the selection of scale items. The combination of the methods as used in the present dissertation has retained internal consistency as a criterion for selecting statements. The multiple category method permits one to ascertain whether the assumptions made in using the simpler

Likert method of scoring have been met.

It is of theoretical interest that the normal deviate weights correlated highly with the integral assignment of weights (Fig. 2, p. 33). The results confirmed Likert's findings and offer interesting possibilities for research. It might be true that normalising is not always necessary, as the results of this study have shown.

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

The problem was to develop and validate instruments to be used in evaluating the effectiveness of educational materials prepared for Catholic seminarians by the Loyola N.I.M.H. Religion and Mental Health Project. The immediate task was to assess the changes which result when pilot groups of seminarians are given the prepared course materials. These experimental trials are to test the changes produced by the curricular materials under a variety of conditions including actual introduction into the seminary. The evaluation of both attitude and information changes was thought to be important by the Loyola Project staff. The Loyola N.I.M.H. Attitude and Achievement Tests were developed to be used as evaluative instruments.

The Loyola N.I.M.H. Attitude Scale was designed to measure the attitudes of Catholic seminarians toward psychiatry. A clinical-empirical approach was used in developing the scale. Several techniques were used to provide empirical data from which to select statements for the scale. A representative group of 55 Catholic seminarians were the subjects for a tape recorded open-end interview, a modified Rosenzweig-type balloon drawing test, an incomplete sentence test, and a projective technique called the Religious Apperception Test. All of these techniques, commonly used in clinical practice, were modified and adapted for use with a seminary population for eliciting attitudes toward psychiatry.

The data obtained by these clinical-empirical methods was tabulated and analyzed to obtain statements for the scale. Possible statements were selected based on most frequently occurring responses. A preliminary 125-item questionnaire was constructed using the method of summated ratings (Likert). The questionnaire was administered to 268 seminarians for the purpose of selecting items for the final scale. The final instrument consisted of 35 items selected on the basis of the magnitude of the difference between the mean score of favorable and unfavorable criterion groups. The statements were then scaled, using the multiple category method of scaling, and the standard deviation and scale value for each item were obtained. This method also provided a check on the integral weights system of scoring which had been used in the preliminary questionnaire. The results of the scaling revealed that the final 35 items were acceptably distributed through the continuum of favorableness, and that the formerly used integral weights scoring method could be retained.

Reliability and validity studies employing suitable cross-validation procedures were conducted using a total sample of 296 seminarians. A split-half reliability of .95 and test retest reliability of .93 with two weeks intervening were found. A validity study was conducted employing two matched groups of seminarians, acting as experimental and control groups. The experimental group was given a treatment, which on a priori grounds would produce a favorable change in attitude, in order to observe whether the scale would detect the change. The results of this study evidenced a significant difference between the pre- and post-test mean for the experimental group, and no change was observed for the control group (significance .001 level).

It was concluded that the scale was sensitive enough to detect changes in attitude toward psychiatry if they do occur. Future plans for using the scale in other research projects were discussed. It was concluded that the attitude scale was sufficiently reliable and valid to be used in the evaluation of the prepared educational materials.

The Loyola N.I.M.H. Achievement Test was designed to measure information changes that resulted from being exposed to the prepared educational materials. The instrument was constructed following traditional methods of achievement test construction. Four psychologists, two of whom were priests, were asked to prepare sets of parallel items to be used in two forms of the achievement test. Each of the psychologists was familiar with the content of the prepared educational materials and was given the course manual to act as a guide in preparing test items. A total of 350 preliminary items was produced by the combined efforts of the group. Several editorial reviews by the group of psychologists and the author of the prepared materials were necessary to insure the correctness of the item answers and "face validity." The final test consisted of two forms, each containing 115 multiple choice items; they were designated forms "A" and "B."

The reliability and validity experiments were similar to those employed with the attitude scale. Split-half reliability of .90 and test-retest reliability of .93 two weeks intervening were obtained. In the test retest reliability study, parallel forms were used on the two testings; therefore, the .93 coefficient might also be called the coefficient of equivalence. A validity study, using the two groups mentioned above, indicated that the treatment effect of the course produced significant changes in the experimen-

tal group. It was concluded that the achievement test could be shortened before using it with larger samples. Future plans for the instrument were discussed.

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APPENDIX I  
STATISTICAL DATA FOR SCALING

Item	Frequency					Proportions					Cumulative Proportions				
	A	B	C	D	E	A	B	C	D	E	0	1	2	3	4
1	35	78	23	11	9	.22	.50	.15	.07	.06	.058	.128	.275	.775	1.000
2	32	59	47	16	2	.20	.38	.30	.10	.01	.013	.116	.418	.797	1.000
3-	1	25	30	69	31	.01	.16	.19	.44	.20	.006	.166	.358	.802	1.000
4-	3	7	31	77	38	.02	.04	.20	.49	.24	.019	.064	.263	.757	1.000
5-	2	2	18	88	46	.01	.01	.11	.56	.20	.013	.025	.141	.703	1.000
6	41	62	25	20	8	.26	.40	.16	.13	.05	.051	.179	.339	.738	1.000
7	33	54	42	24	3	.21	.35	.27	.15	.02	.019	.173	.443	.791	1.000
8	35	53	33	32	3	.22	.34	.21	.20	.02	.019	.224	.436	.777	1.000
9-	3	18	56	61	18	.02	.11	.36	.40	.11	.019	.134	.494	.886	1.000
10-	2	8	25	68	53	.01	.05	.16	.44	.34	.013	.064	.224	.661	1.000
11	5	13	40	76	22	.03	.08	.26	.49	.14	.141	.629	.886	.969	1.000
12-	1	6	17	75	57	.01	.04	.11	.48	.37	.006	.044	.153	.635	1.000
13	28	35	25	59	9	.18	.22	.16	.38	.06	.058	.437	.597	.822	1.000
14	63	70	17	5	1	.40	.45	.11	.03	.01	.006	.038	.147	.597	1.000
15-	1	17	66	64	8	.01	.11	.42	.41	.05	.006	.115	.539	.951	1.000
16-	1	26	48	75	6	.01	.16	.31	.48	.04	.006	.173	.481	.963	1.000
17-	4	32	60	55	5	.03	.20	.39	.35	.03	.026	.231	.617	.971	1.000
18-	3	14	27	93	19	.02	.09	.17	.59	.12	.019	.109	.282	.875	1.000
19-	1	18	57	72	8	.01	.11	.37	.46	.05	.006	.121	.486	.951	1.000
20	9	29	27	79	12	.06	.19	.17	.51	.08	.077	.583	.756	.942	1.000
21-	3	7	21	96	29	.02	.04	.13	.61	.19	.019	.064	.199	.812	1.000
22	61	76	11	3	5	.39	.48	.07	.02	.03	.032	.051	.121	.609	1.000
23-	5	26	53	49	23	.03	.17	.34	.31	.15	.032	.199	.540	.885	1.000
24	34	78	34	8	2	.22	.50	.22	.05	.01	.013	.064	.282	.782	1.000
25-	4	17	42	73	20	.03	.11	.27	.47	.13	.026	.135	.405	.874	1.000
26-	5	47	48	45	11	.03	.30	.31	.29	.07	.032	.334	.642	.931	1.000
27	22	74	45	13	2	.14	.47	.29	.08	.02	.020	.102	.391	.886	1.000
28-	8	45	34	61	8	.05	.29	.22	.39	.05	.051	.340	.558	.950	1.000
29	40	83	23	7	3	.26	.53	.16	.04	.02	.019	.064	.211	.741	1.000
30-	6	5	5	75	65	.04	.03	.03	.48	.42	.038	.070	.102	.584	1.000
31-	4	3	31	74	44	.03	.02	.20	.48	.28	.026	.045	.244	.719	1.000
32-	1	2	45	77	31	.01	.01	.29	.49	.20	.006	.019	.308	.802	1.000
33	39	88	24	3	2	.25	.56	.15	.02	.01	.013	.032	.186	.784	1.000
34-	4	4	15	97	36	.03	.03	.10	.62	.23	.026	.052	.148	.767	1.000
35	29	46	56	18	7	.19	.30	.36	.11	.04	.045	.160	.570	.816	1.000

- indicates a negatively stated item.

APPENDIX II  
STATISTICAL DATA FOR SCALING

Item	<u>Normal Deviates</u>					<u>Upper Limits</u>				
	0	1	2	3	4	0	1	2	3	4
1	-1.57	-1.14	-.60	.76	1.21	-1.91	-1.39	-.73	.92	2.03
2	-2.22	-1.19	-.21	.83	1.28	-2.27	-1.22	-.21	.85	1.77
3	-2.51	-.97	-.36	.85	1.29	-2.43	-.93	-.35	.82	1.67
4	-2.87	-1.52	-.63	.70	1.17	-1.99	-1.46	-.61	.67	1.58
5	-2.23	-1.94	-1.08	.53	1.04	-2.07	-1.81	-.10	.49	1.44
6	-1.63	-.91	-.41	.64	1.13	-2.13	-1.20	-.54	.83	2.11
7	-2.07	-.94	-.14	.81	1.26	-2.11	-.96	-.14	.83	1.75
8	-2.07	-.76	-.16	.76	1.23	-2.17	-.79	-.17	.80	1.77
9	-2.07	-1.11	-.01	1.21	1.59	-1.89	-1.01	-.01	1.10	1.80
10	-2.23	-1.52	-.76	.41	.62	-2.41	-1.64	-.82	.45	.89
11	-1.08	.32	1.20	1.87	2.17	-1.04	.32	1.17	1.80	2.39
12	-2.15	-1.71	-1.02	.34	.91	-2.25	-1.53	-.92	.31	1.32
13	-1.57	-.16	.25	.92	1.35	-2.06	-.21	.32	1.21	2.34
14	-2.58	-1.77	-1.05	.25	.84	-2.38	-1.64	-.97	.23	1.33
15	-2.58	-1.20	.10	1.65	1.99	-2.01	.93	.07	1.28	1.82
16	-2.58	-.94	-.05	1.79	2.09	-1.98	-.73	-.04	1.37	1.85
17	-1.94	-.74	.30	1.90	2.22	-1.63	-.62	.25	1.59	2.14
18	-2.07	-1.23	-.58	1.15	1.52	-1.99	-1.18	-.55	1.10	1.81
19	-2.57	-1.17	-.03	1.65	1.99	-2.01	-.91	-.02	1.29	1.82
20	-1.43	.21	.69	.69	1.57	-1.50	.02	.73	1.65	2.33
21	-2.07	-1.52	-.84	.88	1.31	-2.01	-1.48	-.82	.86	1.68
22	-1.85	-1.64	-1.17	.28	.86	-2.02	-1.78	-1.27	.30	1.57
23	-1.85	-.84	.10	1.05	1.47	-2.03	-.92	.11	1.16	2.06
24	-2.23	-1.52	-.58	.78	1.23	-2.18	-1.49	-.56	.76	1.65
25	-1.94	-1.10	-.24	1.15	1.54	-1.97	-1.12	-.24	1.16	1.96
26	-1.85	-.43	.36	1.48	1.82	-1.83	-.42	.36	1.46	2.13
27	-2.07	-1.27	-.28	1.11	1.53	-2.01	-1.23	-.26	1.07	1.89
28	-1.64	-.41	.15	1.64	1.98	-1.61	-.41	.14	1.61	2.27
29	-2.07	-1.52	-.80	.64	1.13	-2.13	-1.56	-.83	.66	1.64
30	-1.77	-1.47	-1.27	.21	.82	-2.05	-1.68	-1.45	.24	1.63
31	-1.94	-1.70	-.69	.58	1.08	-2.03	-1.77	-.73	.61	1.66
32	-2.51	-2.07	-.50	.85	1.29	-2.11	-1.74	-.42	.71	1.45
33	-2.23	-1.85	-.89	.67	1.14	-2.08	-1.72	-.83	.62	1.51
34	-1.94	-1.62	-1.04	.72	1.19	-1.94	-1.62	-1.04	.73	1.65
35	-1.69	-.99	.50	.90	1.33	-1.99	-1.17	.06	1.06	2.08
						L <sub>1</sub> -2.01	-1.14	-.35	.93	1.80

## APPENDIX III

This questionnaire is an attempt to get your opinion on some vital issues. We are interested only in your agreement or disagreement with the following statements, and not in the truth or falsity of them. In some cases you may feel you do not have enough information to make a judgment; in such instances we would like you to make the best judgment possible.

