

AN EVALUATION OF STRONG'S MINISTER SCALE APPLIED
TO THE ROMAN CATHOLIC CLERGY

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INTRODUCTION

Vocational guidance and counseling have become a very important part of educational and occupational work of modern times. There is room for their usage in every field of endeavor because everyone needs advice in making important decisions regarding his life's work. In relatively recent times, these aspects of education and occupational choice have been subject to psychological and statistical investigation. One of its phases, which has undergone a great deal of investigation, is the subject of interests. Research has shown that interests are something different from abilities: abilities will indicate the possibility or non possibility of an individual attaining certain intellectual or mechanical endeavors, while the interests of an individual seem to indicate the satisfaction and happiness, or the dissatisfaction and unhappiness that will result from his selection of a certain type of work. Therefore, although only a part of counseling and guidance, an investigation and a knowledge of interests is very important for the happiness of the individual.

Because the writer is a priest, and an investigator can do better work with data that is more available and familiar to him, research in the interests of Catholic priests seemed to offer great possibilities for study with an opportunity to utilize the conclusions of such investigation. John Lynch, a student for the Holy Priesthood at the University of Ottawa in Canada, and the writer decided to collaborate upon such a study. Our problem was two-fold: Was it feasible and useful to test the interests of such a group as the Catholic Clergy? And if so, how could it be done?

After considering the work that had already been done in interests, we decided to select Strong's Vocational Interest Blank as the most promising vehicle for investigation. From data obtained from this investigation, John Lynch answered these problems in a Master of Arts Thesis presented to the Faculty of Arts of the University of Ottawa, in June, 1945, entitled, "A Study of the Feasibility and Utility of the Measurement of the Interests of the Catholic Clergy." He drew the conclusion that testing this group was feasible because their results on the Strong Blank showed a normal distribution of scores. Furthermore, it was desirable to have a means of testing the interests of students for the Sacred Priesthood in order to compare their results with those who were already happily laboring in this field. Making a mental distinction between God's Grace and man's natural qualities, all of which go to make up a vocation, Lynch showed that an analysis of these natural qualities and particularly here, of interests, was important as an aid to those directors of seminaries who duty it is to nourish vocations as well as to respect those who apparently have not. Also it would be of value to Bishops in placing priests in field of work which are more suited to their interests, since the battle for souls entails work in all phases of human endeavor.

This thesis is a more detailed analysis of the data obtained from this study. In order to give the reader the necessary background for an understanding of the conclusions based on this data, Chapter I is devoted to an explanation of the nature of interests and the make-up of the Strong Vocational Interest Blank.

In Chapter II is discussed the sample of 105 members of the Catholic Clergy, giving the reasons why it seems to be a good representation of this group. Chapters III and IV analyze the data: the first considers the results of the Catholic Clergy when scored on the Ministers scale and it's comparison with the results of Minister; the second analyzes the data for certain tendencies which would indicate differences between the Catholic Clergy and Ministers. The last chapter explains how to construct a new scale for the Catholic Clergy based on Strong's test. An appendix furnishes a summary of the data of this study, which could be utilized in further work in setting up a new scale.

CHAPTER I

INTERESTS AND THE STRONG VOCATIONAL INTEREST BLANK

Within the circle of one's acquaintances, each person is aware that certain individuals, although successful in their vocational choice, fail to obtain the satisfaction and happiness that results from interest in one's work. Here is a typical example: Jean, a nurse, aged twenty-one, upon graduating from Mount Sinai Hospital in New York, was cited for high scholarship for having attained one of the sixth highest ratings in a class of fifty-seven students. This standing was based upon all phases of nursing: studies, patient treatment, clinical work, case write-up, and specialized experience in psychopathology and obstetrics. Yet after graduation, she expressed a dislike for nursing. This had begun when she had completed about half of the required course. Now, after a year of professional work, she is determined to leave this field for either dress-designing or teaching. Considering her ability, she could have been successful in many occupations, but evidently this is not sufficient if happiness in one's work is to be considered. When our attention is directed to cases such as this, we begin to wonder what is lacking in that particular profession for this individual. Should not success furnish happiness and satisfaction? Through our own experience, we know satisfaction does result from the accomplishment of a job well done. Nevertheless from these cases there appears to be another element which makes for happiness in the doing of one's work.

This problem has agitated vocational guidance directors and educational counselors for a long time. Experimentation and study of this situation began after the first World War but only *in the last fifteen years has this study been intensified and* experimentation ~~made~~ on a great scale. Experimental psychologists have made some progress in its solution with the study and experimentation of interests. While interests themselves are not able to be analyzed because they are feelings of an individual and no one knows what is in another, nevertheless the objects to which interests are attached are able to be analyzed. One of the foremost psychologists in this field is Dr. Edward Strong of Stamford University, California, who has devised the Strong Vocational Interest Blank, the purpose of which is to aid in determining the interests of individuals so that he may be advised of the field in which he would find himself happily engaged. But before an appreciation of this interest blank is made, it is necessary to understand something of the nature of interests.

1. The nature of interests

According to its etymology, the word "interest" comes from the Latin inter (between) and esse (to be) and is defined as to be different, to be of importance. Webster's New International Dictionary gives one definition as:

Excitement of feeling, whether pleasant or painful, accompanying special attention to some object. Perhaps in its more common use, the word interest stands for a permanent disposition or capability of being actually interested. Thus we may say of a person that he is "interested in mathematics" although he may not at the moment be thinking of mathematics at all.

Out of experimentation has appeared a more exact definition of interests than was formerly accepted. Now they are defined in terms of their measurement. According to Fryer, "Interests are the objects and activities that stimulate pleasant feeling in the individual."¹ Aversions are those which stimulate in him unpleasant feeling. These have been classified into two groups: subjective and objective interests.

Subjective interests are estimates of one's feelings. They are two-fold; when experiences, arising in the individual under stimulation from objects and activities about him, bring about a feeling of unpleasantness, they are called dislikes. Between these two feeling experiences, there are varying degrees of experiences which are classified as indifferent.

To distinguish subjective from objective interests, we must bear in mind that the former are experiences by which arise certain feelings in the individual (he estimates how he feels towards an object or situation), while the latter are reactions to objects or situations which are directly observable as when one looks intently at the objects in a store window. When he estimates that he likes those objects, he has a subjective interest. As with subjective interests, there are two types of objective interests; one is a positive reaction which inclines the individual toward the stimulus; the other is a negative reaction or aversion which repels the individual. In the absence of any reaction, he is said to be indifferent.

1. Douglas Fryer, *The Measurement of Interests*, New York, Henry Holt and Company, 1931, footnote p. 15.

Fryer thinks the best understanding of interests is had when they are considered according to the theory of acceptance and rejection:

Both subjective and objective interests may be viewed as acceptance-rejection activity. An acceptance-rejection theory is considered as the most acceptable definition of the interest activities. These acceptances and rejections are observed in the behavior of the individual and in his estimates of pleasure and displeasure when stimulated by an interest situation.¹

That an understanding of these interests is desirable is shown in studies which indicate that subjective interests and aversions, likes and dislikes have a close relationship to individual vocational and educational adjustment. One aspect of these studies shows that interests are a separate unit of psychological activity, distinct from other units such as abilities, emotions and motivation. Experimentation has shown that interests supply something which abilities and achievements do not. They indicate what one likes to do; they show what one considers satisfying. Abilities indicate what one is able to do. Now the object of anyone's life's work is both success and happiness. Success itself may at times furnish personal satisfaction because of the admiration in the eyes of others, but it does not seem to bear directly on the factor of happiness. Happiness in one's work seems to depend primarily on one's interests, without the element of success being prominent. We may like some game or sport like fishing but it doesn't mean that we are proficient in these things. Again we may like or dislike something long after we have anything to do with it or we may have an interest in certain objects from some trivial aspect.

1.

Op. Cit., p. 16.

Therefore experimentation has shown that interests are only an indeterminate indicator of success since it is indicative of satisfaction and not of success itself. Psychologists wish to stress that interest is only one of the factors to be considered in vocational guidance. In the light of these conclusions, interest tests have been used to indicate what a person wants to do and the general direction he should go in order to obtain enjoyment and satisfaction in life.

The choice of a vocation is one of the hardest problems youth has to face. The growth and importance of vocational guidance attests to this fact as well as does each one's own individual experience. Studies of choice of vocation shows that likes and dislikes are by far the greatest factor in the choice. However, to obtain success, a number of traits are needed: age, ability, character, finances, etc,. Interests are not sufficient alone. But one thing interests will do is ----- they will tell the way to go, but will not tell how far or how well one will go.

Realizing the necessity the interests of a person, if he is to be vocationally happy, psychologists busied themselves with the problem of testing these interests. Since subjective interests were only known to the individual because they are personal feelings, for greater validity, testing of objective interests took their attention for which four procedures have been established: First there is the information test, which has as its basis the assumption that one's interest lies in the field in which he is more informed than the average person since his interest would acquire that additional know-

Secondly there is the free-association test, developed by Wyman and Termqn, to measure rapidity of free-associations of an individual but is now recognized to indicate intellectual, social and activity interests. Thirdly, there is the learning test of Burt which is based on the theory that one learns better with pleasant feeling or interest and worse with unpleasant feeling or aversion. Statistically, this has proved to be a test of abilities rather than of interests. Lastly, there is the distraction test of Burt, which based on the theory that a person is less likely to be distracted, that is, his attention is better when interested, tries to measure the strength of interests.

However, in experimental psychology, there has been some research in the field of subjective interest or the feelings of the individual. The purpose was to attempt to gain a knowledge of the interests and aversions from the knowledge of an individual's feeling experience. Four ways have been developed which rely upon the person's own statement of his interests: ² A common test of this nature is that of first choice, in which one records the school subject one likes best or the occupation and so on. The second is a test of rank order or preference, by which all items are ranked in order of preference or all the items are checked which are liked. Thirdly, there is the rating scale, by which the individual rates himself or is rated by others respecting his interests upon a numerical scale of values.

1. Fryer, Op. Cit. p. 261 - 309.

2. Fryer, Op. Cit. Chap. #II, p.19-58.

Lastly there is the inventory, the most widely used at the present stage of experimentation, consists of a kind of questionnaire which asks the individual to estimate his feeling to a given situation, object or activity in his environment. This is the test with which we are concerned and we will say a few more words of explanation about it.

The interest inventory began as an aid for orientation, both in educational and vocational fields. Its purpose was to stimulate the individual and bring before him the problems he should think about. An example of this was a questionnaire for the study of personality by Floyd Allport.¹ The inventories generally include both objects and activities of our environment. Objects are those things in our environment which stimulate us, while an activity is the name given to a reaction of an individual towards various stimuli. An inventory, therefore, is made up of a classified list of these objects and activities and the individual is asked to record his feeling experiences in relation to them. The responses are usually marked as "like", "indifferent", and "dislike". One's experience may be of three kinds: If the individual experiences a pleasant feeling when stimulated, "like" is expressed, if there results no feeling in the individual upon stimulation, it is marked "indifferent"; and finally if an unpleasant feeling arises, -the word "dislike", is scored.

1.

Floyd Allport, A Systematic Questionnaire for the Study of Personality, 8 pp., C.H. Stoelting Co., Chicago, Ill.

These results are then noted as a whole or in part for orientation and counseling.

However, greater advancement has been made upon the inventory than mere orientation or counseling based on general tendencies of the responses. "Likes", "dislikes" and "indifferences", have been given ratings through statistical formulas. These results have been tabulated to furnish a score for the individual, which score furnishes an indication of his interests in general, or in a distinct field, vocation or occupation. As a basis for this procedure, there lie two assumptions: First, since these tests are scored for differences in general interest, that these differences exist. Second, that there are common interests for different fields of activity especially for occupational and professional groups. Experimentation seems to show these assumptions to be valid and therefore aiding in the future usage of these tests.

Although these inventories existed for a long time, Kelly was the earliest investigator to apply this statistical procedure to their analysis. One of the earliest and most widely used inventories for the purpose of orientation was published by Miner in 1918.¹ With its revision in 1922 under the title of "Analysis of Work Interests,"² it gave as its purpose to help to discover special interests and abilities, by suggesting how to observe one's own likes and dislikes.

1. J.B. Miner, An Aid to the Analysis of Vocational Interests, J. of Educ. Res., 1924-25, III; p 197-206.

2. Analysis of Work Interests, C.H. Stoetting Company, Chicago, Ill. pp 4. Citanl. Douglas Fryer, op. Cit, p.28.

Brainard of Kansas State Agricultural College and Hartson and Brentlonger at Oberlin College have worked on inventories with the theory of sampling activities relative to our reactions to our environment. In 1923, Brainard worked with engineers on inventories of interests whose aim was to estimate the degrees of feeling accompanying acts repeated many times. He has also prepared general interest inventories. The Oberlin Inventory began in 1925 by Hartson to study the activities of College students, but its latest edition of 1928¹ is developed to include all professional activities.

These inventories are concerned mainly with activities, or with an analysis of occupations and professions. However, there were other inventories made to study special and general interests, like Terman's study of interests of gifted and normal children, of adult² and Children's reading. Other interest inventories were general and included samples of all special interests: educational, vocational, amusements, reading and so on. An example of this kind is "The³ University of Iowa Assayer, devised by Hart in 1923 and used to distinguish interests of Social groups.

Not satisfied with mere orientation and counseling based on interest inventories, investigators decided, that since an individual was daily in contact with objects and activities of his environment which cause certain feelings that are pleasant, indifferent or

1. The Oberlin Vocational Interest Inquiry, pp 4, is on file in the Department of Psychology, New York University, N.Y.C. according to Fryer, Op. Cit. p 40.

2. L.M. Terman, Mental and Physical Traits of a Thousand Gifted Children, Vol. I Genetic Studies of Genius, Stanford Univ. Press, 1925, 648 pp, citanl D, Fryer, Cep. Cit. p 47.

unpleasant, to present a sample of all these objects and activities to the individual for him to estimate his feelings towards them just as if they were stimulating him. His estimates were to be summarized into a score indicating interest in a particular field or profession. This was a standardized inventory, having a statistically evaluated standardization technique and an objectively verifiable scoring method. Its inception began with a graduate student of the seminary of Clarence S. Yoakum in 1919-20 at the Carnegie Institute of Technology. It began with studies made by Moore who tried to measure the mechanical and social interests of engineers, by Ream who tried to distinguish successful and unsuccessful salesman by their interests and by Freyd who continued the research of Moore. ¹ The result of these studies was the "Carnegie ² Interest Inventory" of 1921, whose aim was to develop scoring keys based upon distinguishing group interests which would have objective criteria in scoring the inventory. Later, inventories were made for men and women. Scoring was based on the use of items which were found to be significant in distinguishing groups. The inventory, therefore, was administered to homogenous groups in order to estimate what the interests of this group were in contrast to that of other groups.

3. "The University of Iowa Assayer" is an file in the Department of Psychology, New York University, N.Y.C. according to Fryer, Op Cit. p.49.

1. Fryer, Op. Cit. p. 60-70.

2. The Carnegie Interest Inventory, 1921 Edition will be found in article by Max Freyd, The Measurement of Interests in Vocational Selection, J. of Pers. Res., 1924-25, III, 366-74, citant by Fryer, Op. Cit, p. 65.

Based on the work done at the Carnegie Institute of Technology, several other inventories have been drawn up for specific purposes such as for use with college students^{and} boys. But the greatest development of this inventory was made at Stanford University. Begun in 1924, Cowdery developed his "Interest Report Blank", which included 263 items of both occupations and general items. Out of this blank was developed Strong's "Vocational Interest Blank". Strong, thinking an increase in the number of items would give a more valid measure, added many more to Cowdery's blank. This is the inventory with which we are immediately concerned and whose makeup will be explained in detail.

2. The Strong Vocational Interest Blank

In the following words, Strong has expressed the use of his interest blank:

Men engaged in a particular occupation have a characteristic set of likes and dislikes which differentiate them from men in other occupations. The Vocational Interest Blank is a device by which such patterns of interest, may be determined. By means of the test, it is also possible to ascertain the pattern of interests - with which a given individual's interests most nearly coincide, and hence the occupation for which he is presumably fitted so far at least as his interests are concerned. - - - It is assumed that if a man ~~xxxx~~ likes to do the things which men like who are successful in a given occupation and dislikes to do the things which these same men dislike to do, he will feel at home in that occupational environment. Seemingly also, he should be more effective there than somewhere else, because he will be engaged, in the main, in work he likes. ²

1. Cowdery's Interest Inventory is distributed by the Stanford University Press, Stanford, Californish, according to Fryer, OP. Cit, p 80.

2. Edward Strong, Vocational Interests of Men and Women, Stanford University Press, Sanford University, Calif. 1942, p 56.

With this idea and supposition in mind, Strong formulated a blank for men and one for women. Here, we are only concerned with the one for men. Originally this blank (form A) had 420 items, and was published in May, 1927. The present revised form (M), cut to 400 items, was published in October 1938. This is the form which we have used in this study.

The form of the Interest Blank. ¹ - - The Interest Blank is a yellow booklet of eight pages; the page furnishes the instructions and preliminary questions of one's background, while the last page lists the various occupations upon which the blank may be scored, allowing space to insert the individual's scores and ratings in all of these occupations. The body of the test consists of eight parts; Part I of 100 questions concerns various occupations; Part II has 36 questions on school subject; Part III lists 49 amusements; Part IV lists 48 activities; Part V deals with 47 peculiarities of people; Part VI enumerates 49 activities among which is to be indicated an order of preference; Part VII has 40 questions on comparison of interest between two items; and Part VIII has 40 items relating to present abilities and characteristics.

Use of the blank. - - The text was formulated as an aid in vocational guidance. But Prof. Strong lists the uses of the Vocational Interest Blank as follows: as an aid in vocational guidance for those who wish to find the occupation for which their interests best fit them; as an aid in educational guidance to indicate the direction

1. Appendix I contains a copy of the blank.

or non-direction of courses to follow; as an admission requirement to professional schools, not to select students who can pass the required but rather to select those men who will like the occupational activities after graduation; and finally as an aid to the selection of employees in order to place employees not only where they will be efficient, but where the job is more congenial to their qualifications and interests and so have him content and happy with his work.¹

With these purposes in mind, the interests of people in thirty-nine occupations² for men and eighteen occupations for women³ were compared with a criterion group and rating scales have been set up.⁴ In this study we are concerned with the Minister scale and particularly its use with the Roman Catholic Clergy. Besides the occupational scales, Strong has experimented with the idea that various occupations may have common interests to enable grouping them together. The idea of this was to narrow the interest field of an individual to a group of occupations when it was not feasible to test the person for interests in one particular field.⁵ Ten group scales have been set up and the basis of their classification was the intercorrelation between scores on the occupational scales.

1. Edward Strong, Op. Cit. p.

2. "Occupation" is used to mean" the men engaged in making a living in the occupation" - Edward Strong, Op. Cit., footnote, p 64.

3. The occupational interests of men for which scoring scales are available are: Accountant, advertising man, architect, artist, author - journalist, aviator, banker, carpenter, certified public accountant, chemist, city school superintendent, coast guard, dentist, engineer, farmer, forest service, lawyer, life insurance salesman, mathematician, mathematics-science high school teacher, minister, musician, office worker, osteopath, personel manager, physician, physicist, policeman, president of a manufacturing concern, printer, production manager, psychologist, public utility salesman, purchasing agent, realestate salesman, sales manager, social science

An example of this grouping of occupations is found in this particular study of the Minister Scale, which is classified in Group V. This group has been given the general title of Social and Moral uplift group. Table I, based on records of 285 college seniors at Stanford, shows Group V and the occupational scales assigned to it as well as their intercorrelations with all the group scales. An appraisal of the correlations shows the correlation of .57 to .76 of these occupations with Group V while with the other groups their correlations are for the most part negative.

Table I

Classification of Occupations in Group V on Basis of Correlation of Interests¹

Group Occupation	Average of correlations between each occupation of Group V and all Groups of occupations.										
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
V Y.M.C.A. Secretary	-.38	-.55	-.28	-.07	+.76	-.21	-.05	-.20	-.25	-.03	-.43
Y.M.C.A. Physical Director	-.09	-.20	-.01	.33	.62	.36	-.20	.05	-.07	-.24	-.56
Personel Manager	-.40	-.38	.16	-.06	.57	.05	.25	.26	.25	-.03	-.13
City School Superintendent	-.18	-.38	-.46	-.25	.68	.26	.38	.03	.16	.25	-.39
Minister	.21	-.12	-.48	-.01	.63	.60	.06	.30	-.16	.25	-.54
Social Science Teacher	-.40	-.60	-.40	-.10	.71	.28	.14	.26	.28	.06	-.48

4. Occupational interests scales for women are: Artist, author, buyer of merchandise, dentist, dietitian, housewife, laboratory technician, lawyer, librarian, life insurance saleswoman, nurse, occupational therapist, office worker, physician, psychologist, saleslady of ready-to-wear, social worker, stenographer-secretary, teacher in elementary school, teacher in high school of a) English b) home economics c) mathematics-science d) physical education e) social sciences, and Y.M.C.A. secretary.

Besides research on occupational scales, work has also been done on others. There has been set up scales on interest maturity, masculinity, femininity, occupational level and studiousness. The Interest Maturity scale is an attempt to measure interests in reference to increase of age of men. The Masculinity-Femininity scale was set up to measure the interests of males and females since men and women desire to accomplish different things in life and possess somewhat different interests. The occupational-level scale furnishes a measure for the interests of men in all occupations on a single scale, ranging from unskilled workmen on the one hand, to business and professional men on the other. It contrasts the interests of unskilled men with those of business and professional men earning \$2,500 a year and upwards.

9. The ten group scales are as follows:

- I. Artist, psychologist, architect, physician, and dentist.
- II. Engineer and chemist, and indirectly mathematician and physicist.
- V.Y.M.C. physical director, personnel manager, Y.M.C.A. secretary, social science high-school teacher, city school superintendent and minister.
- VIII. Accountant, office worker, purchasing agent, and banker
- IX. Sales manager, realtor, and life insurance salesman
- X. Advertising man, lawyer and author-journalist.

For groups III, VI, VII, and XI, there is only one occupation assigned-production manager, musician, C.P.A., and president respectively. Group IV consists of the occupations: farmer, printer, mathematics-science teacher and forest service, but no scale has been set up.

To set-up these various scales, Strong first obtained a large sample of all men as his criterion group, the group which represented the interests of men in general. After a great deal of research was done, to obtain this representative sample, a criterion group which is a fair representation of business men earning \$2,500 and over a year, was finally selected for the construction of the interest scales. With this group as a point of reference in setting up an interest scale, the resulting scores indicate how a given occupation differs in its interests from those business and professional men earning \$2,500 a year. Strong's reason for setting up this criterion is that educated men are not interested in how they compare with semi-skilled or even skilled men, but only how they compare with men making at least \$2,500.²

These scales, then, show the various uses to which the blank can be put. However, in its use, consideration must be given to the fact that the average age of the criterion group of the scales is forty years -- and as experimentation seems to indicate that interests are fairly permanent from the age of 25 to the age of 55 years, the test is said to have value for men tested within this range. Studies also have shown that slight interest changes occur between the 20 to 25 age group and considerably between the ages of 15 to 20. According to these findings, its use with the former group can be considered fairly reliable but with the latter, only in a very general way in counseling. Strong thinks that it should not be used on subjects below the age of seventeen.

1. Edward Strong, Op, Cit., Table 29 - Classification of Occupations on Basis of Correlation of Interests, p. 136.

2. This criterion group is explained more fully in Chapter V.

I n s t r u c t i o n s f o r t a k i n g t h e t e s t. - -

Instructions for taking the test are printed on the blank. On the first page, there is a request of preliminary information about the individual taking the test: date, name, age, sex and address. Following this, there are two series of questions whose purpose is to obtain the background of the individual for counseling. The first set, to be answered by those still attending school, comprises eight questions: present grade of schooling, grade expected to complete, school subjects interested in, subjects expected to specialize in, occupation planned, certainty of decision of occupation, jobs held and time of employment, occupation once considered entering. The second set of eight questions, to be answered by those who have left school, asks the individual to indicate the last grade completed, technical or business courses taken, present occupation and years of experience in it, to specify work actually being done, to name other occupations formerly engaged in, other occupations considered entering and reasons for this. At the end of these questions is a space for remarks of any kind which the person may wish to make.

On the second page is indicated instructions for taking the test itself. Each individual is requested to indicate after each item whether he likes, is indifferent to, or dislikes it. Concerning the part on occupations, he is told to disregard consideration of salary, social standing, future advancement, of whether or not he would like to take up the occupation permanently, and consider only whether or not he would like to do the work of that occupation, meanwhile disregarding

any necessary skills, abilities, or learning which he may or may not have. After each item, there is placed three letters: L for like, I for indifferent and D for dislike. The individual must circle only one of these to indicate his attitude. This method is used for the first 280 questions concerning occupations, interest in school subjects, amusements, activities and peculiarities of people. Then there are 40 items regarding preference of order among certain activities; another 40 items where choice is made of two interest activities; and finally 40 items of present abilities and characteristics to be rated by choosing one of the following "Yes", "?", or "No".

No time limit is set for taking the test, but the individual is asked to work rapidly for it is felt that his initial response is the true one: average time to take the test is about thirty-five minutes. To avoid the serious drawback of falsification, since if given the time and the wish, students may falsify responses and raise their score significantly in the occupation they are desirous of entering, Strong urges the one administering the test to appeal to their desire of knowing what occupation they should enter.

1

D e v e l o p m e n t o f t h e S c a l e s . - - It is assumed that vocational guidance must be based on the factors that discriminate between groups. Therefore interests of one occupation can be expressed in terms of how these interests differ from men in general. All the occupations are contrasted with the same men-in-general group. The responses to the like, indifference and dislike of each item is tabulated and changed

1. Development of a Scale is explained more thoroughly in Chapter V.

to percentages, each item being 100 percent. By a statistical formula then, weights are calculated which have a range of $\frac{1}{4}$. The criterion blanks are scored by these new weights and standard scores are determined from these scores. The new means of distribution is given the score of 80 and the standard deviation the score of 10.