Please read every statement and respond to it in terms of your personal agreement or disagreement according to the following plan:

Strongly agree	Agree	Agree and Disagree equally	Disagree	Strongly disagree
A	B	C	D	E

Please circle the letter indicating your choice.

1. A B C D E A psychiatrist can be effective regardless of his religion.
2. A B C D E There is a close relationship between religious and psychiatric ideals.
3. A B C D E Psychiatry ignores the supernatural side of man.
4. A B C D E A psychiatrist makes one feel uncomfortable because he is always analysing his fellow man.
5. A B C D E Psychiatry denies free will in man's conduct by its emphasis on unconscious motivations.
6. A B C D E Parishioners should be referred to a psychiatrist as readily as to another medical specialist.
7. A B C D E There is no conflict between psychiatry and religion.
8. A B C D E In our complex society it is essential for the priest to have a thorough knowledge of psychiatry.
9. A B C D E Current psychiatric practice allows people to express sexual impulses without moral inhibition.
10. A B C D E Common sense is a fitting substitute for psychiatric knowledge.
11. A B C D E There is nothing in present day psychiatry that is contrary to Catholic teaching.

12. A B C D E A good Catholic should never undergo intensive psychiatric analysis.
13. A B C D E Psychiatry is as important as philosophy in seminary training.
14. A B C D E Religion and psychiatry are compatible.
15. A B C D E Psychiatrists are likely to misguide a Catholic when moral problems are involved.
16. A B C D E Psychiatrists often attempt to take the place of the priest.
17. A B C D E Psychiatry today is dominated by a materialistic philosophy of man.
18. A B C D E Psychiatric analysis usually requires too much time for treatment to be recommended to a parishioner.
19. A B C D E Psychiatrists place an exaggerated emphasis on sex.
20. A B C D E Psychiatric knowledge is essential in adjusting to life in the seminary.
21. A B C D E Psychiatry offers few facts and its teachings are mostly hypothetical and uncertain.
22. A B C D E The findings of psychiatry should be taught to help the priest in his confessional work.
23. A B C D E In most cases a parishioner who thinks he needs psychiatric help would do better to improve his religious life.
24. A B C D E Psychiatry is feared only because it is misunderstood.
25. A B C D E More consistent agreement among psychiatrists is necessary before their teaching can be brought into the seminary.
26. A B C D E Too much psychiatry is a bad thing.
27. A B C D E More emphasis on teaching the findings of psychiatry is needed in the seminary curriculum.
28. A B C D E The present seminary curriculum is too crowded to include more teaching of psychiatric knowledge.
29. A B C D E In dealing with mentally disturbed individuals psychiatry is essential.
30. A B C D E Psychiatry because of its exclusive concern with abnormal individuals is of little use to the priest.

31. A B C D E Psychiatry considers religion a mass delusion to be eliminated through analysis.
32. A B C D E The psychiatrist's use of electric shock therapy should be condemned.
33. A B C D E The priest who utilizes psychiatric knowledge in his work is a more effective priest.
34. A B C D E Psychiatry is unacceptable because it deals too much with the unknown.
35. A B C D E A priest should not hesitate to refer a parishioner to a psychiatrist.

APPENDIX IV  
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1. Dynamic can best be thought of as referring to:
  - a. energy going in many possible directions.
  - b. an emphasis on efficient rather than final causality.
  - c. continuing conscious activity.
  - d. peripheral motivation.
  - e. striving for self-actuation or fulfillment.
2. The Freudian viewpoint on the nature of the ego resembles the scholastic:
  - a. in the organization of inner abilities.
  - b. in its substantial nature.
  - c. in its concern with the id.
  - d. in its purposeful aspects.
  - e. in none of the above.
3. In translating an ontological value to a psychological one, the most important factor in the ordinary person is:
  - a. appraisal.
  - b. drive.
  - c. emotions.
  - d. physiological concomitant.
  - e. defense mechanisms.
4. The psychological characteristics of the genital state in psychosexual development are:
  - a. sexual adequacy.
  - b. self-fulfillment.
  - c. resolution of ambivalence.
  - d. emotional independence.
  - e. all of the above.
5. The core of the self:
  - a. has to do with the religious faith of a person.
  - b. is synonymous with the ideal self.
  - c. tends to be universal from culture to culture.
  - d. is the substantial self.
  - e. none of the above.

6. The term emotion includes all but which one of the following aspects:
  - a. cognizing an object.
  - b. experiencing the emotion.
  - c. physiological change accompanying the upset state.
  - d. perception of the upset state in another person.
  - e. particular level of experience.
7. Narcissism refers to:
  - a. feelings of personal inadequacy.
  - b. feelings of self-love.
  - c. a tendency to envy other people.
  - d. tendency to experience moods of self-justification.
  - e. none of the above.
8. According to Freud's psychoanalytic theory, the main systems of the personality are:
  - a. id, ego, super-ego.
  - b. life instincts and death instincts.
  - c. oral, anal, phallic.
  - d. pleasure drives and reality drives.
  - e. none of the above.
9. The terms sanguine, phlegmatic, choleric, and melancholic refer to:
  - a. temperament.
  - b. biochemical-endocrinological factors.
  - c. constitution.
  - d. body types.
  - e. all of these.
10. In the first few months of infancy, the affectionate holding and avoiding sudden withdrawal has a neurological basis known as:
  - a. conditioned reflex.
  - b. peristaltic wave.
  - c. Moro reflex.
  - d. babinsky reflex.
  - e. none of the above.
11. A definition of personality which is comprehensive must include:
  - a. the individualized but not rational substrate of action.
  - b. the idea that totality adds a new trait to unity.
  - c. the notion of substance as changing with the growth of abilities.
  - d. the notion of "mask," of faculties, and of substance.
  - e. human nature, rational principles and uniquenesses.

12. Immanent activity strictly means:
- a. the reaction of an intellectual faculty to a direction from free will.
  - b. only that which is the perfection of the agent itself which acts.
  - c. only that which remains within the partial confines of the object moving.
  - d. that which results in a product that is more than the sum of parts.
  - e. only the actions of sentient and rational beings.
13. A person who becomes fixated at or regresses to the anal stage is apt to show the symptom pattern of:
- a. obsessive-compulsives.
  - b. hysterics.
  - c. manic-depressives.
  - d. schizophrenics.
  - e. none of the above.
14. Difficulties in the toilet training may be due to:
- a. child's failure to understand wishes of parent.
  - b. child's preference for the narcissistic gratification of his creation.
  - c. child's preference for the oral to the anal stage.
  - d. child's expressing hostility to the parents.
  - e. all of the above.
15. Self-respect and confidence on the part of the client increases initially in proportion to the:
- a. number of counseling sessions.
  - b. degree of ventilation.
  - c. recognized increase of acceptance by the counselor.
  - d. new insights of the client.
  - e. way the client compares himself with others.
16. Reassurance may be described as:
- a. a form of encouragement to dispel doubts and uncertainties.
  - b. a stating of something nice about the patient.
  - c. a way of suggesting certain things to the client.
  - d. a way for the counselor to interpret things to the client.
  - e. a technique of encouragement that is sufficient in itself to help a client.
17. The ability to accept criticism without retreating or fighting; competitive participation in games; carrying out small responsibilities; leaving home unsupervised; making reasonable judgments about right and wrong; restricting impulses through social pressure are capabilities that one should expect in:
- a. anal stage.
  - b. latency stage.
  - c. oedipal stage.
  - d. early adolescence.
  - e. late adolescence.

18. The importance of religion in relation to mental health derives from:
- a. a cultural determinant aiding the person to adjustment.
  - b. its special implication for psychological well being transcending other cultural determinants.
  - c. that every problem is basically a religious one.
  - d. its value as a philosophy of life or a plan that gives meaning to life.
  - e. all of these except a.
19. The function of transference is:
- a. projection of unconscious contents upon the therapist.
  - b. seeing the therapist as he really is.
  - c. seeing oneself as one really is.
  - d. shifting problems where they really belong.
  - e. evading solutions to problems.
20. To say that in psychotherapy one gradually brings the elements in the self into consciousness means:
- a. developing an empirical ego.
  - b. observing the self in action.
  - c. acquiring insight.
  - d. developing a self-image.
  - e. experiencing counter transference.
21. The self image most closely related to the Freudian concept of id is:
- a. image of my self as I am.
  - b. image of my self as I would like to be.
  - c. image of my self as I ought to be.
  - d. image of my self as others see me.
  - e. image of my self as I am going to be.
22. The following statement about the relations between conscience and super-ego is false:
- a. super-ego antedates conscience genetically.
  - b. conscience can go beyond the limits set by super-ego.
  - c. a narrow and rigid super-ego yields a scrupulous conscience.
  - d. super-ego is more basic and controlling than conscience.
  - e. conscience and super-ego are non equivalent.
23. When people are asked to report where they feel the center of the self to be, they:
- a. usually do not understand the question.
  - b. locate it in the head.
  - c. locate it most in the heart.
  - d. give differing locations which are partially related to cultural factors.
  - e. none of the above.

24. There is a lack of "will power" in one of the following:
- overlapping situations.
  - temptations.
  - conflict.
  - compulsion.
  - sexual problems.
25. The so-called primary emotions include:
- joy, fear, anger, grief.
  - pain, fear, hate, love.
  - shame, guilt, anger, grief.
  - love, fear, anger.
  - all of the above.
26. Factors predisposing an individual toward feelings of jealousy are:
- self-hate.
  - insecurity in self-conception.
  - lack of intensity of feelings of love.
  - all of the above.
  - none of the above.
27. According to best estimates the percentage of persons who come to the general practitioner with complaints that are really psychogenic in origin is:
- 10.
  - 75.
  - 25.
  - 5.
  - 40.
28. Separation anxiety as related to the birth process is usually identified with the name of:
- Sullivan.
  - Freud.
  - Rank.
  - Adler.
  - Jung.
29. By reflecting on our actions, we can arrive at a:
- sense of personal identity.
  - sense of acceptance.
  - comfortableness with people.
  - satisfaction of dependency needs.
  - self concept.