S c o r i n g a b l a n k. - - Strong sets forth what is accomplished by scoring an interest inventory:

The test is useful in that it makes it possible for young people to indicate their liking for specific activities one at a time. This they can do when at the same time they are often unable to verbalize the sum total of all their interests. Scores based on all the specific responses aid the student to select an occupation when he does not know the interests associated with the various occupations, even if he has sized up his own interests correctly. The interest test eliminates then the necessity (1) of knowing what is involved in the various occupations, (2) of cataloging one's interests and estimating their relative values, and (3) of determining which occupations will provide maximum opportunity of doing what one wants to do and minimum necessity of doing what one does not want to do.¹

The blank must be scored separately for each scale and therefore as many scales must be used as there are occupations in which the subject is to be tested. Although the blanks may be scored by machine, they can be also scored by hand. For this purpose, stencils are provided for each occupation. Each consists of nine pieces of cardboard corresponding to the nine columns of items of the test. On each slip are contained the weights of the occupation in the three columns of each item. To illustrate the scoring, in Table II is shown the first ten items of the blank for Minister interest, and opposite them are the weights which appear on the stencil. In the third column is checked the responses made by a Roman Catholic Cleric on this scale, and the fourth column contains the scores obtained by this Cleric for Minister interest.

Table II
Scores Obtained by a R.C.Cleric for Minister Interest

First ten items on the Vocational Interest Blank	Scoring weights for Minister Interest			Responses of a R. C. Cleric			Scores for Minister Interest Obtained by this Cleric
	L	I	D	L	I	D	
Actor	2	0	-2			X	-2
Advertiser	0	0	0	X			0
Architect	1	0	0			X	0
Army Officer.	-1	-1	2	X			-1
Artist	1	-1	-2			X	-2
Astronomer	2	0	-2		X		0
Athletic director	0	1	-1	X			0
Auctioneer	0	0	0		X		0
Author of novel	2	0	-3		X		0
Author of technical book	-1	1	0		X		1
Total 10 items							-4
Total 400 items							-5
Standard Score . . . . .							.22
Rating							C

If we examine Table II, we will see in section two, how a R. C. Cleric checked the items: He dislikes to be an actor and that gives him the weight of -2; he likes to be an advertiser but since no weight is assigned to that coice, he is given a zero score for that item, etc. The total of these weights of these ten items is -4 and for the 400 items -5. This total is the raw score for the person. The total score indicates the liklehood that the person does or does not possess the interests of men in that given occupation: a high score means that he has the interests of that occupation, while a low score means that he does not possess such interests. In this case a total score of -5 indicates he does not have the interest that ministers possess.

In order that the resulting raw scores for many occupations of one person may be compared, standard scores have been calculated by the formula $10 \frac{X - M}{\sigma} + 50$. X is the raw score; M is the means of distribution; σ is the standard deviation of the distribution; and fifty is added to obviate negative scores and decimals. In table II, the standard score for this Cleric is 22. In Table III is shown the table of scores for the Minister Scale by which any raw score can immediately be translated into a standard score.

Table III
Norms for the Minister Scale

Ministers			Percentiles		
Raw Score	Standard Score	Rating	250 Ministers	306 Stanford Freshmen	285 Stanford Seniors
270.....	70	A	99		
260.....	68	A	97		
250.....	67	A	96		
240.....	65	A	94		
230.....	63	A	91		
220.....	61	A	87		
210.....	60	A	81		
200.....	58	A	77		
190.....	56	A	73		
180.....	55	A	67		
170.....	53	A	59		99
160.....	51	A	51		99
150.....	50	A	41		99
140.....	48	A	37	99	99
130.....	46	A	31	99	99
120.....	44	A	28	99	99
110.....	43	B/-	24	99	98
100.....	41	B/-	19	97	98
90.....	39	B/-	16	97	96
80.....	38	B	13	96	95
70.....	36	B	11	95	93
60.....	34	B	9	93	93
50.....	33	B-	7	92	90
40.....	31	B-	5	90	88
30.....	29	C/-	4	87	87
20.....	27	C/-	2	85	83

1. Edward Strong, Scale for Measuring Interests of Ministers, September, 1938 to be used with the Vocational Interest Blank for Men.

Table III
Norms for the Minister Scale

Ministers			Percentiles		
Raw Score	Standard Score	Rating	250 Ministers	306 Stanford Freshmen	285 Stanford Seniors
10.....	26	C +	2	80	79
0.....	24	C	2	75	74
-10.....	22	C	1	69	68
-20.....	21	C	1	62	64
-30.....	19	C	1	58	59
-40.....	17	C	1	52	54
-50.....	16	C	1	46	48
-60.....	14	C	1	44	42
-70.....	12	C	1	40	37
-80.....	11	C		33	33
-90.....	9	C		27	29
-100.....	7	C		22	24
-110.....	5	C		19	20
-120.....	4	C		16	16
-130.....	2	C		12	12
-140.....	0	C		8	9
-150.....	-1	C		7	5
-160.....	-3	C		6	3
-170.....	-5	C		3	1
-180.....	-6	C		2	1
-190.....	-8	C		1	1
-200.....	-10	C		1	1
-210.....	-12	C		1	1

Score	Raw Score	Standard Score	Percentage
Mean.....	152.6	50	
Sigma.....	58.90	10	
Ratings: A.....	123 and up	45 and up	71.2
B +	94 to 122	40 to 44	12.0
B.....	64 to 93	35 to 39	6.8
B-.....	35 to 63	30 to 34	5.6
C +	5 to 34	25 to 29	2.8
C.....	4 and below	24 and below	1.6

Lowest Significant Stand Score, 28
Reliability, .899

If we examine table III, we find the mean raw score is 152.6 and the σ of the distribution is 58.9; also that the mean raw score is now called 50 standard score, and a range of 58.9 raw scores is called a range of 10 standard scores. From the table can be read directly the standard score for any raw score on the scale, for example an individual having a raw score of 145 would have a standard score of .49.

To make possible an understanding of the results for persons inexperienced with statistics, scores have been translated into ratings and to make the test more easy in guidance and employment usage, raw scores are interpreted in terms of A, B⁺, B, B⁻, C⁺ and C. An A rating means that the individual possesses the interests of the men successfully engaged in that occupation; B⁺, B and B⁻ ratings mean that the individual probably possesses those interests; C⁺ and C rating indicate nonpossession of such interests. Going back to table II again, we note that the Cleric's Standard score in terms of the norms of Table III is C, which indicates he does not possess interests common to Ministers.

From Table III, it seems that the norms for each scale include percentiles for three groups; the criterion occupation group, college freshmen and college seniors both of Stanford University. The last two are used to furnish an idea of how their scores overlap the criterion group. But little use is made of results based on percentiles because the results are of value relative only to that criterion group and therefore do not tell much about relation of the individual's score

to the group as a whole. The use of standard scores has value because it gives a result validated against a definite objective criterion, namely the average interest of the men of that occupation.

I n t e r p r e t a t i o n o f S c o r e s. - - Generally for a person who is trying to decide upon an occupation, interest scores may be viewed as indicating the direction he should take. A high score in the Minister Scale indicates a possible future in that or some allied field. However, there are two interpretations to be considered: First, a person's score can be ascertained in reference to its criterion group. Here the raw score is converted into a standard score which indicates just where he stands in relation to the distribution of scores of the criterion group on that scale. Then, Standard scores can be compared, since they all mean the same thing. Secondly, from the individual's score certain things can be predicted. But, to understand the value of their prediction, and understanding of the extent of possession of interests of an occupation must be had.

When the three columns of responses of the 400 items are added, if a person's total score is plus, it means he has interests more in common with the criterion group than with the men-in-general group; if his score is negative, the reverse is the case. Thirdly, in interpreting scores, chance must be considered. The possibility that scores may be obtained this way was experimented by means of dice. The dice were thrown for each item of 40 cases; a 1 or 2 signified like; a 3 or 4, indifference; and a 5 or 6, dislike. It was shown that it was impossible to obtain as high as B/ in some occupations by chance; however in that

OF Ministers out of 40 chance scores, only 5 attained a C[/] and only one a B-. The mean chance score for the Minister scale was 20.2 with the σ being 4.4. The zero raw score of the criterion group in terms of standard scores, was 24; the percentage of the criterion group scoring above the mean chance score was 99, that of scoring above zero was 98 and scoring above c[/]* rating ii .25 standard score was 98. It is to be concluded then that there is no likelihood of obtaining a significant score on this scale by chance and that the criterion group scores far above chance scores. To preclude the effect of chance, a score is called significant if it is 4 standard scores above that obtainable by chance or is 2 standard scores above a zero score on the scale. Because of this definition, significant scores differ for each occupation. On the Minister scale, it is 25 standard scores.

P r e d i c t i o n.- - Again, to assign a person to some
1
occupation involves three assumptions: that interests are fairly permanent;
that interests are little influenced by vocational experience; and lastly
that with the interests of an occupation, one will like to do the things
that men in that occupation will like to do. If interests weren't
permanent, an assignment to an occupation would be of little value. How-
ever, Strong's research shows that correlation between occupational
interest scores when there is an interval ~~that~~ of ten years between test
2
and retest is .75. He also showed that if a senior had a C rating in 1927,
there were 2.3 chances in a hundred that it might be raised to B[/] in 1937
3
and 0.9 chances in a hundred that it might be changed to an A rating.

1. Permanence means persistence in time without change. With Strong it is employed with reference to a larger sampling of interest than mere items, over a considerable period of time.

2. Edward Strong. Op. Cit.. p.51.

As regards the second, data shows that occupational interest scores do not increase with occupational experience, in fact they decrease slightly - with the exception of Ministers. Strong's data shows that scores of 95 college seniors who followed and remained in the profession indicated in college, retested ten years later showed averages of 46.9 compared with 46.2 of the original; furthermore, that professional students with little or no experience score approximately as do men with many years of experience.⁴

As regards the third assumption, that an individual will enjoy the work of an occupation when he has the interests of adult men of that occupation, the fact that these individuals were engaged in the same occupation at the time of a follow-up seems to indicate that they have fair adjustment to that occupation in terms of ability and satisfaction, or else they would have changed.

With this in mind, then, it may be said that a man scoring low, for example, on the Minister Scale would not like the environment of that profession. On the other hand, if he scores high, he can be considered as having the likes of that environment. However, Strong counsels the use of many scales to obtain a complete picture of a person's interests. His high ratings will furnish an indication of where his vocational satisfaction lies. Perhaps it may be a combination of two professions as Ministry in the teaching field. In general one should

4. Edward Strong, Op. Cit. p.324

only seriously consider those occupations in which he receives A or B¹ ratings before considering any other; also he should carefully consider any occupation in which he receives a C rating before accepting it as his final choice.

1

Reliability of the Scales.- - Before any test can be said to have value, it must have two qualities that are characteristic of a good test, namely, reliability and validity. With the "odd even" technique, Strong obtained the average coefficient of reliability on 36 revised scales for men of .877 as based on the records of 285 Stanford seniors. For only one, that of certified public accountant, it falls below .80, namely .727, while in thirteen occupations the coefficient equals 90 or higher.² For the Minister scale it is .899.

But as well as the reliability of the scale, the reliability of individual scores i.e. how much the individual score deviates from the theoretically "true" score. An obtained standard score of say 50 on the test does not mean .50 but a series of scores which extend above and below that amount, depending upon the errors involved in the sample

1. What reliability means is explained by Henry E. Garrett as follows: "The reliability of a test, or of any measuring instrument, depends upon the consistency with which it gauges the ability of those to whom it is applied. If the members of a group take a test the second time, and each individual makes a score which differs very little or not at all, from his first record, the test is said to be reliable. On the other hand, if there are wide discrepancies between the scores made on the first and second administrations of the test, and if such differences occur in large number, scores on the test are inconsistent and unstable, and the test is unreliable." Henry E. Garrett, *Statistics in Psychology and Education*, Longmans, Green and Co., New York, 1944, p. 311.

2. Edward Strong, *Op. Cit.*, p. 82.

thru chance and errors in calculations. This variation is called the standard error of a score, which is obtained by the formula $\delta x = \sigma \sqrt{1 - r_{11}}$, WHERE σ is the standard deviation of scores of the criterion group and r_{11} the reliability of the scale. Since the stand error of a score on the Minister scale is 3.18, it means that there are 68 chances in 100 that the true score lies within the limits ± 3.18 from the obtained score. Thus, if one scores 50 on the Minister scale, there are 68 chances in 100 that his "true" score lies between 50 ± 3.18 i.e. between 46.82 and 53.18. This error is sufficient to change a persons rating from A to B etc. and vice versa.

2

V a l i d i t y.- - This quality of a test is very difficult to obtain because of the difficulty of setting up a criterion that would be a measure of the test's validity, or its ability to measure what it sets out to measure. The object of this interest test is to differentiate occupations - and Strong, after much consideration, defines that anyone known to his associates as a member of an occupation for at least three years is a member of that occupation. Therefore, Strong states that the "criterion of a vocational interest test should be whether

2. Garrett's explains validity as follows: "The validity of a test, or other measuring instrument, depends upon the fidelity with which it measures whatever it purports to measure. A yard-stick is valid when measurements made by it can be checked by other measuring rods. And, in the same way, a test is valid when the capacity, which it gauges corresponds to the same capacity as otherwise objectively measured and defined." - Henry E. Garrett, *Op. Cit.* p. 324.

or not the person will be satisfied in the career to which it directs him, other factors than interest being disregarded".¹ This satisfaction is defined as "reasonable" satisfaction in opposition to dissatisfaction since few men are completely or almost completely satisfied with their occupations. Summing up this criterion, it would consist of two parts; one pertains to the general direction to be pursued; and the other pertains to the route to be followed in the immediate future.