30. Role taking is generally likely to be the living out of:
- latent anti-social tendencies.
  - covert attitudes towards the group.
  - a social behavior organization, as in play, or in real life situation.
  - desires to imitate i.e., really be a particular social person.
  - native hostility shown in gaining status.
31. All emotions must correctly include:
- perception of stimuli, organic resonance, and affect.
  - drives and physiological components but not cognition.
  - reactions of appetitive and affective life.
  - evaluation of stimulus as well as intellectual appreciation of it.
  - awareness of the value of the stimulus without being directed one way or another.
32. In learning the laws of exercise and effect are usually associated with the name of:
- Tolman.
  - Lashley.
  - Thorndike.
  - Krechesky.
  - Sullivan.
33. In the development of the so-called constitutional psychopath it is reasonable to speak of:
- the complete absence of super-ego.
  - the malformation of the super-ego.
  - the complete absence of love.
  - both a and c.
  - both b and c.
34. The factor that particularly characterizes and begins in the oedipal stage in individual development is:
- well articulated consciences.
  - socialization.
  - personalization.
  - pre-conceptual functioning.
  - none of the above.
35. In counseling, the expression "blowing off steam" is associated with the process of:
- argumentation.
  - catharsis.
  - emotional support.
  - desensitization.
  - emotional relief.

36. In counseling, recognition of causes and effects in personal relationships, clarification of restrictions and anticipating consequences of behavior are examples of:
- a. interpretations.
  - b. awarenesses.
  - c. emotional experience.
  - d. relationships.
  - e. stages in counseling.
37. The latency period in psychosexual development is most clearly characterized in the child's life by:
- a. the beginning of active dating.
  - b. regression of sexual development.
  - c. turning from intense ties of the family to the social world of his peers.
  - d. all of the above.
  - e. none of the above.
38. The golden period of the relationship between the priest and the parishioner is:
- a. oedipal period.
  - b. latency period.
  - c. adolescence.
  - d. maturity.
  - e. old age.
39. The intellect and the will play a key role in the personality theory of:
- a. Allport.
  - b. Schneiders.
  - c. Prince.
  - d. Stagner.
  - e. Meyer.
40. To say that behavior is a reflection of inner organization leads one to conclude:
- a. that studying behavior is the scientific way of understanding man.
  - b. that only man's behavior need be known to understand him.
  - c. that a psychosis can be inferred from behavioral observation.
  - d. that typing people helps to understand them.
  - e. that behavior habits build personality.
41. The psychological characteristics of the oral (infancy) period of child development are:
- a. pre-ambivalence.
  - b. narcissism.
  - c. passivity.
  - d. dependence.
  - e. all of the above.

42. An hallucination is:
- a. a distorted perception of a stimulus.
  - b. a convincing impression of something that is actually not present.
  - c. a form of insanity.
  - d. a rare experience found only in abnormal cases.
  - e. a false idea about reality.
43. Impairment of ability to act on one's own volition is known as:
- a. amnesia.
  - b. obsession.
  - c. abulia.
  - d. persecution.
  - e. none of the above.
44. Emotional feelings accompanying success and failure depend most directly upon:
- a. inner personal standards.
  - b. external social standards.
  - c. attitudes of other people.
  - d. objective success or failure in a given performance.
  - e. none of these.
45. Frustration is:
- a. the existence of an objective barrier to a goal.
  - b. a state of thwarting in the organism.
  - c. a deleterious condition of the person.
  - d. a personality trait.
  - e. none of the above.
46. Dependence, passivity, and greediness are regarded as traits found in the so-called:
- a. anal character.
  - b. phallic stage.
  - c. oral character.
  - d. genital stage.
  - e. none of above.
47. To state that each ability in man has two urgencies to go into action -- a remote and a proximate one, suggests:
- a. that the character of immediate acts is determined by early acts.
  - b. that there are instincts in man.
  - c. that intellectual acts are based on sensation.
  - d. that one's present hunger is unrelated to past hungers.
  - e. that abilities are prior to activation.
48. In the use of free association, the expectation is to reactivate:
- a. intellectual experiences.
  - b. sensory-motor-vegetative experiences.
  - c. both a and b equally.
  - d. primarily b and incidentally a.

e. free will experiences.

49. The most frequently recurring problem which seminarians mention as constituting problems for priests in the apostolate is:
- a. interpersonal relations with other clergymen.
  - b. the ability to mix and deal with lawyers and doctors.
  - c. the right use of the sacraments in preserving mental health.
  - d. the proper attitude to take regarding sex instruction.
  - e. being able to meet and deal easily with all sorts of persons, and of handling referrals.
50. The drives, impulses and urges are present active concretizations of:
- a. immanent strivings for self-expression.
  - b. the directional or purposive movements within the organism.
  - c. the basic life of rationality in a man.
  - d. the past workings of vis aestimativa.
  - e. the total autonomic energy patterns.
51. Apparatus of the vegetative system, though designed and naturally directed toward a particular goal or purpose:
- a. sometimes stimulates itself to deviant forms of function.
  - b. often does not obtain any purpose at all.
  - c. may actually serve many purposes such as that of satisfying emotional needs.
  - d. not infrequently stands in the way of any transmission of a nerve impulse.
  - e. always acts autonomically, i.e., in total independence of the central nervous system.
52. In the first stages of language learning:
- a. conditioned response learning is effective.
  - b. rote learning is effective.
  - c. trial and error learning is effective.
  - d. all three types of learning are effective.
  - e. none of these are effective.
53. The basic reason why the Freudians cannot satisfactorily explain the oedipal conflict in the girl is:
- a. the primary love objects change.
  - b. Freudian system is illogical.
  - c. the genital organs of the sexes differ.
  - d. none of the above.
  - e. all of the above.
54. The chief characteristic of the adolescent is his:
- a. desire to imitate his parents.
  - b. emotional unrest and drive for independence.
  - c. need for rules to guide his actions.
  - d. desire to act contrary to a group.
  - e. desire to have his own money.

55. Unconscious memories may be disturbing because:
- a. the client is unable to utilize all his experience.
  - b. they are lacunae in his experiential self.
  - c. they were pushed out of awareness but retained their affect.
  - d. they are so mysterious and have a secret life of their own.
  - e. they are so difficult to detect.
56. In the latency stage of psychodynamic development the following characteristic is noteworthy:
- a. functioning on a vegetative, sensory, and rational level.
  - b. full development of conscience.
  - c. good eye-hand coordination.
  - d. emphasis on concretistic thinking.
  - e. all of the above.
57. In the care of souls the pastor or priest functions as:
- a. an intelligent, mature, real Christian friend.
  - b. official representative of the parish.
  - c. ordained minister of the Church.
  - d. b and c only.
  - e. a, b and c.
58. The word "rapport" means a:
- a. sympathetic relationship.
  - b. empathetic relationship.
  - c. counseling relationship.
  - d. rational-understanding relationship.
  - e. non-directive relationship.
59. Which of the following factors is erroneous in defining the total emotional experience:
- a. the drive.
  - b. the physiological concomitant.
  - c. the cognitive-estimative element.
  - d. the particular level in life experiences.
  - e. the psychic structure.
60. The part-whole principle states that:
- a. the whole quantity is more than the sum of the quantitative parts.
  - b. the whole can be perceived and made up of parts.
  - c. the properties of the parts depend upon the nature of the parts.
  - d. the properties of the whole are made up of the properties of the parts.
  - e. parts have no reality independently of the whole.

61. The term "need" refers to:
- a. organic deficits of the body.
  - b. the experiencing of deficit conditions.
  - c. desires and goals toward which they are directed.
  - d. the basic resources of all behavior.
  - e. none of the above.
62. The emotions of shame and guilt are:
- a. different ways of looking at the same emotional disturbance.
  - b. always linked.
  - c. rarely found at the same time in the person.
  - d. differentiated in terms of the way in which they are perceived as related to the self.
  - e. none of the above.
63. The term "homeostasis" refers to:
- a. activation of body needs.
  - b. state of quiescence in the organism.
  - c. maintenance of steady physiological states.
  - d. voluntary behavior of the organism in seeking to maintain necessary body conditions.
  - e. none of the above.
64. Among the factors influencing the pre-natal development of the child's personality the following is least important:
- a. emotional experiences of the mother.
  - b. mother's redistribution of love in the family.
  - c. emotional maturity of mother.
  - d. temperament of mother.
  - e. external sounds during pregnancy.
65. Personality organization may give the appearance of being disturbed, in the following ways:
- a. by too frequent use of perceptual synthesis.
  - b. by failure to distinguish between visual perception and auditory imagery.
  - c. by persistent setting up of defenses which maintain sufficient adjustment.
  - d. middle-of-the-road behavior in the form of being neurotic.
  - e. persecution complexes, hallucinations, and extremes of behavior.
66. The "memory systems" in Klubertanz's personality definition are in fact:
- a. remnants of total past stressful experiences.
  - b. like fixations transferred from parents.
  - c. related to identification with the parental figures.
  - d. manifestations of the unconscious self-image.
  - e. unrelated to the need for love or fulfillment.

67. Ambivalence, or the capacity for hating and loving the same object:
- is felt only for human beings.
  - is felt only by young children.
  - is an inborn quality of response to reality.
  - is originally unconscious but is made conscious by experience.
  - none of these.
68. Acceptance of the client by the counselor means:
- approving of the client's behavior.
  - agreeing with what the client says.
  - taking the client as he is.
  - arriving on time for the counseling session.
  - saying nice things about the client.
69. The idea of a person being unaware of the real aim underlying his actions is:
- opposed to the freedom of the will.
  - sound theory.
  - a possibility but not a probability.
  - putting man on the same level with the animal.
  - destroying the self-determining principle of man.
70. Such personality characteristics as greater socialization, easy factual learning, focus on external reality, unconcern over personal appearance, exclusive association with the same sex, interest in collecting things, are found principally in the:
- oral stage.
  - anal stage.
  - oedipal stage.
  - latency stage.
  - adolescent stage.
71. The phase of psychosexual development characterized by constructive expression of emotions, interest in the opposite sex, acceptance by peers, social poise, parental emancipation, intellectual maturity, selection of occupation, constructive use of leisure time, developed philosophy of life is known as:
- early adolescence.
  - middle adolescence.
  - late adolescence.
  - all of these.
  - none of these.
72. The meaning of operational personality is most closely related to:
- the social effectiveness of the person.
  - the total life experiences that constitute the person.
  - the variation in response due to variation in stimulus.
  - the effect the person has on others.
  - the manner in which personality develops.

73. The notion of person has particular reference to:
- a. rationality of the person.
  - b. rational-animal character of man.
  - c. the individualized aspect of man.
  - d. the variety of masks men wear.
  - e. the empirical ego.
74. Which of the following psychological entities is most heterogeneous:
- a. psychobiological unit.
  - b. substantial self.
  - c. substantial ego.
  - d. supposit.
  - e. experiential ego.
75. It may be said that an immanent action of a living organism is an activity or operation which is the perfection of the agent which acts. This implies:
- a. an external distinct product or action.
  - b. the nature or essence of a being having vital activity.
  - c. an action initiated by others and motivating the self.
  - d. an action started within the self but not remaining within the self.
  - e. actions that create the empirical self.
76. The psychological characteristics of the anal period of infantile development are:
- a. incomplete giving of love.
  - b. hostility.
  - c. ambivalence.
  - d. all of the above.
  - e. none of the above.
77. The conception that one has of the self is synonymous with:
- a. ego.
  - b. personality.
  - c. human nature.
  - d. ego strength.
  - e. none of the above.
78. A consideration of the unconscious dynamic factors in human behavior leads one to conclude:
- a. that there is psychological evidence supporting the doctrine of free will.
  - b. the fact that people experience free will is based on the activity of free will.
  - c. the problem of the perception of free will is a proper psychological question.
  - d. that free will is limited.
  - e. none of these.