In 1932, Strong set up the following four proposition² as measures of the predictive value of his test:

1. Men continueing in occupation A obtain a higher interest score in A than in any other occupation.
2. Men continueing in occupation A obtain a higher interest score in A than other men entering other occupations.
3. Men continuing in occupation A obtain higher scores in A than men who change from A to another occupation.
4. Men changing from occupation A to occupation B serve higher than in B, prior to the change than in any other occupation, including A.

Data obtained on ten year following of 116 seniors and nine year following of 112 and 101 freshmen substantiated these as follows: The first proposition is bore out in eight out of nine comparisons. When group averages are considered, the mean score of vocational choices is 50.2 while the average mean of the highest occupation not chosed by the groups was 47.7. The second proposition is true in six of nine comparisons. The third is supported in five out of seven possible comparisons - - the average of the seven groups who continued had a mean score of 48.0 and those who changed occupations, 44.0.

1. Edward Strong, Op. Cit. p. 132.

2. Edward Strong, Op. Cit. p. 388.

The occupation choice of the data does not uphold the fourth proposition, since the average score of 68 men in college was 42.4, whereas ten years later the score of their occupation choice averaged 40.5.

To recapitulate the main points of this chapter, it has been ascertained that interest is an important factor to be considered in vocational choice if one is to obtain satisfaction and happiness in that endeavor. Therefore it is important that some means be obtained and used to guide people in selecting a life's work. Today, the best means of doing this is afforded by Strong's Vocational Interest Blank by which many occupations have been delineated from one another by statistical methods. This test, then, is a means whereby individuals may be tested to learn whether they have the interests that are common with the interests of people in a certain occupation who, presumably because of their interests, are satisfied and happy in that work.

CHAPTER II

THE ROMAN CATHOLIC CLERGY AND THE MINISTER SCALE

In the foregoing chapter was described the use of the Strong Vocational Interest Blank with thirty-nine different occupations - that a scale had been developed for each of these to furnish knowledge of an individual's interest relative to his classification or non-classification as having the same interests in common with the various representative groups of these occupations as compared with the broad interest of men-in-general. Among these various scales, one of particular importance to us, is that of Ministers and of its value for use with Catholic priests. It is true that the Ministers of all denominations have something in common, i.e. the salvation of souls. However, the question arises as to whether the interests of Protestant Ministers and that of the Roman Catholic Clergy would differ. It would be more likely that the Ministers of various Protestant Denominations have more common interests among themselves than with the Catholic Clergy because of the wide difference in worship and in their private lives. Priests take vows of chastity and obedience; they live, for the most part a communal life since all the clergy attached to one parish live together; they wear a distinctive garb on all occasions, they have a fairly ordered daily plan of life in that of daily Mass, breviary and so forth. In these things they differ from the Protestant Clergy and since these factors profoundly influence their attitude and mode of living, it is to be thought that there may be a basis for distinction of interests between these two groups. In conjunction with this study the theoretical aspect of the problem was considered by Mr. John Lynch of the University seminary, University of Ottawa in a Master of Arts

thesis presented to the Faculty of Arts through the Institute of
Experimental psychology in June, 1945.¹

Lynch studied the feasibility and utility of testing the interests of the Roman Catholic Clergy. He pointed out that the Catholic Priesthood is not an occupation in the ordinary accepted sense, but a vocation from Almighty God. But this vocation or calling does not ordinarily come immediately from God but by the call of the Bishop when the candidate has the requisite physical intellectual and moral qualifications, and expresses a desire to devote his life and efforts for the salvation of souls. In such a calling, God's¹ grace ~~and~~ ^{is} ever present and all things are possible to Him. But because He works through the persons and created objects around us, it is possible to analyze these things in their relation to this calling. Not in any sense, is the study made with the idea of disregarding the most important factor of any vocation -- the Grace of God; nor of disassociating it entirely from the human factors involved but at least a distinction of reason between the two can be made, to permit this study of the human factors in any vocation. The Grace of Almighty God is supernatural and as such is above our reasoning, so by this study an analysis is made of the situation upon which the Grace of God works. With this in mind, then, we can consider the priest in his multifold activities - social, education, moral, religious - not in their direct relation to God but in their human sphere. Lynch therefore concludes: "It is because the priest remains a man that the phenomena of interests play the same important role in the amount and direction of his accomplishments in the ministry that they do in the success of other vocations or occupations".

Even were it feasible to test the Roman Catholic Clergy, would there be any use for such in the present method of vocational encouragement and education of the Roman Catholic Church? Lynch points out that with an understanding of the limits of such testing, it has definite ability. Interest tests only furnish a segment of the information of an individual in counseling in any sphere. Therefore, it could be of use as one of the factors in the direction of the initial counseling of a student, and later on as a directive to students in the seminary as to what interests might be cultivated by him in order that he might prepare himself better for his future work and associations with the clergy and laity. Certainly when we consider that the rates of students who begin to study for the priesthood in high school for Religious Congregations and are actually ordained, is one out of four, and that from 5 to 10 percent of those in major seminaries leave because they feel they have no vocation, there is room for availing ourselves of all the means within our grasp to aid in the selection of students and their continuance of studies. Such means would be very beneficial to the individuals because the Church points out to the directors of vocations that decisions should be made as early as possible in the students studies so that he might be able to fit himself for some other domain of endeavor before he becomes too old for his chances of taking up another work are slim because of his age, responsibilities of the demands of the occupation. Furthermore, an interest test could be useful in post-ordination assignments. The Church is universal and is interested in men as a whole. The Church must have means to direct men in the social and education world as well as the strictly moral and religious fields.

She therefore, needs teachers, social directors, administrators, etc., as well as parish priests. Such a test could help to place a newly ordained in the field to which his abilities are best suited for - the Advancement of the Church and the salvation of souls.

Having justified its use theoretically, for the Clergy, the problem then was to find a suitable medium for testing these interests. Of interests tests available, the one that seemed most likely to be a proper testing vehicle, was Strong's blank, because, and upon it, has gone more research in this field than any other test. Besides, it had already delineated so many other occupations with success and already had a scale for the clergy based on a criterion group of Protestant Ministers. This, then, would furnish us a means of immediately solving one of our problems: whether the interests of the Protestant Ministry and that of the Catholic Clergy were the same or could they be distinguished as Strong had distinguished among this thirty-nine occupations. On the basis of our investigation - - a detailed account of which will follow, Lynch drew forth the general conclusion that the Minister Scale was not suitable for the Catholic Clergy while Catholic Clergy interests definitely could be associated with the scale for Group V (Moral Uplift) which included such occupations as: social science teacher, minister, personnel manager, Y.M.C.A. secretary, Y.M.C.A. physical director and city school superintendent. Lynch pointed out that a specific scale for this group was feasible since otherwise, their results would not have been so normally distributed.

It is the purpose of this thesis, to analyze these results more thoroughly and in a more detailed way, also to make a start in the

construction of a new scale based on Strong's Inventory, for the Catholic Clergy. We will begin with a study of the samples of both the criterion group for the Minister Scale and the group of Catholic Clergy we have tested.

There is little information obtainable from Strong's book on his sample of Protestant Ministers. However, this is given: there were 255 Clergymen tested whose devotions were as follows: 112 were Presbyterian ministers, 85 Methodist ministers, the remaining 48 cases are divided among the other denominations. More than three fifths of these ministers live on the Pacific Coast; the others represented equally the rest of the country. The average age of this group is 42.6 years and the average education is 18.2 grades. On the basis of this sample, then, the scale was set up. All of the blanks were used to develop the scale but only 250 were used to determine the norms.

With this scale, a representative sample of the Roman Catholic Clergy was tested. The testing began at the University Seminary of the University of Ottawa, Ottawa, Canada. Thinking that blanks administered to all seminarians might be useful, results from 76 persons in the institution were obtained. The students ranged in class from first philosophers, thru the six year course, and included some graduate students and professors. Their ages ranged from 18 to 33. In addition to this sample, one was obtained at St. Mary's Seminary, Baltimore, Maryland, of 81 students of third and fourth year of theology, all of whom were in major orders i e. sub-deacons or deacons. Most of these were to be ordained to the Sacred Priesthood in a few months after taking the test.

In light of Strong's conclusions, in order to obtain the best representative sample of Catholic Clergy, it was decided to eliminate certain cases. In this way also, an external criterion of validity could be obtained. Strong's research showed that interests were fairly permanent at about the age of 25 years. Furthermore, it would be better to deal with men who are already in their profession. Seminarians as such are not part of the Clergy permanently until they have received the first major sacred order, the Sub diaconate. To really appreciate this factor in the sample, it should be kept in mind that once a sacred order is received, one is permanently a member of the clergy and after that it is a extremely rare case for one to leave that group to work in a purely secular profession. In this, there is a great difference between the Roman Catholic Clergy and Protestant Ministers since Ministers may easily and have left their work in the Ministry for other pursuits. Catholic Clergy remain subject to their Bishop forever, while the Protestant Clergy can take it upon themselves to leave the ministry as they will. When dealing with the factor of validity which concerns continuance in one's profession, this must loom large. As a result of these considerations, cases considered for the sample had to have that main qualification of having received at least the first of the major orders. Automatically then was solved the difficulty of including cases of individuals whose ages ranged below 20 or in the early 20's, because the ages of subdeacons average about 24 years. This would furnish us a required factor in the sample: permanence of interests of those who were to represent the group. Cases at the University of Ottawa

2. Major Sacred Orders are offices or steps in the hierarchy of the Catholic Church in which one may begin to ascend only when his Seminary course is almost completed.

where the individuals were French and had a limited knowledge of English, and limited experience with customs, recreations, readings, etc. of the United States, were also discarded so as not to unduly increase chance errors in the sample. Therefore from these 157 cases, the sample of 105 was drawn: 24 from the University of Ottawa and 81 from St. Mary's University Seminary. We will now discuss this sample in more detail, but first we will say a few words about the conditions under which the test was administered.

Because of the delicacy of testing interests that relate to a vocation to the Priesthood, which is a gift of God, some misunderstanding arose, as was natural, concerning the worth of such a test. Then, too, some felt that such a test would delve into something sacred - their relationship to Almighty God, in the sense that every seminarian is striving for perfection. To inquire into the defects which they were daily trying to overcome, seemed like revealing the very nature of their spirituality. However, when the nature of the test and its use were understood, the cooperation was general. Later on we will discuss some of their objections. But to allay anyone's fears, we decided at the University of Ottawa not to have them place their name on the sheet, or answer the questions on the 1st page with the exception of age and education. No time limit was given, each handed his test in when completed. But they were urged to answer swiftly and generally, the time recommended was about 35 to 40 minutes. All the blanks handed out were completed with the exception of about three.

However, with the tests at Baltimore, we obtained a little more information from the preliminary questions. In the handling of these tests anywhere, there are some difficulties. When one knows the daily horarium of a seminarian, one realized that each day is so planned with spiritual exercises, classes, studies and recreation, that there is little time for extraneous affairs. Add to this, the preparation for Ordination for those who were to be ordained and the schedule is formidable. However, of 100 blanks handed out, 81 were returned. Each student was given the blank to fill out when he found the time and then returned it. With this group, we requested the elimination of their name to allay their fears of asking personal questions. All were cooperative in answering the items but quite a few failed to completely fill the 1st page about their background. It was felt that under the circumstances, they had no time to do this. One advantage at least, in this rush, is the fact that they completed the test quickly, thereby recording their first impressions concerning the items.

After a discussion of the administration of the test, it might be well to analyze just what background this sample has. This information was gathered from the preliminary questions of the test. We were able to obtain an average of the formal education, age and the location of the residence of the whole group by personal supplementation. But, as was said, only the students of St. Marys answered the preliminary questions, as such so that information is taken from ~~the~~ their blanks only.

~~XXXXXXXXXXXX~~ To begin with, we might follow the order of the blank itself. First, what is the representative age of the sample? The range was from 23 years 8 months to 33 years while the average of

the group as a whole as 25.6 years. Secondly, the blank requests the information about the location of one's residence. Here we really have been fortunate with our sample, since the students come from diverse localities. This makes our sample representative of the Clergy in a wide territory.

Listed information shows that the group represented 19 states: Connecticut, Delaware, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, E Virginia, West Virginia and Wisconsin. The sample also included cases from the provinces of Ontario and Quebec in Canada and from Newfoundland. Here is listed the various dioceses and the number of cases from each dioceses that make up the sample: Amos (Quebec) 1, Baltimore 14, Camden 4, Dubuque 4, Fall River 5, Hartford 12, LaCross, 3, Manchester 10, Montreal 1, Nashville 3, New York 1, Ottawa 1, Portland (Maine) 1, Providence 8, Richmond 5, San Antonio 1, Saginaw 3, Scranton 7, Sioux City 2, St John's (Newfoundland) 2, Pembroke (Ontario) 1, Timmins (Quebec) 1, Wheeling 3, Winona 2, Wilmington 2, Youngstown 1, Besides there were 4 cases from the Congregation of the Oblates of Mary Immaculate of Ottawa, Canada. It was also ascertained by personal information, that the persons were descendants of the following nationalities: English, French, German, Hungarian, Irish, Italian, Lithuanian, Polish and Slovak. Some were only of the 1st generation in America but all were born here and were thoroughly American. Certainly this sample is representative of the Clergy over a wide territory. But now let us see what information was obtainable from those.

In the first place, it must be noted that only the first set of questions were answered, namely those requested of persons in school. Secondly the results of the answers were obtained from over 2/3 of the blanks of the Clergy at St. Mary's in Baltimore. Or, in other words, the results give us information about half of the entire sample. An exception to this is the number of school years completed.