79. If a mother feels protective tendencies when her frightened child cries we may properly speak of:
- sympathy.
  - emotional contagion.
  - empathy.
  - self-induction of emotion.
  - none of the above.
80. Which one of the following is not basic to a conception of human needs:
- security.
  - satisfaction.
  - success.
  - stimulation.
  - occupation.
81. In Freudian theory the ego is considered as most concerned with:
- demands for pleasure of the self.
  - moral restraints.
  - reality coping.
  - instincts.
  - none of above.
82. In essence the defense mechanisms are:
- protectors against anxiety.
  - ways of convincing others of one's rightness.
  - escape mechanisms.
  - conscious self-deception mechanisms.
  - none of above.
83. In analysing the attitudes of women with psychogenic infertility, one factor that is not related to such infertility would be:
- patching up a shaky marriage.
  - rebuking the patient's mother.
  - wanting a child to love the mother.
  - to give earlier children a companion.
  - wanting child as an alter ego.
84. In the oral stage of development the psychological level most active is:
- intellectual.
  - sensory-motor.
  - vegetative.
  - all of the above.
  - none of the above.
85. A neurotic depression can be distinguished from a psychotic one in the developmental sequence by:
- depth of the depression.
  - the fact that the neurotic depression is a reaction; to the environment.
  - by the fact that a psychotic depression stems from within.
  - by both b and c.
  - none of the above.

86. To account for innate and acquired dispositions, we must:
- learn to distinguish between the permanent innate basis and acquired tendency to change.
  - admit that it is impossible to have constant change if personality is permanent.
  - realize that organization may change when powers go into action.
  - recognize that the original structure of personality contains mutable potential principles.
  - restate the laws of genetics and of learning.
87. It is possible to know the existence of the substantial ego and something about the operational ego:
- only in the experience of pain.
  - only through the mediation of an external sensation.
  - only in catatonic state.
  - sometimes by cognizing only objects outside the self.
  - only by means of catching oneself in actual experience.
88. The name of Pavlov is associated with a type of learning known as:
- trial and error.
  - conditioning.
  - insight.
  - rote memory.
  - none of the above.
89. In a child the primary or first internal control is developed:
- on a sensory motor level.
  - through the intake emotions, especially love.
  - in the absence of free will.
  - through a primitive non-rational "conscience."
  - all of the above.
90. In the anal phase of psychological development, one psychological characteristic that does not appear is:
- reality dealing through deferring gratification.
  - relinquishing what does not belong to one.
  - giving in return for love.
  - development of substitution and reaction formation.
  - capacity for free choice.
91. A boy who begins with a very close emotional relationship with the mother, then enters into a competitive relation with the father over the mother's love and finally identifies with the father and takes over his super-ego may be said to have:
- laid the groundwork for homosexuality.
  - failed at the anal state.
  - resolved his oedipus complex.
  - safely reached adulthood.
  - none of the above.

92. The mental illness ordinarily or frequently resulting from the unsatisfactory resolution of the oedipal period of psychosexual development is:
- a. schizophrenia.
  - b. neurasthenia.
  - c. psychopathic state.
  - d. hysteria.
  - e. none of the above.
93. In evaluating the past experiences of the client, the important thing is:
- a. the amount of information that is true.
  - b. the number of experiences that are recalled.
  - c. how the client feels about the experiences.
  - d. recalling the earliest possible memory.
  - e. how well the client can remember the experiences.
94. The following statement is true in relation to the counselor making interpretations:
- a. He should rarely make interpretations.
  - b. He should make interpretations in an emotional context.
  - c. He should make interpretations as soon as he is certain that they are correct.
  - d. He should make interpretations in an authoritarian manner.
  - e. He should not make interpretations too quickly.
95. The counseling process may be speeded up:
- a. if interpretations are made as soon as possible.
  - b. if the client is encouraged to do a lot of talking.
  - c. if suggestions are made by the counselor.
  - d. if the client is warned of a limited number of sessions.
  - e. if the counselor "sticks" to his original diagnosis.
96. Clique and gang formation is most characteristic of that phase in psychosexual development known as:
- a. oedipal stage.
  - b. adolescence.
  - c. latency period.
  - d. pre-adolescence.
  - e. none of the above.
97. A person may be defined as:
- a. a human nature, complete in itself.
  - b. an intact human nature.
  - c. an individualized human being.
  - d. a rational substance.
  - e. a psycho-biological unit.

98. A mature "I and Thou" relationship presupposes:

- a. a chronological maturation (age)
- b. a certain level of personality development.
- c. a knowledge of others.
- d. an extroverted personality.
- e. all of these.

99. A mature "I and Thou" relationship is based on:

- a. the ability to share.
- b. the desire to have friends.
- c. the need for acceptance.
- d. experience in dealing with people.
- e. all of these.

100. Every human being is:

- a. unique both physically and spiritually.
- b. different only genetically.
- c. only spiritually unique.
- d. only physically unique.
- e. quantitatively distinct from animals.

101. Emotion always follows:

- a. perception.
- b. physiological (autonomic) changes.
- c. an appraisal of the situation with reference to the self.
- d. stimulation by the senses.
- e. a need.

102. One of the early discoveries of the mental hygiene movement was:

- a. the use of electric shock.
- b. the moral implications of mental illness.
- c. the use of tranquillizing drugs.
- d. the use of psychological testing.
- e. the importance of interpersonal relationships in adjustment.

103. The mental hygiene movement was begun by:

- a. Dorothea Dix.
- b. Sigmund Freud.
- c. Clifford Beers.
- d. Wilhelm Wundt.
- e. Philippe Pinel.

104. Nerve energy has been found to be:

- a. an electro-biochemical process.
- b. an electrical process.
- c. a chemical process.
- d. a useful construct.
- e. none of these.

105. The specificity of the nerve energy experience called hearing is found in:
- a. a specific kind of nerve energy peculiar to hearing.
  - b. the chemical transformation of sound waves.
  - c. the properties of the sensory receptor.
  - d. the rate of current transformation along the auditory nerve.
  - e. none of these.
106. An example of a psychosomatic illness is:
- a. alcoholism.
  - b. scrupulosity.
  - c. depression.
  - d. ulcer.
  - e. schizophrenia.
107. The course of personality development is characterized by:
- a. clearly defined breaks between the various stages.
  - b. the cessation of development in adulthood.
  - c. the major role of maturation in the first years of life.
  - d. equal degree of maturation during each stage of development.
  - e. the major role of maturation during adolescence.
108. The sex of the child is determined at conception by:
- a. the egg cell, which contains either an X or a Y chromosome.
  - b. the sperm cell, which contains either an X or a Y chromosome.
  - c. either an egg or sperm cell, whichever happens to have a Y chromosome.
  - d. a special pair of genes.
  - e. no one knows how sex is determined.
109. Socialization and personalization:
- a. must be developed by learning experiences.
  - b. are completed by late adolescence.
  - c. depend only on self-development and improvement.
  - d. are completed by the oedipal stage.
  - e. none of these.
110. The ideal goal of the process of socialization in this life is:
- a. a sociable, friendly personality.
  - b. a mature "I and Thou" relationship.
  - c. a perfectly realized "I and Thou" relationship.
  - d. community living.
  - e. all of these.
111. The process of personality development:
- a. denies the substantial nature of man's personality.
  - b. is a dynamic, always-becoming thing.
  - c. involves only social development.
  - d. is static and consistent.
  - e. none of these.

112. The first modern psychologist to speak of energy having a directional flow was:
- a. Allport.
  - b. Adler.
  - c. Freud.
  - d. Jung.
  - e. Sullivan.
113. The operational ego is most nearly synonymous with:
- a. the results of other people's evaluation of the substantial self.
  - b. the normal personality.
  - c. personal evaluation of the self.
  - d. a detached objective evaluation obtained from others.
  - e. none of the above.
114. The statement that the earlier the need deprivation, the more irrational will be the need expression means.
- a. a psychoneurosis can lead to a psychosis.
  - b. psychoses are laid down earlier in life than neuroses.
  - c. needs demand satisfaction from birth at different levels of development.
  - d. none of the above.
  - e. all of the above.
115. When an ability of man goes into act and when this mode of action is determined by experiences in earlier phases of personality development, we speak of:
- a. the active intellectual development.
  - b. dynamic development.
  - c. developmental unfolding.
  - d. volitional development.
  - e. none of these.

APPENDIX V  
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1. The state of readiness for action in terms of the organization of powers plus their previous modification is the:
  - a. substantial ego.
  - b. operational personality.
  - c. self-image.
  - d. empirical ego.
  - e. self-adjustment.
2. The word "rapport" means a:
  - a. sympathetic relationship.
  - b. empathetic relationship.
  - c. counseling relationship.
  - d. rational-understanding relationship.
  - e. non-directive relationship.
3. A scholastic conception of personality is most closely identified with the personality theory of:
  - a. Beers.
  - b. Arnold.
  - c. Watson.
  - d. Woodworth.
  - e. Symonds.
4. The unconscious projection of the patient's attitudes toward figures from his past, usually parental, onto the therapist, is called:
  - a. transference.
  - b. rapport.
  - c. abreaction.
  - d. resistance.
  - e. insight.
5. In speaking of an energy system going purposefully in a certain direction, with or without self-advertence we are referring to:
  - a. habit systems of the person.
  - b. a dynamic system.
  - c. a hierarchy of sentiments dominated by self-regard.
  - d. Freudian libido theory.
  - e. organization of total personality.

6. That the presence of a psychosis in a person can be inferred from observing his behavior means that:
- a. the substantial ego is based on the empirical ego.
  - b. type of behavior gives some indication of type of inner organization.
  - c. systematic study of behavior is necessary for correct diagnosis.
  - d. that psychoses are largely inherited.
  - e. none of the above.
7. The individualized, rational, substantial self is commonly referred to as the:
- a. experiential ego.
  - b. person.
  - c. operational ego.
  - d. the self image.
  - e. the looking glass self.
8. Acquiring insight into oneself involves most essentially:
- a. becoming aware of the substantial ego.
  - b. bringing the elements in the self into full self-awareness.
  - c. experiencing counter-transference.
  - d. developing a new self-concept.
  - e. none of the above.
9. The operational ego is most nearly synonymous with:
- a. the results of other people's evaluation of the substantial self.
  - b. the normal personality.
  - c. personal evaluation of the self.
  - d. a detached objective evaluation obtained from others.
  - e. none of the above.
10. That the ego is substantial in nature is a basic tenet of:
- a. all scholastics.
  - b. all Freudians.
  - c. some scholastics and some Freudians.
  - d. no Freudians and no scholastics.
  - e. all scholastics and all Freudians.
11. The psychobiological unit as discussed in these lectures is most closely identified with the name of:
- a. Freud.
  - b. Sullivan.
  - c. Allport.
  - d. none of these.
  - e. all of these.