An analysis of all blanks show that the average number of school years completed was 19.8 years. The range was from 18 to 24 years. As was said our sample was limited to those in Sacred Orders. Only those finishing their 3rd year of theology are eligible to receive the first of these, the subdiaconate. This year corresponds to the 7th year of college, or 19th in school. There are 40 of these in our sample. The second Sacred Order, the Diaconate, is received by 4th year theologians, or those in their last year. Of these, the sample includes 54. It might be kept in mind that almost everyone of these was to be ordained to the Sacred Priesthood within three or four months of taking the test. The remaining 11 cases of the sample are made up of priests, both graduate students and professors. The graduate work of the professors and students was in the following fields: Dogmatic Theology, Moral Theology, Canon Law, Civil Law, Roman Law, Education and Philosophy.

The next two questions on the blank concern school subjects. As to the first, the subjects the individual was most interested in, Theology was the main choice. Here is a tabulation of the answers and the number of cases selecting the subject: Theology 66, history 8, sociology 5, homiletics 4, Scripture 4, Church history 3, psychology 3, public speaking 2, liturgy 2, writing 1, cannon law 1, economics 1, and

church music 1, Among these, 39 cases listed Theology only and 12 blanks gave no answer at all. The second question seems to show like results: Asked what subject they expected to study in the future, the replies were: Theology 47, sociology 5, homiletics 4, history 4, scripture 3, psychology 2, apologetics 2, canon law 2, liturgy 2, and catechetics, Greek, economics, church music, mathematics, philosophy, languages, each with one. Of these, 34 said they would only study Theology, while 14 of the blanks had no response. From these two questions we can readily see the homogeneity of the interests of this group. For the vast majority, interests lie in Theology as such an allied subject such as sociology. In fact the relation of sociology to Theology by these results is confirmation of classifying both these types of work in Group V - moral uplift.

The last group of questions concerns occupations. All of course had entered the ranks of the clergy and were absolutely sure of their choice since having received a sacred order, they could never leave. This will be discussed in Chapter V in relation to the validity of this sample. Here are two questions whose results remain to be analyzed: listing various jobs at one time held, and listing occupations formerly considered as a life's work. As to the first, the following were listed: Clerking 23, retail selling 17, factory worker 10, farming 9, play-ground director 8, salesman 5, common laborer 5, truck driver 5, machinist 5, teaching 3, railroading 3, road construction 3, laboratory assistant 2, mining 2, mail carrier 2, accountant 2, and one each as gas station attendant, sailing, short order cook, meat packing, electrician, carpenter's helper, factory foreman, shipping clerk, painter, crane operator, private tutor, foreman, guide, radio staff organist,

steamfitter, usher, wholesale salesman, janitor, caddy, gardner, orphanage worker, baseball player, delivery man, bank teller, installment collector, sanitation worker, hotel clerk, musician, bingo announcer, and waiter. Of the sample, 13 cases didn't answer and 5 said they never had a job. The first thing that strikes our attention is the diversified occupations of the group. They have had varied experience and opportunity to acquire many interests. Yet, testing them on Group V scale, Lynch showed the homogeneity of their interests as a group since nearly all passed this test. It shows that our sample has coherence as regards to interests in spite of the various influences. The reason for doing most of these jobs, however, can be said to be more or less expediency -- most of these men, had only temporary jobs during vacations, to aid in financing their education. However there are some who intended the work to be fairly permanent as teaching or working in a bank as teller. These aren't jobs for mere vacation periods. Also it may be noted that some of these jobs fall into the interests of Group V -- such as playground director and teaching.

The last question is of more value since it requests a listing of occupations previously considered as one's life work. They listed their responses as: Medicine 8, teaching 8, social service 4, literary work 4, law 3, dentistry 2, engineering 2, police work 2, and one each for mechanics, professional army career thru West Point, international law, accounting, business advertising, seaman, business insurance, retailing and advertising, chemical engineer, mine engineering, clerking, farming, church music, business musician, physical education, fire fighting, acting, secret service, diplomatic service, and naval service. Of the 81 blanks, 23 gave no answer and 17 said they had never considered

any other profession. In considering these results, if we exclude those who gave no answer, and considering those who never had any other desire, we have a majority of the cases deciding on a life's work in Group V. Medicine is high but it is akin to Group V in the social line or desire to aid humanity. Teaching and social service are foremost after that and they are in Group V. These men, then, had fairly common interests all their life since most would be classified in Group V. Also it shows the stability of interests in the persistence of those who only selected one occupation and never changed, and through the fact that even though some others were considered, their interests had much in common with that of their final choice.

Before, finishing this chapter on the discussion of our sample, and going on to a presentation of the results of the testing, it might be well to examine the faithfulness with which these items were answered. Strong pointed out that one can raise his score appreciably by deliberately falsifying his responses. To offset this, he suggested an appeal to the person's desire to find out in what direction his interests were. But with our group, we have assurance that no attempt was made to falsify the answers because, first, we are dealing with men whose purpose to strive for perfection and such an intention would be contradictory to their principles. If they would fill in the blank, it would be filled faithfully or not at all. Some individuals did think a few questions were quite personal, yet my personal discussion with them showed, they would have no intention of answering the items any way but as they saw them. Secondly, in order to falsify, one must know in what particular direction he is striving to increase his score, whereas, in general, it

was found that the students were unfamiliar with the nature of such a test; they took it at its face value and filled it out because they were requested by a friend in need of data for a study. They would not gain or lose anything by it. Also, the fact that we requested them not to put their names on the blank was an incentive to fill the blank.

Some other factors in completing the blank are cited by Strong. From a knowledge of the administration of the tests and of the group itself, as from a survey of completed tests, it appears that carefulness was exercised in recording the responses. As to misunderstanding of the conceptions of "like", "indifference", and "dislike" -- such as manifested in an excessive tendency to use one of these three categories too frequently which would affect the score -- when the number of likes, indifferent and dislike responses were counted on each blank, it was evident that the responses were diversified and use made of all three categories.¹

However, there were some little difficulties evident. A few blanks had remarks such as "I feel that many of the questions did not have the Clergy (Roman Catholic) in mind when made "or" the Priesthood is not an occupation or profession." A few personally said they considered some items of Part VIII, Rating of Present Abilities and Characteristics, as too personal, but also said that they answered these faithfully. As to other remarks, we must bear in mind that we are dealing with an exclusive group, most of whom have been educated in an atmosphere of the Priesthood since they were quite young.

1. A survey of the responses in percent of these three categories for every item, the parts and the whole test in Appendix bear this out.

Therefore, remarks of a few such as "too vague" in regard to the item 156, "Smokers"; "not familiar" with the magazines: item 175: "Judge" and item 177 "System", shows that these things have been outside of their environment. One or two remarked that they did not have such subjects as mechanical drawing, military drill, shop work. Such responses show a misunderstanding of the instructions but these are negligible in regard to the whole.

Of a little more importance would be unanswered items. Here is a summary of the items that were missed four times or more: item 2, advertiser 6 times, item 5 artist, 4; item 7 athletic director, 6; 21, cashier in bank, 4; 22 certified public accountant, 6; 23 chemist, 5; 32 electrical engineer, 7; 35 factory manager, 5; 175 "Judge", 9; 176 New Republic, 11; 177 "System", 15; 179 American Magazine, 7; 181 "Atlantic monthly", 8; 376 able to meet emergencies quickly and effectively, 4; 394 best likes friends are superior, equal or inferior in ability to me, 5; 393 when caught in a mistake usually, seldom make, or practically never make excuses, 4; and 395 ability to handle complaints, 4. The absence of responses to these items seems to be due to some extent to each person's lack of understanding, also to rapidity of answering so that one or more were skipped, to lack of knowledge about items especially magazines, and finally to lack of just knowing one's attitude in regard to evaluation of one's characteristics. Although these defects when treated in detail seem to be great, yet when we consider the whole group, the number of questions, the cooperation obtained, we feel the responses were well given.

In concluding this chapter, it might be well to recall its principal ideas. Since it is feasible to test the Catholic Clergy in

regard to their interests because priests live in the world and have interests like everyone else and since it is useful as an aid in counseling vocations and in placement after ordination, it was decided to use Strong's Vocational Interest Blank for this purpose. A sample of 105 Catholic Clerics was obtained from the University of Ottawa, Ottawa, Canada and from St. Mary's Seminary, Baltimore, Maryland. This sample seems to be a good representation of this group, even though the number of cases is small, because they are obtained from a wide ~~group~~ geographical area. It is a good sample in terms of Strong's requirements since they are all definitely settled in this vocation because of their reception of Sacred Orders, and since their average age is 25.6 year, an age at which interests seem to be stable and permanent. The data obtained from this sample, particularly that obtained by the scoring of these cases on the Minister Scale will be considered in the next chapter.

CHAPTER III

RESULTS OF THE CATHOLIC CLERGY ON THE STRONG VOCATION INTEREST BLANK

Having examined our sample of the Roman Catholic Clergy and the mode of the administration of the test to this group, we concluded that it appears representative and that the results seem to be worthy of consideration as indicative of their interests. Therefore, we will proceed with the analysis of this data obtained from the correction of these blanks and compare it with the results of the group of Protestant Ministers upon whose results the scale was developed. First in treating the results as a whole, we want to know exactly what success and failure was obtained by the Roman Catholic Clergy on this Ministers Scale; secondly, we will consider the difference in the results of these two groups.

1. The success and failure of the Catholic Clergy tested on the Ministers Scale.

Since our purpose in working with interest tests and the Catholic Clergy is to find a proper and useful vehicle on which to test the Clergy, our first concern is whether or not the Minister scale of the Strong Vocational Interest Blank would serve this purpose. An immediate answer can be obtained by a glance at the general results of all cases of Catholic Clergy tested as present in Table IV.

TABLE IV
 Distribution of Ratings of Catholic Clerics on the Minister
 Scale Compared with that of Protestant Ministers and a
 Normal Distribution

Rating and Standard Scores	Actual Distribution based on ten scales	256 Ministers	105 Catholic Priests
A 45 and up	70.2	71.2	24.8
B / 40 to 44	11.9	12.0	19.0
B 35 to 39	9.6	6.8	12.4
B- 30 to 34	4.8	5.6	16.2
C / 25 to 29	2.5	2.8	15.2
C 24 and below	1.0	1.6	12.4

The results differ widely: only 24.8 per cent of the Catholic Clergy received an A compared with 72.2 per cent of the Ministers whose results approximate those of the actual distribution based on a tally of distributions of scores of ten criterion groups on their respective scales which is also presented in the table. If we add the results of those receiving A, B~~/~~ and B-, within which limits one may be considered having the interests of the criterion group upon which the involved scale is based, we find that only 56.2 per cent of the Catholic Clergy have those interests compared with 90 per cent of the criterion group. Conversely, whereas only 4.4 per cent of the Ministers received C~~/~~ and C-, indicating very little interest possession in relation to the group as a whole, 27.6 per cent of the Catholic Clergy received these ratings. Evidently these figures show a wide divergence in the results of two groups which are supposed to be a fair representation of their kind; in any case, the divergence is wide enough for us to conclude that the Minister Scale is not a proper testing vehicle for the Catholic Clergy and that if this blank is to be utilized for testing Catholic priests,

or students for the priesthood, a new scale will have to be developed.

2. Differentiation of Ministers and Catholic Priests

Even though the general results of the Catholic priests show by their lack of success on the Minister scale that it is not a suitable instrument for testing them, yet the problem arises as to whether or not we can differentiate these two groups to the extent that a separate scale can be developed for Catholic priests alone. Strong showed that men engaged in occupations have a characteristic pattern of likes and dislikes which differentiates them from each other. Let us examine the difference in this regard between our two groups.

First, to show this difference in a general way and to show the comparative results of both these groups on the Minister Scale, Table V presents a comparison of the mean and sigma of both raw and standard scores of these groups.

TABLE V

Comparison of Ministers and Catholic Priests by Mean and Sigma of Raw and Standard Scores on the Minister Scale

Sample	Raw Score		Standard Score	
	Mean	Sigma	Mean	Sigma
256 Ministers	156.6	58.9	50	10
105 Catholic Priests	76	63.7	36.1	10.6

These results show in a general way that a difference exists. Comparison of means indicates a large divergence in central tendency of both groups. In regard to raw scores, the mean of the Minister Sample, 156.6 is almost twice that of the mean for Catholic Clerics which is 76. Transcribed into standard scores, a better view is obtained because the values given to standard scores permit a better comparison. Here the mean of 50 for Ministers compares with a mean of 36.1 for the Catholic Clergy. The divergence is great enough just by general observation to indicate that the two groups differ considerable in interests as a whole, at least sufficiently so that they should not be tested by the same scale.

A more precise view that this differentiation between these two groups exists is presented in Table VI. Here, we have the standard means of both groups and the difference between their means which is 13.9 standard scores. The critical ratio of this difference is 16.5 which shows beyond doubt that there is a significant difference in the interests of these two groups.

TABLE VI

Differentiation of Ministers and Catholic Priests by Use of the Minister Scale

Sample	Mean	Sigma	Difference between Mean of Ministers and Catholic Priests	Critical Ratio of Difference of mean	Percentage of over-lapping	Percentage of Letter Ratings		
						A	A and B ⁺	A, B, and B-
255 Ministers	50	10	...	...	...	71.2	83.2	90
105 Catholic Priests	36.1	10.6	13.9	16.5	48.3	24.8	43.8	56.2

Even though these two groups differ than, there is some overlapping between the distributions.¹ In Table VI is presented the percentage of overlapping between these two groups. It is 48.3 percent. The data given in the column - Percentage of Letter Ratings - shows the amount of overlapping for each rating, namely 24.8 percent of the Catholic Priests receive A on the Ministers Scale, compared to 71.2 percent of Ministers, which shows that 24.8 percent of the distribution of our sample coincides with the interests of 71.2 percent of ministers, etc.