12. The image of the self as I would like to be is most closely related to the Freudian concept of:
- id.
  - ego.
  - superego.
  - none of these.
  - all of these.
13. A being which by its nature or essence has vital activity also has:
- the power to interpret reality.
  - the power to engage in sensory-motor activity.
  - the characteristic of transient activity.
  - in addition to transiency, shows immanent action also.
  - the property of immanent activity.
14. The associated action of the factors of cognition, drive, physiological reaction and level of life experience constitutes:
- psychic structure.
  - emotion.
  - operational personality.
  - attitude.
  - instinct.
15. The transition between ontological and psychological values is hindered in an ordinary person primarily by:
- emotions.
  - defenses.
  - drives to knowledge.
  - attitudes toward self.
  - instincts of reproduction.
16. That conscience can go beyond the limits set by the super-ego is:
- empirically established.
  - theoretically defensible.
  - empirically indemonstrable.
  - psychologically irrelevant.
  - physiologically possible.
17. The statement that the earlier the need deprivation, the more irrational will be the need expression means:
- a psychoneurosis can lead to a psychosis.
  - psychoses are laid down earlier in life than neuroses.
  - needs demand satisfaction from birth at different levels of development.
  - none of the above.
  - all of the above.

18. The traits of pessimism, slovenliness and over self-incorporation distinguish the person whose character is:
- oral.
  - anal.
  - genital.
  - oedipal.
  - none of these.
19. The character traits of orderliness, frugality, and obstinacy are customarily associated with:
- oral character.
  - anal character.
  - phallic character.
  - hedonic character.
  - none of these.
20. The genital character is:
- an "ideal concept."
  - an effective sublimator.
  - the best approximation to fulfillment.
  - all of the above.
  - none of the above.
21. A convincing impression of something that is actually not there is:
- an illusion.
  - an hallucination.
  - a substantial ego.
  - self-perception.
  - a delusion.
22. That the properties of the parts depend upon the nature of the whole states the principle known as:
- Gestalt principle.
  - the totality principle.
  - part-whole principle.
  - true Gestalt.
  - all of the above.
23. The conception that one has of the self is synonymous with:
- ego.
  - personality.
  - human nature.
  - ego strength.
  - none of the above.

24. The fact that upon questioning, different people locate the self in different places indicates:
- that there are many selves in one person.
  - cultural factors help determine the empirical location of the self.
  - that substantial self is not empirically derived.
  - that they don't understand the question.
  - none of the above.
25. The fact that the substantial self must be inferred from the operational self indicates:
- the limitations of psychology.
  - the hypothetical character of the substantial self.
  - the importance of studying the operational personality.
  - the correctness of the Scholastic position on the mind-body problem.
  - the falsity of hylomorphism in regard to man.
26. When a person experiences a deficit condition as defined in this course, this reflects:
- a drive.
  - a want.
  - a need.
  - an interest.
  - none of these.
27. Abulia may be most correctly defined as:
- impairment of ability to act on one's own volition.
  - selective or complete forgetfulness.
  - inability to rid oneself of an unwanted idea.
  - frustration in the need system.
  - practically the same as perseveration.
28. Will power can be limited by:
- perfectionism.
  - unconscious factors.
  - conflict.
  - past experience.
  - all of the above.
29. The limitation placed on free will by dynamic unconscious factors:
- is minimal.
  - is absolute.
  - can be experimentally established.
  - is the same for all creatures.
  - none of the above.

30. An emotion can be experienced without:
- a. an evaluation.
  - b. experiencing any change.
  - c. any notion of physical or physiological change.
  - d. a rational judgment.
  - e. knowing any object.
31. An example of sympathy would be:
- a. a mother feeling protective tendencies for a frightened child.
  - b. a mother becoming fearful when a child is fearful.
  - c. a mother feeling the same fear the child does.
  - d. a mother who has little feeling and shows it.
  - e. none of these.
32. Love, fear and anger are:
- a. primary emotions.
  - b. secondary or derived emotions.
  - c. both a and b.
  - d. probably b but not a.
  - e. hard to identify as to class.
33. That inner personal standards determine the emotions accompanying success and failure is an illustration of the functioning of:
- a. empirical ego.
  - b. experiential personality.
  - c. substantial ego.
  - d. operational personality.
  - e. none of these.
34. The fact that shame and guilt can be differentiated in terms of the way they are perceived as related to the self suggests that they are:
- a. always linked to each other.
  - b. different ways of looking at the same emotional experience.
  - c. rarely found at the same time in the same person.
  - d. only rationally distinct from each other.
  - e. none of the above.
35. The feeling of self-love is similar to:
- a. ethnocentrism.
  - b. narcissism.
  - c. empathy.
  - d. self-justification.
  - e. altruistic intent.

36. Which of the following is not basic to a conception of human needs:
- a. status.
  - b. exploration.
  - c. security.
  - d. occupation.
  - e. affection.
37. The maintenance of a steady physiological state is referred to as:
- a. quiescence in the organism.
  - b. adjustment.
  - c. adaptation.
  - d. homeostasis.
  - e. hematopoiesis.
38. A state of thwarting in the organism is referred to as:
- a. frustration.
  - b. ambivalence.
  - c. conflict.
  - d. obsession.
  - e. none of these.
39. The id, ego, and super-ego are comparable to:
- a. instinct, self, conscience.
  - b. oral, anal, phallic.
  - c. intervening variables.
  - d. reality and pleasure principles.
  - e. both a and c.
40. Reality coping is the function of the:
- a. ego.
  - b. id.
  - c. super-ego.
  - d. libido.
  - e. all of the above.
41. A person in the oral period is said to be characterized by the following pattern of traits:
- a. frugality, stubbornness and stinginess.
  - b. aggression and hostility.
  - c. dependence, passivity and greediness.
  - d. friendliness but not affection.
  - e. none of these.
42. Among the following which one is not a defense against anxiety:
- a. repression.
  - b. rationalization.
  - c. expression.
  - d. sublimation.
  - e. escaping.

43. According to best estimates the percentage of persons who come to the general practitioner with complaints that are really psychogenic in origin is:
- a. 10.
  - b. 75.
  - c. 25.
  - d. 5.
  - e. 40.
44. Constitutional typologies have been developed by:
- a. Sheldon.
  - b. Kretschmer.
  - c. Jung.
  - d. Hippocrates.
  - e. all of these.
45. In the pre-natal development of the child the following factors seem substantially irrelevant:
- a. redistribution of affection in the family.
  - b. external sounds.
  - c. nutritional status.
  - d. mother's reception of the child.
  - e. mother's general health.
46. Analysing the attitudes of women with psychogenic infertility one factor that is not related to such infertility would be:
- a. patching up a shaky marriage.
  - b. rebuking the patient's mother.
  - c. wanting a child to love the mother.
  - d. to give earlier children a companion.
  - e. wanting a child as an alter ego.
47. Otto Rank bases his entire theory of the development of neurosis on:
- a. inferiority feelings.
  - b. birth trauma.
  - c. libidinal instincts.
  - d. inter-personal relations.
  - e. none of these.
48. The vegetative level in man is minimally operative in the:
- a. latency stage.
  - b. anal stage.
  - c. oral stage.
  - d. all of the above.
  - e. none of the above.

49. When an ability of man goes into act and when this mode of action is determined by experiences in earlier phases of personality development, we may speak of:
- a. the active intellectual development.
  - b. dynamic development.
  - c. developmental unfolding.
  - d. volitional development.
  - e. none of these.
50. To state that each ability in man has two urgencies to go into action-- a remote and a proximate one, suggests:
- a. that the character of immediate acts is determined by early acts.
  - b. that there are instincts in man.
  - c. that intellectual acts are based on sensation.
  - d. that one's present hunger is unrelated to past hungers.
  - e. that abilities are prior to activation.
51. By reflecting on our actions, we can arrive at a:
- a. sense of personal identity.
  - b. sense of acceptance.
  - c. comfortableness with people.
  - d. satisfaction of dependency needs.
  - e. self concept.
52. The so-called anaclitic personality is most closely allied to:
- a. neurosis.
  - b. schizophrenia.
  - c. manic depressive behavior.
  - d. psychopathic personality.
  - e. none of the above.
53. In the use of free association the expectation is to reactivate:
- a. intellectual experiences.
  - b. sensory-motor-vegetative experiences.
  - c. both a and b equally.
  - d. primarily b and incidentally a.
  - e. free will experiences.
54. The Moro reflex in infants is displayed in:
- a. inability to hold the head up.
  - b. mass fear movements including a cry.
  - c. automatic reaching at birth.
  - d. clutching and closing hands automatically.
  - e. mass anger movements.

55. The acting out of organized social behavior, as in play or in real life, is called:
- depersonalization.
  - social individualization.
  - social conditioning.
  - role-taking.
  - passive dependence.
56. Topics which seminarians often mention as problems for priests in the apostolate are:
- dealing with aged men and adolescent women.
  - the use of scientific as well as rational psychology in breaking down defenses to religion.
  - the loneliness, moodiness and personal withdrawing tendencies of priests and nuns.
  - the megalomania and hypochondria characteristic of worldlings.
  - approachableness, referrals, and establishing rapport.
57. When we have persecution complexes, hallucinations, and extremes of behavior we suspect:
- that imagination has been inadequately related to visual experience.
  - that the perceptual apparatus mainly is disturbed.
  - failure of a person to use his unique abilities.
  - disturbances in personality organization.
  - that the behavior is not the result of an inner organization.
58. It is possible to have constant change in the midst of permanency:
- since there is an original basic structure and an added progressive development of powers.
  - since change is the most permanent characteristic of all life.
  - because the laws of genetics are static but those of learning are dynamic.
  - because we don't know where to draw the line between substance and accident.
  - because permanent powers are the substantial principles.
59. Many definitions of personality are inadequate because they:
- overstress the notion of response to stimuli.
  - relate a series of traits and presuppose an inner organizer.
  - picture the genes as inner organizers directing inner strivings.
  - fail to get the idea that human beings possess a unique inner purposive organization of powers.
  - overstress the uniqueness principle while denying traits.
60. Whenever one catches himself in actual experience:
- he reflexly abstracts the self-concept.
  - he knows the empirical ego only.
  - he partially knows his operational ego and the existence of the substantial ego.
  - he utilizes both intellect and deliberate will power.

e. he has a sensory self-image only.

61. In Klubertanz's definition of personality, there is a similarity between his "memory systems" and:
- a. residuals of forgotten total-experiences in a stressful situation.
  - b. the libidinal urge to expression in a stressful situation.
  - c. the need for community unconscious.
  - d. the social inferiority feelings in a past stressful situation.
  - e. none of the above.

62. Directional or purposive movements within an organism:
- a. are the only irrational processes found in living things.
  - b. are actively concretized drives and impulses in animals and men.
  - c. are manifestations of the rational nature of man.
  - d. clearly show an aestimative sense in man.
  - e. are identical with autonomic energy patterns.

63. All emotions most correctly include:
- a. perception of stimuli, organic resonance and affect.
  - b. drives and physiological components but not cognition.
  - c. reactions of appetitive and affective life.
  - d. evaluation of the stimulus as well as intellectual appreciation of it.
  - e. awareness of the value of the stimulus without being directed one way or another.

64. When an action is the perfection of the acting agent itself:
- a. it presupposes free choice and self-determination.
  - b. it is an immanent action.
  - c. it is in the moral and official order.
  - d. it verifies the universal Gestalt principle.
  - e. it is most probably an act of a sentient being.

65. Apparatus of the vegetative system, though designed and naturally directed toward a particular goal or purpose:
- a. sometimes stimulates itself to deviant forms of function.
  - b. often does not obtain any purpose at all.
  - c. may actually serve many purposes, such as that of satisfying emotional needs.
  - d. not infrequently stands in the way of any transmission of the nerve impulse.
  - e. always acts autonomically, i.e., in total independence of the central nervous system.