Overlapping is an indication of validity of the scale and therefore of any new scale developed for the Catholic Clergy. This 48.3 percent of overlapping of the two groups would seem to indicate that a new scale for Catholic priests would not be valid. But it must be born in mind that overlapping is not to be viewed as the criterion of perfect validity, since actually groups do possess interests that are common. The ability to distinguish two groups with fine distinction will depend upon the amount of overlapping.

Another way to differentiate groups besides mean scores and percentage of overlapping is the method of differentiation by correlation. This procedure gives the best idea of differentiation. A correlation of occupations showing their differentiation can be obtained by scoring a group on the two scales of these occupations and correlating these two sets of data. However, we have no Catholic Clergy scale, so we cannot follow this procedure. In order to obtain a correlation of some kind for these two groups, the following method was used to produce the data for correlation: we tallied the total responses for each like, indifference

1. Overlapping means: "the percentage of scores made by one group

and dislike for each item of our sample. We also had this data for Ministers. Therefore, we multiplied the total responses for each like, indifference and dislike of each item by the corresponding scoring weights on the Minister Scale. Where the weight was zero for the three possible responses for an item, the item was left out of the calculation. Adding these totals we obtained a score for each item which was the total score for the whole sample for that item. Correlating these two sets of data for the whole test, we obtained correlations for the whole test and for its parts. This is presented in Table VII.

TABLE VII

Correlation between Data of Ministers and Catholic Priests by Parts of the Blank

Parts of the Blank	N Items	r	pr
I. Occupations	94	.79	\pm .03
II. School Subjects	29	.92	\pm .02
III Amusements	40	.68	\pm .06
IV Activities	39	.67	\pm .06
V People	31	.71	\pm .06
VI Preference of Activities	35	.15	\pm .09
VII Comparison of Items	29	.71	\pm .06
VIII Present Abilities	23	.63	\pm .08
Entire Blank	320	.64	\pm .02

To understand the meaning of these correlations, we may consider that the responses to each item are limited to like, indifference or dislike. When one group responds with "like", a second group which differs greatly from it would respond with "dislike." This means that the difference between the groups is brought out in the resulting different mean scores of each group. The greater the difference in mean

scores, the greater the difference between the groups. In terms of correlation, this would mean the two groups shift from 1.00 towards -1.00 in regard to a point of reference, zero, namely the men-in-general group. A minus correlation does not mean that one group likes what the other dislikes, but that they differ in interests of each group in a different direction from the interests of men-in-general.

Examining Table VII then, we observe that the correlation for the items of the entire blank between these two groups is .64 with a probable error of $\pm .02$. This probable error indicates that the real correlation is $.64 \pm .02$ and means that there are 50 chances in 100 that the true correlation lies within the range of .62 to .66. There are 99 chances in 100 that the correlation lies within the range of .56 to .72 (4 times the probable error will increase the chance of correlation to 99 out of 100). This shows a high correlation between these groups but it does not mean that they cannot therefore be differentiated. Among the various scales available, there are 17 correlations above ¹.80 and four correlations below -.80 out of 861 raw correlations. The high correlations indicate that these pairs of occupations are not differentiated to any great degree by the interest test; the low correlations show very great differentiations between those pairs. Our correlation of .64 then shows great agreement but differentiation between these two groups is possible. This is shown in Table VII which reproduces the correlations between Ministers and the other occupations of Group V, the Moral Uplift Scale. However, in comparison with our

1. Edward Strong, Op. Cit. p. 114.

correlation, we should keep in mind two things: first, our correlation is not based on its own scale, but on the Minister Scale, compared to responses of Ministers; and secondly our sample consists of only 105 cases whereas all the other listed occupations average 250 cases. This causes some difference in the resultant correlation but, in general, it gives us a picture of the way these two groups correlate.

TABLE VIII

Correlation between Minister Scale and other Scales Classified in Group V, Moral Uplift.

Minister Scale with	Correlation
Y. M. C. A. physical director . . . . .	.63
Personnel manager . . . . .	.41
Y. M. C. A. Secretary . . . . .	.72
City School Superintendent . . . . .	.75
Catholic Clergy . . . . .	.64

We can see that even with a correlation as high as .75, that between Ministers and City School superintendent, separate scales have been set up. These correlations are high among these occupations because their interests are quite common, yet their differences are sufficient to warrant separate scales for testing individuals for a more exact and precise direction of their interests.

There has been made an effort to compare the results on the various parts of the blank as regards to Ministers and the Catholic Clergy. Table VII has this data. We notice that seven out of eight parts have a correlation of .63 and above which shows agreement to a large extent on each of these parts of the blank between these two groups. The average correlation of these seven parts is .73 and the highest

agreement is in school subjects where the correlation is $.92 \pm .02$. We can readily see how these two groups would tend to go together here because they both receive a formal classical training, that at least in its college aspect would agree remarkably well. The lowest correlation occurs for Part VI Preference of Activities which is $.75 \pm .09$. This indicates a slight tendency to correlation but the high probable error makes possible even negative correlation in regard to this part. Since this part concerns mainly conditions of one's work, it seems a comparison of the responses of both these groups indicate slightly different trends of each group. Ministers seem to want more freedom and less discipline in work, more opportunity to speak publicly, and do not care for supervision or to supervise to the extent that the Catholic Clergy do. The Clergy on the other hand, want courteous treatment from superiors, seek more opportunity for consulting others and seem to like activity that is a little more exciting. These differences might go a ways in explaining this low correlation. It probably brings out the greatest differences between these two groups and presents data for their differentiation.

Before closing this chapter, it might be well to consider the results of Ministers and the Catholic Clergy in reference to Group V. Even though their results show significant difference, nevertheless the 48.3 percent of overlapping indicates considerable common interests. Correction of the 105 cases of the Catholic Clergy by means of the scale for Group V bears this out and shows clearly that the Catholic Clergy scale would be classified in this group. Table IX furnishes the results of this comparison.

TABLE IX

Distribution of Ratings of Occupational Criterion Groups Classified in Group V and of Catholic Clergy Scored on Group V Scale. ¹

Occupation	Standard Scores and Ratings					
	45 up A	40 to 44 B ⁺	35 to 39 B	30 to 34 B-	25 to 29 C ⁺	24 & below C
Y.M.C.A. physical Director	75.0	7.0	8.0	7.0	2.0	1.0
Personnel manager	48.0	11.0	18.0	10.0	8.0	5.0
Y.M.C.A. secretary	87.0	6.0	5.0	2.0	0	0
Social science teacher	73.0	15.0	6.0	2.0	3.0	1.0
School superintendent	66.0	10.0	14.0	4.0	6.0	0
Minister	92.0	4.0	3.0	1.0	0	0
Average	71.8	12.0	7.3	4.7	3.0	1.2
Catholic Clergy	77.1	6.7	11.4	2.8	1.0	1.0

1. Results for all except Catholic Clerics taken from Edward, Strong, Op. Cit. Table 42, p. 172.

The data shows how well the Catholic Clergy as a group belong to Group V or Moral Uplift. Compared with the rest of the groups, having 77.1 percent of its cases receiving A ratings, it ranks third highest out of seven groups. This amount is higher than the average of 71.8 percent for all groups classified in Group V. If we consider the percent of A, B⁺ and B ratings, we find the average for the group is 90.1 percent, while that of the Catholic Clergy is 95.2 percent. It is evident, therefore, that a scale for the Catholic Clergy would be classified as having the interests of this group of occupations but at the same time can be differentiated from them by a separate scale of their own.

A final observation based on data in Table IX shows that 95.2 percent of Catholic priests may be considered as successfully having passed the test as scored with the Group V scale, while Table IV shows

that only 56.2 percent of them passed the test when scored with the Minister scale. Yet Strong has concluded from all his data that people of a particular occupation score, on an average lower on a group scale than on a particular scale.¹ We conclude, therefore, that the Minister scale should not be used to test the interests of the Catholic Clergy, but should have a scale of its own.

To briefly sum up our conclusions, based on the data presented in this chapter then, we can say that Catholic priests do not test well on the Minister scale since 27.6 percent of them failed in the test compared to 4.4 percent of Ministers. This warrants a new scale. The proof is established in the fact that there is a significant difference in the results of both Ministers and Catholic Priests.

1. Edward Strong, Op. Cit; p. 177.

CHAPTER IV

AN ANALYSIS OF LIKES, INDIFFERENCES, DISLIKES OF MINISTERS AND CATHOLIC CLERICS

In general, comparison of the success and failure of Ministers and Roman Catholic Clerics of Chapter III, shows that these two groups differ to such an extent in their interests, that the development of a new scale for the Roman Catholic Clergy is possible. But before we proceed with a discussion of how to bring about the realization of such a scale, it would be well to analyze further the results of these two groups by considering the actual responses of the various items. That is the aim of this chapter; to consider in detail, the responses of likes, indifferences and dislikes of these two groups.

In interest testing, it has been found that there is more agreement than disagreement. However, distinction of groups is based on the differences. We desire to compare the responses to see how much agreement there is and how much disagreement. Particularly it would be well to learn if the differences furnish some indication wherein the basis of separation of these two groups lies. Strong has pointed out that this data does not furnish information as to which group likes items as distinct from another, since items may have the same rank order between two groups but one group may like all the items more than the other group.¹ But what we wish to learn first is whether Ministers like, are indifferent to or dislike items more than the Roman Catholic Clerics or vice versa.

1. Edward Strong, Op. Cit. p. 95.

1. Total results considered

We can obtain a fairly comprehensive view of this situation, if we look at Table X, which contains a summary of the likes, indifferences and dislikes of both the group of Ministers and the group of Roman Catholic Clergy. The data furnishes the actual number of responses of the individuals of these two groups. But for the purpose of comparing their results, and since we are dealing with two groups differing in number, the data is also presented in percentages. No attempt has been made to obtain the critical ratios of these differences because the procedure involves more work than it is worth in regard to our problem. Critical ratios obtained by Strong on percentage differences of 32 to 42, were approximately 10 to 13. Here we have much smaller percentage differences and a glance at the table would show few would obtain a critical ratio of 3. Comparing the total results for items liked, the Catholic Clerics like them more by 3.5 percent which is not significant, even though it is a reversal of Strong's conclusion based on much data that with age, likes increase. The average age of the Minister sample is 42.6 years and that of the priests is 25.6 years. Perhaps this might have been different had our sample been larger. In the indifferent column, we see Ministers are 4.5 percent more indifferent than Clerics. As to dislikes, there is only a divergence of 1 percent in favor of the Catholic priests. In general then, the results are very similar and not significantly different.

An analysis of the results between these two groups in another way is shown in Table XI which gives the mean and standard deviation of likes, indifferences and dislikes. Strong has calculated the significant differences to be 5.0 percent between likes, 2.7 percent between in-

TABLE X

Summary of Likes, Indifferences, Dislikes, Responses and Percentages of Ministers and Roman Catholic Clerics by the Parts of the Blank.¹

Parts	N Items	Like		Indifferent		Dislike	
		Responses	Percent	Responses	Percent	Responses	Perce
255 Ministers							
I Occupations	100	6,362	26	11,034	44	7,459	30
II School Subjects	36	5,059	56	2,812	32	1,103	11
III Amusements	49	5,641	46	4,106	33	2,595	21
IV Activities	48	5,274	44	3,952	33	2,783	23
V People	47	3,592	30	4,188	36	4,001	34
VII Comparison of items	40	3,869	39	2,957	29	3,222	32
VIII Present abilities	39	4,819	49	2,874	29	2,103	22
Total including VI	599 ²	34,616	38.5	31,923	35.5	23,266	26
105 Roman Catholic Clerics							
I Occupations	100	3,439	33	3,475	33	3,558	34
II School Subjects	36	2,091	56	1,015	27	617	17
III Amusements	49	2,383	47	1,557	31	1,140	22
IV Activities	48	2,344	47	1,453	29	1,232	24
V People	47	1,704	35	1,654	33	1,567	32
VII Comparison of items	40	1,756	42	1,080	26	1,318	32
VIII Present abilities	39	1,923	47	1,318	32	890	21
Total including VI	399	15,640	42	11,552	31	10,322	27

1. Part VI, Order of Preference of Activities, is excluded since the instructions require 30 percent of items to be checked as likes, 40 percent as indifferent and 30 percent as dislike. Totals include Part VI

2. The last item "worry about mistakes" was omitted.

ANALYSIS OF LIKES, INDIFFERENCES, AND DISLIKES BETWEEN MINISTERS 60a
AND ROMAN CATHOLIC CLERICS

TABLE XI
Mean and Standard Deviation of Like, Indifference and Dislike
Percentages of Ministers and Roman Catholic Clerics.¹

Part	N Items	Like		Indifferent		Dislike	
		Mean	Sigma	Mean	Sigma	Mean	Sigma
255 Ministers							
I Occupations	100	25.6	18.8	44.2	12.2	30.4	17.7
II School subjects	36	56.2	18.6	32.3	13.0	12.1	10.9
III Amusements	49	47.8	29.5	32.9	13.8	22.9	21.4
IV Activities	48	43.8	22.5	33.4	14.4	22.4	16.3
V People	47	31.6	27.5	35.5	17.9	33.8	26.4
VII Comparison of items	40	39.4	28.1	28.9	17.4	31.0	15.3
VIII Present abilities	39	49.6	25.1	29.7	12.8	21.5	23.2
Total including VI	399 ²	37.7	25.8	36.3	14.2	26.6	20.8
105 Roman Catholic Clerics							
I Occupations	100	36.7	18.8	34.8	25.8	34.5	14.6
II School subjects	36	56.2	17.8	27.1	10.1	16.7	10.5
III Amusements	49	48.2	24.7	31.1	12.4	21.7	19.2
IV Activities	48	46.8	21.6	27.2	9.6	25.2	14.1
V People	47	32.7	31.0	34.1	21.5	32.1	27.4
VII Comparisons of items	40	42.4	20.2	25.8	17.9	32.8	21.6
VIII Present abilities	39	45.9	23.5	32.0	16.3	21.1	17.0
Total including VI	399	40.1	23.2	31.8	13.6	27.8	18.6

¹ Part VI, Order of Preference of Activities, is excluded, since the instructions require 30 percent of items to be checked as likes, 40 percent as indifferent and 30 percent as dislike. Totals include Part VI.

differences, and 4.4 percent between dislikes for populations such as ours since these equal approximately three times the critical ratio of the difference.¹ The general results for all items show that Catholic Priests have a mean of 2.4 percent greater than Ministers for likes, but a mean of 2.2 percent less than that of Ministers for dislikes. The significant difference is again found in the means for indifferences where the Minister mean is 4.5 percent greater.