66. Historically experimental work in conditioning is associated with the name of:
- a. Thorndike.
  - b. Ebbinghaus.
  - c. Pavlov.
  - d. Freud.

e. all of the above.

67. Thorndike is largely responsible for the modern development of:

- a. insight learning.
- b. latent learning.
- c. conditioning.
- d. laws of learning.
- e. none of the above.

68. Conditioned response learning, rote learning, and trial and error learning are found in:

- a. oral stage.
- b. anal stage.
- c. oedipal stage.
- d. latency period.
- e. all of the above.

69. The obsessive compulsive neurosis is apt to be most intimately connected with fixation at or regression to the:

- a. oral phase.
- b. anal phase.
- c. latency period.
- d. oedipal phase.
- e. none of the above.

70. Primitive "conscience" developed in the child is related to:

- a. neurotic guilt.
- b. Freudian super-ego.
- c. reciprocal love.
- d. sensory motor functioning.
- e. all of the above.

71. When there is a complete absence of parental love and the consequent absence of any super-ego formation, the possibility is high that we will eventually have a:

- a. psychopath.
- b. neurotic.
- c. scrupulous person.
- d. psychotic.
- e. passive-aggressive personality.

72. The anal period is characterized by:

- a. rudimentary gratification deferment.
- b. relinquishment of belongings.
- c. giving for love.
- d. ego ideal development.
- e. all of the above.

73. Ambivalence may be described as:
- a. simultaneously experiencing opposite feelings.
  - b. alternately experiencing opposite feelings.
  - c. a hypothetical construct with no basis in reality.
  - d. a defense mechanism.
  - e. alternately experiencing anger and hostility.
74. The child who prefers to be powerful or controlling rather than to be loved is apt to have:
- a. constipation or diarrhea.
  - b. diarrhea alone.
  - c. normal bowel movements.
  - d. constipation alone.
  - e. none of these.
75. The learning of how to share with others, how to take less and to give more in interpersonal relations is most characteristic of the:
- a. anal stage.
  - b. oral stage.
  - c. oedipal stage.
  - d. all of the above.
  - e. none of the above.
76. The adequate resolution of the oedipus complex in the male involves:
- a. bypassing the anal phase.
  - b. loving the mother without jealousy for the father.
  - c. loving father and mother equally.
  - d. identifying positively with and loving the father.
  - e. none of the above.
77. The basic reason why the Freudians cannot satisfactorily explain the resolution of the oedipal conflict in the girl is:
- a. the primary love objects change.
  - b. Freudian system is illogical.
  - c. the genital organs of the sexes differ.
  - d. none of the above.
  - e. all of the above.
78. The classical picture of hysteria according to Freudian theory is the result of:
- a. unresolved oedipal situation.
  - b. repressed sexual impulses.
  - c. unresolved anal conflict.
  - d. inferiority feelings.
  - e. all of the above.

79. Emotional unrest and an intense drive for independence are peculiarly characteristic of the:
- pre-school child.
  - grammar school child.
  - adolescent.
  - young adult.
  - middle-aged person.
80. Taking the client as he is, is associated in counseling with the concept of:
- rapport.
  - empathy.
  - approval.
  - acceptance.
  - patience.
81. The feelings of the client are most important in evaluating:
- the past experiences of the client.
  - the length of time that will be spent in counseling.
  - attitude of the client to the counselor.
  - the religious practice of the client.
  - the symptoms or complaints of the client.
82. Desensitization-ventilation is a process in counseling that enables the client to:
- feel very relaxed.
  - verbally air his feelings.
  - think back over his past experiences.
  - establish transference with the counselor.
  - breathe much better.
83. Once the client begins to recognize that he is being accepted by the counselor:
- he gains self-respect and confidence.
  - he feels there is nothing morally wrong with his behavior.
  - he will continue in his current behavior patterns.
  - he will recognize how successful the counseling was.
  - he realizes that he also must accept other people.
84. The idea of a person being unaware of the real aim underlying his actions is:
- opposed to the freedom of the will.
  - sound theory.
  - a possibility but not a probability.
  - putting man on the same level with the animal.
  - destroying the self-determining principle of man.

85. Unconscious memories may be disturbing because:
- a. the client is unable to utilize all his experience.
  - b. they are lacunae in his experiential self.
  - c. they were pushed out of awareness but retained their affect.
  - d. they are so mysterious and have a secret life of their own.
  - e. they are so difficult to detect.
86. In counseling, recognition of causes and effects in personal relationships clarification of restrictions and anticipating consequences of behavior are examples of:
- a. interpretations.
  - b. awarenesses.
  - c. emotional experience.
  - d. relationships.
  - e. stages in counseling.
87. To make interpretations as quickly as possible:
- a. speeds up the counseling process.
  - b. gives the client confidence in the counselor.
  - c. saves a lot of time.
  - d. is an unsound procedure in counseling.
  - e. is a sign of a good counselor.
88. The technical name for the form of encouragement given to dispel doubts and anxieties is:
- a. reassurance.
  - b. catharsis.
  - c. transference.
  - d. dependence.
  - e. auxiliary therapy.
89. Suggestions by the counselor are valuable because they:
- a. widen the scope of the client's thinking and thereby speed up counseling.
  - b. allow the client to utilize the experience of the counselor.
  - c. give the counselor a chance to prove his value in the counseling situation.
  - d. give the client a chance to think rather than talk all the time.
  - e. all of these.
90. In psychosexual development the process of turning from the intense ties with the family to the social world of peers is characteristic of the:
- a. maturity stage.
  - b. anal stage.
  - c. oedipal stage.
  - d. latency stage.
  - e. adolescent stage.

91. In the latency stage of psychodynamic development the following characteristic is noteworthy:
- a. functioning on a vegetative, sensory, and rational level.
  - b. full development of conscience.
  - c. good eye-hand coordination.
  - d. emphasis on concretistic thinking.
  - e. all of the above.
92. Such sources of fear and anxiety and conflict in the personality of anxiety over lack of emotional security, excessive timidity due to restrictive parents, anxiety about the stability of self identity, anxiety over independence, anxiety over failure to conform are characteristic of the:
- a. anal stage.
  - b. oral stage.
  - c. oedipal stage.
  - d. latency stage.
  - e. adolescent stage.
93. The ability to accept criticism without retreating or fighting, competitive participation in games, carrying out small responsibilities, leaving home unsupervised, making reasonable judgments about right and wrong, restricting impulses through social pressure are capabilities that one should expect in:
- a. anal stage.
  - b. latency stage.
  - c. oedipal stage.
  - d. early adolescence.
  - e. late adolescence.
94. The period in the child's development in which confession begins, first Communion is made, confirmation may be given is a period in the relationship between the priest and the child often characterized as the:
- a. difficult period.
  - b. latency period.
  - c. golden period.
  - d. both b and c.
  - e. none of the above.
95. Pre-adolescence is most specifically characterized by:
- a. clique and gang behavior.
  - b. emotionally supported sex behavior.
  - c. pre-ambivalence.
  - d. all of the above.
  - e. none of the above.

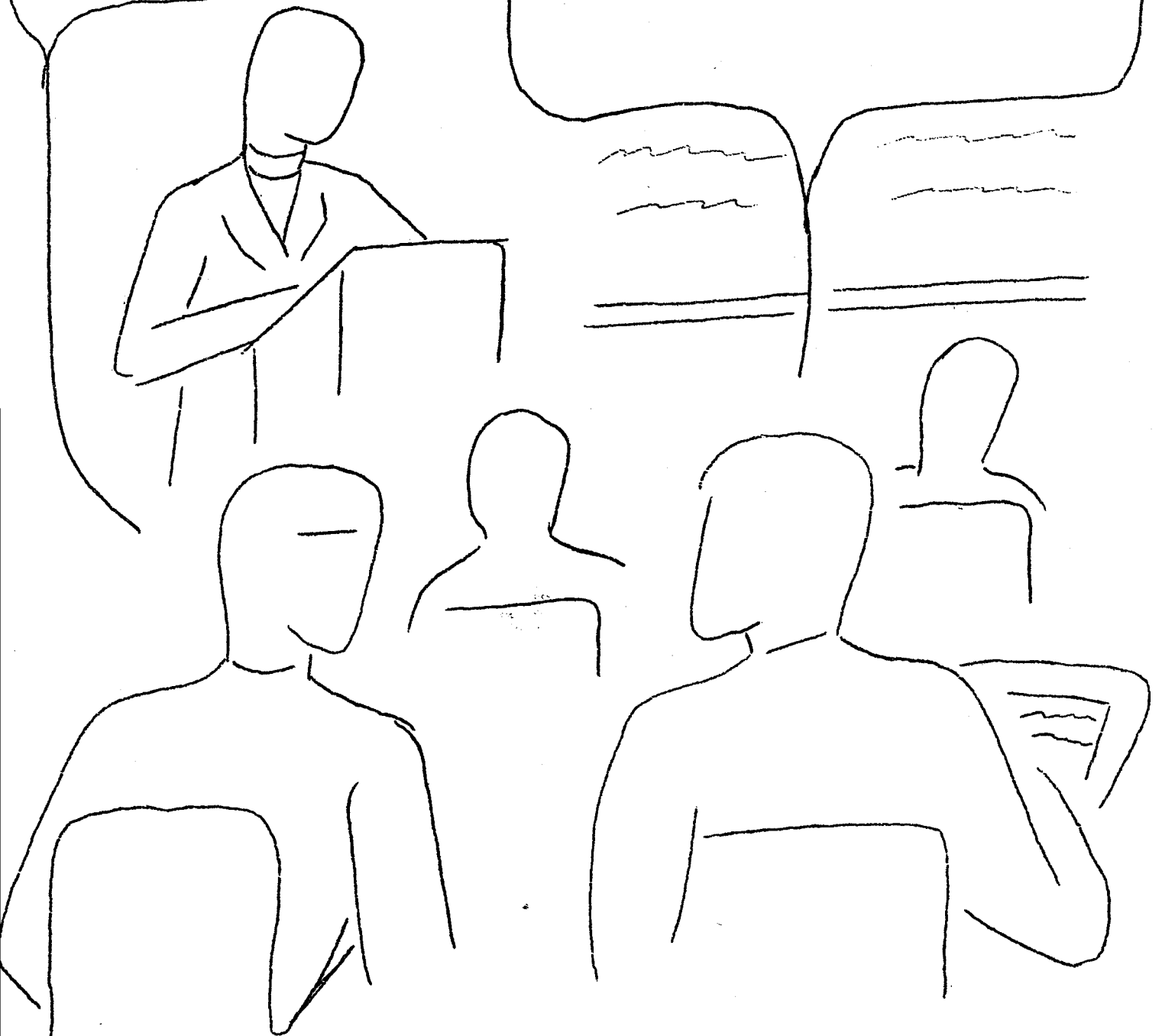
96. The disillusionment resulting from a conflict between the ideal and the real world plus the presence of sex problems characterize the world of the:
- pre-adolescent child.
  - adolescent child.
  - mature person.
  - senile person.
  - all of these.
97. In the care of souls the pastor or priest functions as:
- an intelligent, mature, real Christian friend.
  - official representative of the parish.
  - ordained minister of the Church.
  - b and c only.
  - a, b, and c.
98. The fact that there are some deeply religious people who are poorly adjusted psychologically indicates that:
- religion is only one determiner of adjustment.
  - other factors working on personality adjustment may offset the influences of religion.
  - virtues and values of religion may be ineffectively explored.
  - the fear, guilt, and anxiety created by the misuse of religion may damage some personalities.
  - all of the above.
99. An "individualized human being" is the definition of:
- substance.
  - rationality.
  - person.
  - operational self.
  - experiential self.
100. The ability to share is characteristic of:
- the oral stage.
  - children from large families.
  - a genuine "I and Thou" relationship.
  - children who need acceptance.
  - all of these.
101. In the human being an appraisal of the situation with reference to the self always precedes:
- striving.
  - instinct.
  - emotion.
  - drive.
  - none of these.

102. One of the early discoveries of the mental hygiene movement was:
- a. the use of electric shock.
  - b. the moral implications of mental illness.
  - c. the use of tranquilizing drugs.
  - d. the use of psychological testing.
  - e. the importance of interpersonal relationships in adjustment.
103. Clifford Beers is the founder of:
- a. the mental hygiene movement.
  - b. one school of psychoanalysis.
  - c. non-directive counseling.
  - d. the first mental hospital.
  - e. the first laboratory in psychology.
104. Nerve energy has been found to be:
- a. an electro-biochemical process.
  - b. an electrical process.
  - c. a chemical process.
  - d. a useful construct.
  - e. none of these.
105. The specificity of the nerve energy experience called hearing is found in:
- a. a specific kind of nerve energy peculiar to hearing.
  - b. the chemical transformation of sound waves.
  - c. the properties of the sensory receptor.
  - d. the rate of current transformation along the auditory nerve.
  - e. none of these.
106. The first modern psychologist to speak of energy having a directional flow was:
- a. Allport.
  - b. Adler.
  - c. Freud.
  - d. Jung.
  - e. Sullivan.
107. The course of personality development is characterized by:
- a. clearly defined breaks between the various stages.
  - b. the cessation of development in adulthood.
  - c. the major role of maturation in the first years of life.
  - d. equal degree of maturation during each stage of development.
  - e. the major role of maturation during adolescence.
108. The sex of the child is determined at conception by:
- a. the sperm cell.
  - b. the egg cell.
  - c. both the sperm and the egg cells.
  - d. unknown factors.
  - e. the bio-chemical-endocrinological bath.

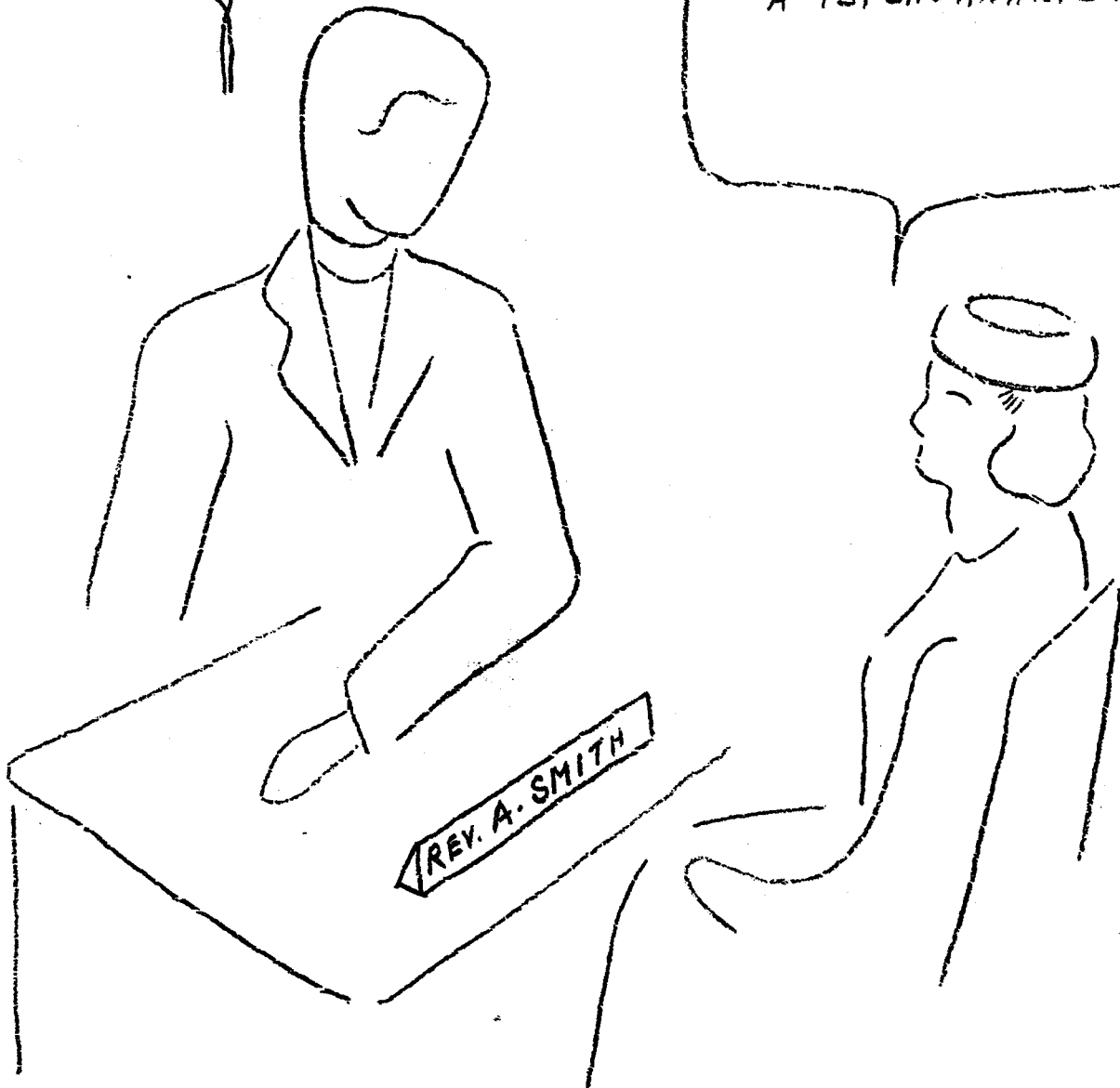
109. Learning experiences are necessary to develop:
- a. eye dominance.
  - b. the substantial ego.
  - c. instincts.
  - d. socialization and personalization.
  - e. none of the above.
110. A mature "I and Thou" relationship is the goal of the process of:
- a. individualization.
  - b. socialization.
  - c. group living.
  - d. identification.
  - e. role-playing.
111. A dynamic, always-becoming development is characteristic of the:
- a. substantial ego.
  - b. human personality.
  - c. intact organism.
  - d. supposit.
  - e. all of the above.
112. A mature "I and Thou" relationship presupposes:
- a. a chronological maturation (age).
  - b. a certain level of personality development.
  - c. a knowledge of others.
  - d. an extroverted personality.
  - e. all of these.
113. Every human being is:
- a. unique both physically and spiritually.
  - b. different only genetically.
  - c. only spiritually unique.
  - d. only physically unique.
  - e. quantitatively distinct from animals.
114. An example of a psychosomatic illness is:
- a. alcoholism.
  - b. scrupulosity.
  - c. depression.
  - d. ulcer.
  - e. schizophrenia.
115. Factors predisposing an individual toward feelings of jealousy are:
- a. self-hate.
  - b. insecurity in self-conception.
  - c. lack of intensity of feelings of love.
  - d. all of the above.
  - e. none of the above.

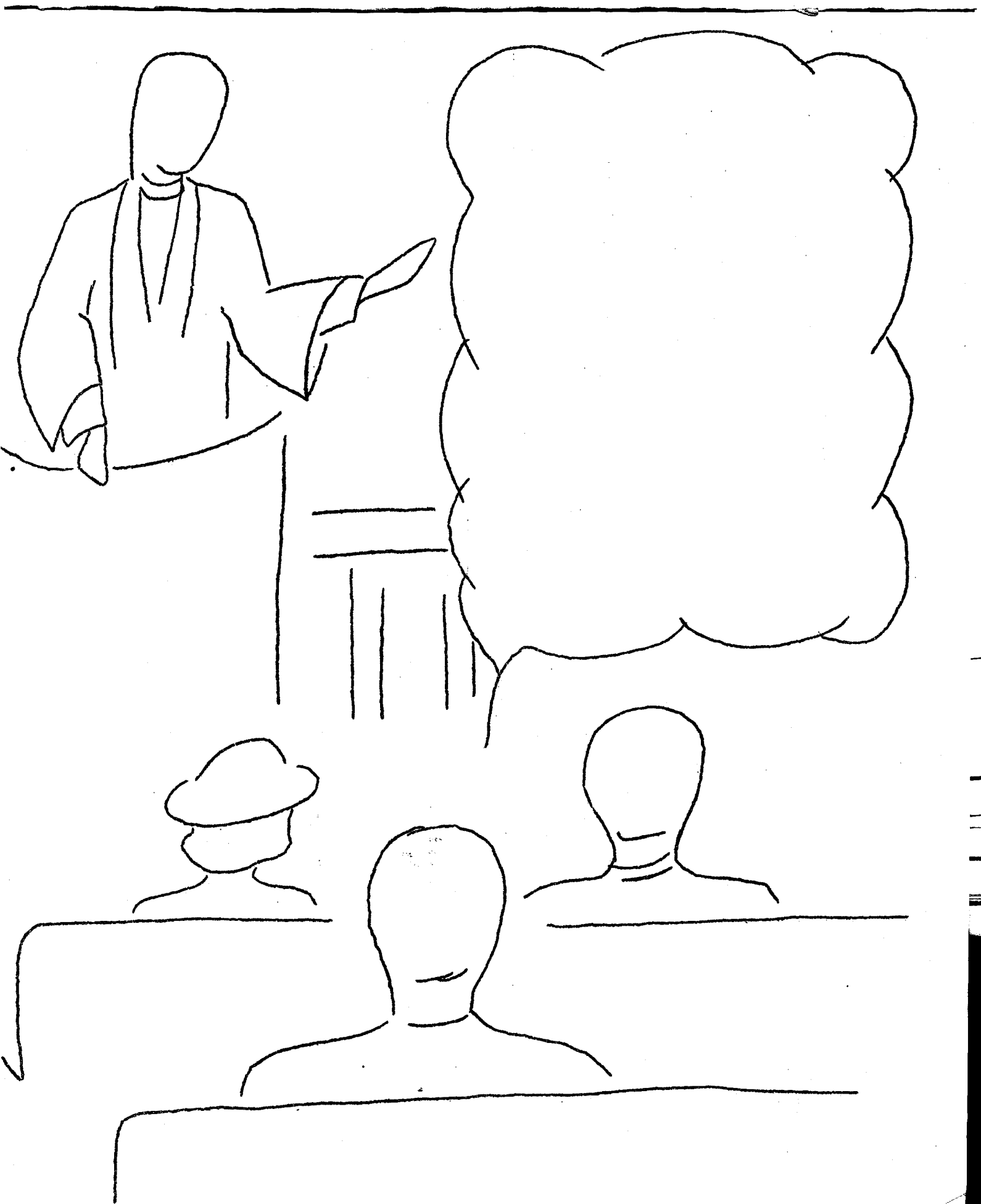
LOYOLA MENTAL HEALTH PROJECT

IN OUR MODERN DAY  
IT'S IMPOSSIBLE TO  
DO A GOOD JOB  
AS A PRIEST  
WITHOUT SOME  
KNOWLEDGE OF  
MODERN DYNAMIC  
PSYCHOLOGY.