Still another way of showing up the similarity of these two groups is produced in Table XII. Here they agree remarkably in likes for interest items. For 30.9 percent of the items, the Ministers and Clergy agree within a range of \pm 5 percent, for 57.3 percent of items the range is \pm 10 percent and for 74.7 percent of items, the range is \pm 15 percent. This is confirmed by Table XV, which shows the correlation of likes between these groups for all items is .84, although an actual count shows that Catholic Clerics like 239 items more than Ministers with a tie for 16

1. Edward Strong, Op. Cit., p. 95.

TABLE XII
Differences in Percentage of Likes for Interest Items
Between Ministers and Catholic Clerics

Differences in Percentage of Likes	Percentage of 399 items	Difference in Percentage of Likes	Percentage of 399 items
45	.5	-10	8.3
40	.8	-15	6.6
35	1.0	-20	4.0
30	1.8	-25	1.5
25	3.4	-30	1.3
20	3.5	-35	1.0
15	6.1	-40	1.3

TABLE XII - continued

Differences in Percentage of Likes	Percentage of 399 items	Difference in Percentage of Likes	Percentage of 399 items
10	10.8	-45	.5
5	18.1	-50	.3
0	20.1	-55	.0
-5	10.8	-60	.3

TABLE XIII

Similarity of Likes of Ministers and Catholic Clerics

Parts of Blank	Correlation
100 Occupations . . . . .	.90
36 School Subjects . . . . .	.93
49 Amusements . . . . .	.65
48 Activities . . . . .	.85
47 Kinds of people . . . . .	.87
40 Order of preference of activities . . . . .	.51
40 Comparison between items . . . . .	.85
40 Present abilities . . . . .	.77
Total of 400 Items . . . . .	.84

Considering the test as a whole, there is genuine agreement, which ~~is~~ has been the result of all testing with Strong, since there is more agreement than disagreement in interests among individuals, and which can be expected to be more so in our comparison where the field of work of these two groups is so similar. However, this does not preclude the possibility of differentiation for when the similarities are disregarded and only the disagreements are considered, differences loom large.

2. The parts of the blank considered separately.

Analysis of the data on the various parts of the test furnish similar conclusions. Going back to Table X, and comparing percentages of likes, we see that there are only two sets that seem to indicate some difference. Catholic Clerics like Part I, show Occupations 7 percent more than Ministers and Part V, People, more by 5 percent. But Catholic Clerics also dislike Part I, Occupations by 4 percent more and Part II School subjects, by 6 percent more. The greater percentage of dislikes for School subjects might be explained by the fact that generally those in school dislike such things more than those out of school, and our sample of Clerics were mainly still in school at this testing. Both these differences in likes and dislikes reflect in the indifferent column. Out of six comparison, Ministers were more indifferent in five, the greatest being in Part I, Occupations. Catholic Clerics were more indifferent to Part VIII, Present Abilities by 3 percent.

Considering the mean and standard deviation of these results, in Table XI, of twenty-one comparisons, only six are significantly different. In the comparison of likes, there is only one - Catholic Clerics like Part I Occupations, more than Ministers to the extent of 10.1 percent, in comparison of indifferences, Ministers are more indifferent in four parts -- 9.4 percent as regards Part I Occupations, 6.4 percent as regards Part II School Subject, 6.2 as regards Part IV Activities, and 3.13 percent as regards Part VII Comparison of items; in comparing dislikes, there is only one significant difference - that of Part II School Subjects, wherein Catholic Clerics dislike this part by 4.6 percent more.

For a final comparison of these various parts of the test, we might consider Table XIII, which gives the correlation of likes. The highest correlation, that of Part II, School Subjects is .93 and the lowest, that of Part VI, Order of preference of activities is .51. The average correlation is .79. It is very high for Occupations being .90, and in School subjects, .93. The least similarity in liking is found in Part III Amusements which is .65 and in Part VI, Order of preference of Activities which is .51. These latter may be explained by the fact that amusements and personal activities differ a great deal in individuals and that there is more room for variation in this regard in a specialized occupational group.

This data on the parts shows great similarity -- the significant differences are not too great. The differences in age of our samples and in the number of cases, are also factors to be kept in mind.

3. Interest trends

Having shown that there is more agreement than disagreement between Catholic Clerics and Ministers, it would be enlightening to know if there are any trends of interests peculiar to each of these groups. This study involves a great deal of work, since the items must be subjected to analysis and therefore even the results are hard to interpret because of the numerous factors involved. Here is presented a very general analysis of these trends.

First, various items were classified, their percentages of likes added and averaged for both our samples. This classification is very subjective and involves items with different tendencies and factors that influence other directions almost as much as the class they are in..

An example of this is item 63 Music teachers, one may select the item because one likes to teach, yet another may select it because the idea of music is more predominating. Some items were placed in more than one classification for this reason. No attempt was made to include all items, Table XIV shows these results.

TABLE XIV

Classification of Items with Percentages of Likes of Ministers and Catholic Clerics.

Classification of Interests	N	Average Percentages		Difference in percent
		Ministers	Catholic Clerics	
Linguistic - reading	5	83.8	78.8	5
Amusements - general culture	12	78.	61.5	16.5
People-desirable traits	9	74.4	73.6	.8
Linguistic - speaking	7	57.1	55.4	1.7
Influencing by advising, instructing.	4	53.8	55.8	-2
Dislike change	10	52.2	40.4	11.8
Occupation - writing	8	49.3	44.8	4.5
Linguistic - writing	9	44.5	44	.5
People - unfortunates	5	39.8	50.8	-11.
Amusement - noncultural, many people	6	37.8	55.1	-16.3
Instructing	21	37.6	46.8	-9.2
Amusement - noncultural, few people	30	33.4	37	-3.6
Influencing others by supervision	14	33.1	38.6	-5.5
Supervision	21	31.3	37	-5.7
Service to people	27	29.6	36.2	-6.6
Physical skill and daring	35	26.3	38	-11.7
Handling figures	8	17.8	18.3	-.5
Selling	8	10.9	14.6	-4.7
People - undesirable	9	8.6	7.9	.7

These results, although to be taken in a very general sense, because of lack of statistical refinement, show certain trends in interests of each of these groups. To ascertain statistical significance involves the calculation of the standard error of difference between these averages which is very difficult and not of that much value for our purpose. However, we can get some idea of what statistical significance would be from Strong's calculation of the standard difference between averages for ages 25 and 55 years with populations of 215 and 151 respectively for 13 items - it is 2.3 percent. Accordingly, he has figured that a difference of 7 percent or more between averages of items are statistically significant, since it has a critical ratio of 3 or more.¹ If we keep in mind that our groups 26.6 and 42.6 years with populations of 256 and 105, we see that our groups approximate his. Therefore, we will just consider those which seem to tend towards significance. There are only two groups which show more likes on the part of Ministers: In amusements that are of a general culture on 12 items, they average 16.5 percent more likes while on 10 items involving dislike of change they like 11.8 percent more. Regarding this last group, it would seem as if they are more conservative as regards stability of living; their greater average age may have something to do with their response.

In this table, the differences that have a minus sign show the average percent that Catholic Clerics like the group of items more. The greatest of these is 16.3 percent for 6 items of amusements, that are noncultural and involve many people participating. Some other groups that seem to indicate a difference show 11 percent more liking Catholic Clerics for unfortunate people involving 5 items, 9.2 percent more on

21 items involving instruction or teaching, and 11.7 percent more on 35 items concerning interests of physical skill and daring. This would seem to indicate that Catholic Clerics like unfortunates, teaching, and work involving excitement or change more than Ministers.

Other items, where it was thought difference, might exist, were those involving working conditions. A comparison with ten of these items is shown in Table XV which presents the rank order of these two groups. Four of these comparisons seem to warrant consideration. Ministers rank the item, certainly one's work will be judged by fair standards, second while Catholic Clerics rank it sixth. Perhaps Catholic priests expect rewards more in spiritual return. Priests rank the item, freedom in working out one's own method of doing work, fourth, while Ministers rank it eighth and the item, opportunity to understand just how one's superior expects work to be done, as tenth, while Ministers rank it fifth. These two items seem to have something in common, yet their ranking by Priests seem to be different from what would be expected compared to the ranking of Ministers because priests are under strict supervision and obedience to superiors, whereas Ministers in general are not. The last item, courteous treatment from superiors is ranked fifth by priests compared with tenth by Ministers, which result seems more in line with our observation.

To conclude this chapter, it might be said there is great agreement between these groups regarding their likes, indifferences and dislikes. However, the significant differences pointed out and the different

trends indicated between these groups, show that there is a basis for differentiating these groups. Therefore, Chapter V will deal with the method of constructing such a scale.

TABLE XV

Order of Preference of Certain Working Conditions of Ministers and Catholic Clerics.¹

Items Liked	Percentage Rated as Most Enjoyed		Rank Orders	
	256 Ministers	115 Catholic Priests	256 Ministers	105 Catholic Priests
Opportunity to make use of all of one's knowledge and experience	78	58	1	1
Certainty of one's work will be judged by fair standards . . .	73	25	2	6
Co-workers-congenial, competent and adequate in number	47	43	3	2
Steadiness and permanence of work	40	42	4	3
Opportunity to understand just how one's superior expects work to be done	22	15	5	10
Salary received for work	16	23	6	7
Opportunity for promotion . . .	11	22	7	8
Freedom in working out one's own method of doing the work . . .	3	35	8	4
Opportunity to ask questions and to consult about difficulties .	4	19	9	9
Courteous treatment from superiors	5	26	10	5

1. Instructions requested the individual to check three of these ten items that he liked best, then three that he liked least, and the remaining four as indifferent.

CHAPTER V

CONSTRUCTING A NEW SCALE FOR THE CATHOLIC CLERGY

The brief study of our data of the results of the Catholic Clergy tested on the Vocational Interest Blank according to the Minister scale has indicated a need for a separate scale for this particular group. The general results of the Catholic Clerics, in terms of the Minister scale, show lack of success. Although both these groups have a great deal in common as is shown in Chapter IV, wherein similarity of responses is observed to be so preponderant, nevertheless, the differences are so great both theoretically in the details of their work in life and in the analysis of the individual items and groups of items that the Minister scale would not be a suitable vehicle for testing the interests of the Catholic Clergy. That is the first and main conclusion derived from this study. But since it is not a suitable means and since John Lynch showed, at length, the desirability of such a scale for the Catholic Clergy, this chapter is devoted to the consideration of how to bring about the reality of such a scale - in other words, how would such a scale be constructed.

1. The construction of a new scale.

To obtain data for a new scale or testing vehicle of any type, we must have a sample of the group whose characteristics are to be tested and a criterion against which this group is to be judged. For a new scale then, we need a sufficient number of blanks answered by the members of the group or occupation in question, plus a sufficient number of blanks answered by men-in-general. Once this is done, the principle guides to the new scale are: Groups are differentiated by weighing the items in

which the two groups differ and ignoring the terms in which they agree. Before this can be done, the actual responses for like, indifference and dislike for each item must be tallied and totaled and then changed to percent, the total responses for like, indifference and dislike of each item equalling 100 percent. With these results special occupational groups and the men-in-general group are both directly comparable since the population of both samples is 100.

On the basis of this comparison, a scoring weight for each item of like, indifference and dislike is obtained through the revised statistical formula of Kelly.

$$\text{Weight} = 100 \frac{\Delta}{1-4 j \Delta^2}$$

$\Delta = \frac{a}{n} - p P$, means the relative frequency in any cell minus the relative frequency by chance.