BUT, FATHER, THE  
ONLY PERSON TO  
WHOM I COULD  
GO FOR HELP IS  
A PSYCHOANALYST

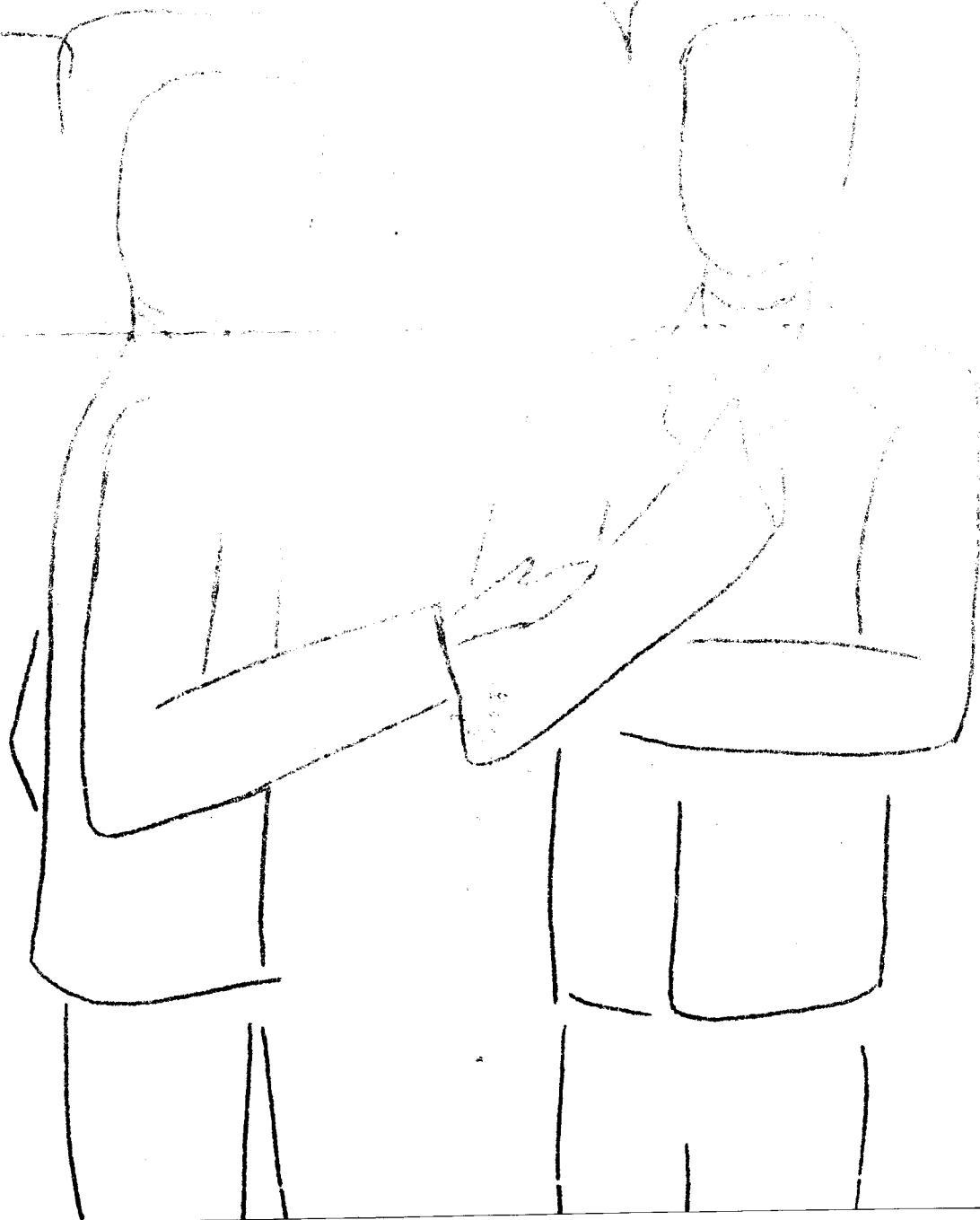




PSYCHOLOGY IS  
JUST LIKE  
RELIGION TO ME  
IT HELPED ME  
BECAUSE I  
HAVE FAITH  
IN IT.

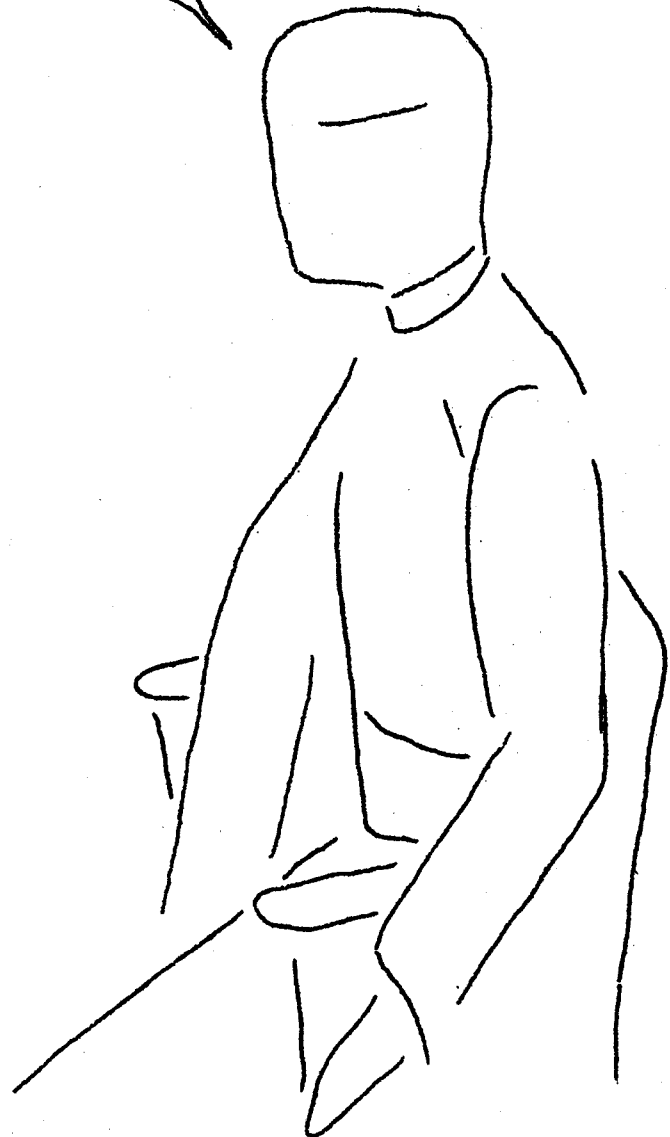
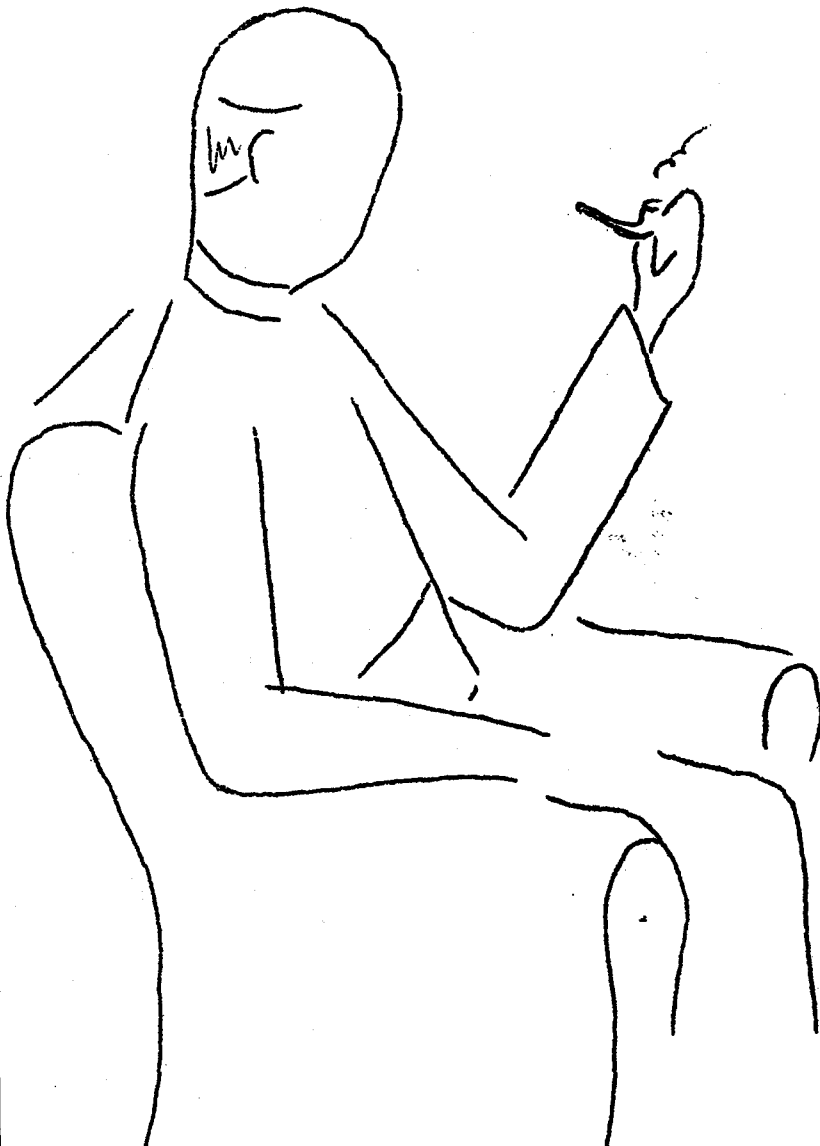


WHAT DO YOU  
THINK OF USING  
MENTAL HEALTH  
IDEAS IN OUR  
PROFESSIONAL  
WORK ?



LOYOLA MENTAL HEALTH PROJECT

I'D LIKE YOUR  
OPINION ON  
THE PLACE OF  
PSYCHOLOGY IN  
RELIGIOUS WORK.



## LOYOLA MENTAL HEALTH PROJECT

**INSTRUCTIONS:** Complete the following sentences with the first thought that comes to mind. Just jot down the first thing you think of. It doesn't matter whether it is a word, a series of words or a whole sentence. For example if the incomplete sentence were " the best things about summertime..... you might complete it with something like this: " are the outdoor sports and picnics." Go ahead now and finish the sentences below .

1. Mental maladjustment is caused by \_\_\_\_\_

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2. A person who is mentally healthy \_\_\_\_\_

---

---

3. The best way to help a person with scruples \_\_\_\_\_

---

---

4. People who don't profit by counsel \_\_\_\_\_

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5. The thing that really bothers me about modern psychology \_\_\_\_\_

---

---

6. The trouble with non-directive counseling \_\_\_\_\_

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LOYOLA MENTAL HEALTH PROJECT

6. \_\_\_\_\_

7. Priests who use mental hygiene principles \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. Psychiatry is mostly \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. The trouble with psychoanalysis \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

10. A good way to help people with problems \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11. Children who constantly misbehave in school \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. The constant use of psychology in sermons \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

LOYOLA MENTAL HEALTH PROJECT

19. Psychology can be used \_\_\_\_\_

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20. Marriage counseling requires \_\_\_\_\_

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APPROVAL SHEET

The dissertation submitted by Neil John Webb 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.

June 1960  
Date

Frank Hobbs  
Signature of Adviser