$j = \frac{1-3 p q}{p^2 q^2}$ In calculations with a semi-equalized table, as ours is since it is in the form of percent, $\Delta = \frac{a - c}{2}$

The calculation of the weight for like of the first item "Actor" for Catholic Clergy scale is as follows:

	Items Marked	Items Not Marked	Total
Men-in-general	.21	.29	.50
Catholic Clergy	.46	.04	.50
Total	.67	.33	1.00

$$W. = 100 \frac{1/2 (.21 - .46)}{1-4 \left\{ \frac{1-3 (.21 \cancel{.46}) (.29 \cancel{.04})}{(.21 \cancel{.46})^2 (.29 \cancel{.04})^2} \right\} \left(\frac{.21 - .46}{2} \right)^2} = 4.1$$

The weight of 4, therefore, is obtained. Now depending on whether the percentage of the occupational group for which the scale is being made is greater or smaller than the corresponding percentage for

the men-in-general group, a plus or minus sign is assigned to that weight. In this case, the percentage of the Catholic Clergy is greater so the weight for Like for the first item on their scale would be $\neq 4$. However, this weight is reduced by means of a chart, since experimentation has shown that if weights are limited to a range of $\neq 4$, they produce the same results as higher weights. Therefore, differences of 11 and above obtained by the formula are assigned to weight of 4; 8 to 10. 3; 5 to 7, 2; 2 to 4, 1; -1 to 1, 0; -2 to -4, -1; etc. and the weight for the first item for Like on a new scale for Catholic Clerics would be $\neq 1$.

These weights according to Strong are the mathematical expression of two factors:

—"First, the extent to which the data. . . . differentiates any group and men-in-general (represented by the numerator of the equation): and secondly to which the data might be the resultant of chance (represented by the denominator of the equation). The more then, the data differentiates the two groups, and the less likely the data are due to mere chance, the larger the weighting and vice versa."²

Table XVI shows how the first five items of the blank would be evaluated for a scale for the Catholic Clergy based on the 105 case sample.

1. T.L. Kelly, "The scoring of Alternative Responses with Reference to Some Criterion", Journal of Educational Psychology, (1934), 25, p. 504-10. Cited by Edward Strong, Op. Cit. p. 611.

2. Edward Strong, Op. Cit., p. 611.

TABLE XVI

2

Determination of Weights for A Catholic Clergy Scale

First five Items on Vocational Interest Blank	Percentage of men-in General tested			Percentage of Catholic Clerics tested			Differences in percent- age			Scoring Weights for Catholic Cleric Interest		
	L	I	D	L	I	D	L	I	D	L	I	D
Actor (not movie)	21	32	47	46	28	26	15	-4	-19	1	0	-4
Advertiser	33	38	29	33	38	29	0	0	0	0	0	0
Architect	37	40	23	36	41	23	-1	1	0	0	0	0
Army officer	22	29	49	49	29	22	27	0	-27	4	0	-4
Artist	24	40	36	42	30	28	18	-10	-8	4	-2	-1

The sum of weights on the 400 items, after this comparison, constitutes the raw score on the scale of the test. Then the blanks of the criterion group of Catholic Clerics would be scored by these weights. Finally standard scores would be determined from the distribution of the scores of this criterion group by calculation. The mean and standard deviation and letting the mean equal 50 and the standard deviation equal 10.

2. The Criterion Group

As was pointed out, a scoring scale for an interest test is constructed upon the differences in interests between two groups. The question arises as to how many cases are necessary for a representative sample of the interests of that group. Too few cases for a sample will permit chance to play a great part in the appearance of many differences in interest which would not be present had the sample been larger. At first, scales were developed from criterion groups of 100 cases. But these did not prove as efficient as was desired, since Strong found that only 64% of ~~the original group~~ a second group will rate A instead of 75% of the original group. His experimentation with increases of

the criterion group from 83 to 274 cases, which gave twice as many A ratings and over three times as many ratings above C, indicated that the smaller the sample, the greater will be the differentiation between groups. He finally concluded:

A criterion group of 400 forecasts the results to be obtained with a group of 500 nearly twice as well as does a criterion group of 50 (.839 vs. .475). There is an increase of forecasting efficiency from .71 with a criterion group of 150 cases to .74 with a criterion group of 280 cases to .80 with a criterion group of 300 cases and to .84 with a criterion group of 400 cases.²

The advantage of the higher reliability is shown by the fact that a reliability of .839 for accountant furnishes only 46.7 chances in 100 that a score based on that scale is true; whereas the higher reliability of .938 for author increased the chances to 68.3 in 100 that an individual score obtained on that scale is true.³

At present, the scales of the Vocational Interest Blank are based on 250 cases but work is being done to try to obtain scales based on 400 to 500 cases, since Strong concludes that there is an error of one to two standard scores in using a scale from the data of 250 cases, since Strong concludes that there is an error of one to two standard scores in using a scale from the data of 250 cases instead of 400 to 500 cases. An increase of error of from two to eight standard scores results from using a scale of a criterion group of 100 cases. Stated in another way, use of a sample of 250 cases as a criterion group produces a difference of 5 percent between the obtained and true differentiation between two occupations. This would be reduced to about 1.1 percent with a scale based on a sample of 400 cases.

2. Percentages of Men-in-General tested taken from Table 2, Edward Strong, Op. Cit., p. 75.

2. Edward Strong, Op. Cit. p. 643

3. Edward Strong, Op. Cit. p. 81.

Because of these conclusions, it is not our intention to set up a scale on these 105 cases of the Catholic Clergy. It would be an easy affair now that all the totals for like, indifferent, and dislike for each item is tabulated and changed to percentages as is produced in Appendix 2. But we are looking forward to increasing this sample to the required 400 to 500 cases.

3. The men-in-general group

To construct a scale or draw up norms in interest for a particular group, it is necessary to have some point of reference which will determine what interests are peculiar to that group. For the Vocational Interest Blank, - this point of reference is a criterion group composed of all men, which furnishes a picture of the interests of an average man. When the interests of a particular group is then compared with this men-in-general group, differences crop up on which both groups can be delineated and on which one specialized group can be differentiated from another specialized group.

One can readily see that care must be exercised in obtaining a men-in-general group which is representative, since it will determine how specialized groups are differentiated. At first, since the blank was used in guidance and counseling towards the professional occupations, the men-in-general group was based upon a representative sample of all of these. With the extension of the use of the blank to other occupational levels, namely the trades, it became apparent that the men-in-general group should differ for men in the upper-socio-economic level from those of unskilled or semi-skilled occupations. Experimentation shows that scales for a particular group differ. When based on different men-in-general groups, Strong now has three men-in-general groups:

The first group is called P_1 . This group typifies the upper strata of occupations and is a subsample of the second group or P_2 . It differs from the second in that it represents business and professional men earning approximately \$2,500 a year and upward. Table XVII shows its composition. Only this group is presented here because it is the one on which the new Catholic Clergy scale should be based as will be explained shortly.

The second group is called P_2 . This group represents on an average, skilled workman. It was constituted by Strong as representative of men between the ages of 18 to 60 years, distributed according to age, education and occupation as given by the United States Census. A sample of 1,000 blanks was set up, although actually more than this number of blanks was used since sometimes as many as over one hundred blanks were averaged to furnish an average blank for this sample. Each blank represented 35,000 men of the 1930 census, since the total number of males between 18 and 60 years of age was then 35,068,768. In each 35,000 in a particular group, a representative blank was chosen.. This is the group on which the present scales are based.

The third group is called P_3 . It typifies workingmen - a group that as a whole averages a little below the average for semi-skilled workmen. It represents unskilled, semi-skilled and skilled workmen and was constructed from 553 cases of these groups found in the 1,000 cases of the census.

An occupation scored against these three groups furnish different results because the point of reference differs. They are therefore three different mean of measuring interests. The relationships or differences

TABLE XVII

Composition of the Revised "Men-in-General", Group (P₁), Representative of Professional and Business Men Earning \$2,500 a year and Upward.*

Occupations According to Census	Number per 1,000 in Census	Occupations Used in "Men-in-General Group"	Quota used	Number Interes Blanks Used
Professional men¹				
Actor	1	Professional men		
Architect	1	Architect	1	114
Artist, Sculptor	1	Artist	1	226
Author, Editor	1	Editor, journalist	1	122
Advertising agent, photograph- er, window decorator.	1	Advertising man	1	60
Chemist	1	Chemist	1	148
College president and professor	1	College professor	1	564
Dentist	2	Dentist	2	238
Engineer	6	Engineer	6	382
Lawyer	4	Lawyer	4	195
Librarian, social and religious worker, nurse.	2	Y. M. C. A. Secretary	2	99
Minister	3	Minister	3	245
Physician, surgeon, veterinarian	4	Physician, surgeon.	4	337
Teacher	6	Teacher	6	282
		City school superintendent.	1	193
		Certified public accountant	1	329
Total	34	Total	33	3,534
Business men¹				
Farm owner and manager	132	Business men		
Retail dealer	40	Farm owner and manager.	13	50
Lumbering, mining official	1	Retail owner.	4	25
Manufacturing owner	5	Lumbering official.	1	5
		President, owner, mfg. doncern	7	50
Manufacturing official	8	Sales manager.	2	25
		Production manager.	2	25
		Advertising manager	2	25
0 Official, railroad, ware- house, stockyard	3	Official of railroad	3	7
Official, trucking, taxie, garage	3	Official, trucking, taxi.	3	4
Manager and owner, rest- rauant, boarding house and hotel	5	Hotel manager and owner	2	25
Wholesale dealer	2	Wholesale dealer.	2	5
Official, city, county, state and federal	4	Government official	4	7
Undertaker	1	Undertaker	1	4

TABLE XVII - continued -

Composition of the Revised "Men-in-General", Group (P₁), Representative of Professional and Business Men Earning \$2,500 a year and Upward.*

Occupations According to Census	Number per 1,000 in Census	Occupations Used in "Men-in-General Group	Quota used	Number of Interest Blanks Used
Business men		Business men		
Banker and broker	2	Banker	2	50
Building Contractor	4	Building contractor	4	6
Office clerk	34	Office manager	1	50
Accountant	5	Accountant	5	332
Credit manager	1	Credit manager	1	14
Purchasing Agent	1	Purchasing Agent	1	120
Traveling salesman	7	Traveling salesman	5	25
Insurance agent	6	Like insurance salesman	2	220
Commercial broker, commission man, stock broker	3	Broker, commercial and financial	2	126
Total	272	Total	71	1,212
Grand Total	306	Grand Total	106	4,746

* Edward Strong, Op. Cit., Table 190, p. 596.

1. Occupations excluded wherein or a group the wage was not \$2,500.

in interest between occupations will depend upon what men-in-general group their scales were developed. With P₁ scales the correlations between occupations express relationships when they are viewed from the point of reference of the upper-socio-economic level; while with P₂ scales the correlations express relationships between occupations. The question arises: on what men-in-general group should the various occupations have their scales based? It would be difficult to determine off hand, under which classification many occupations would fall.

To understand what point of reference is to be used for an occupation, the occupational level¹ scale of Strong is used. This scale was constructed to furnish a measurement of difference between the interest of workman and those of business and professional men; it is an attempt to measure interests of men in all occupations on a single scale ranging from unskilled workmen to business and professional men. By using the same method as in obtaining other scales and by contrasting these two groups with each other, the scale was set up. On this scale¹ the mean raw score is 18.1; sigma is 73.62; r is .875; range of scores is from 80 to 20 standard scores. From data on mean standard scores and standard deviations of 36 occupations, Strong shows there is evidence of a "definite progression in scores from unskilled to semi-skilled and to skilled men from there upward to the broader and more executive types of business activities and the professions."² His data shows that every skilled trade shows an average significantly higher score than the highest score for unskilled workmen.

The importance of a scale such as this may be compared to the use of intelligence testing, by which one's intelligence is determined for ability to do certain work. Here, although there is much overlapping between the occupations, yet in a general way, a standard score on this scale for an individual will determine the trend of his interests: a low score means his interests coincide more with those of unskilled workmen, while an increase in score indicates interests with higher types, at least in a socio-economic sense, of occupations.

1. Edward Strong, Op. Cit. p. 189.

2. Edward Strong, Op. Cit.

Knowing the purpose of this OL scale as it is called, we can readily see its adaptability to determine what men-in-general group is to be used in setting up a scale for a particular occupation. For example, an occupation scoring low on this scale is said to have interests in common with unskilled men, therefore the point of reference for the set-up of the scale for that occupation should be P_3 - or the men-in-general group of workingmen, etc. In other words, a person with a high OL score is unlikely to obtain a high score on occupations with low OL mean scores and vice versa. The OL score determines, therefore, interests related to occupation at a certain level on the socio-economic range.

Data supporting this conclusion is furnished by Strong as follows:¹ For men with OL scores of 60 or higher - experimentation on ten occupations shows that P_2 scores are distinctly higher than P_1 scores when these occupations have low mean OL scores. For men with OL scores of 45 to 60, P_1 and P_2 scores agree quite well on this range but disagree more as OL deviates from the range. Men with OL scores of 44 and below, P_1 and P_2 differ considerably - P_1 being higher than the latter.

Strong has the following to say concerning the relationship of
2
a man's score based on P_1 and P_2 :

First, P_1 scores are more greatly influenced than P_2 scores by the OL score of the man tested . . . for example, with carpenters, the P_1 scores vary from 23 to 61, but only from 42 to 54 on the P_2 scales.

Secondly, P_1 scores on the ten occupational scales vary universally with the OL score of the man tested - s.g. carpenters with very low OL scores average 60.5 on the carpenter scale; as their OL score increases their carpenter score decreases to 23.

Thirdly, P_2 scores on the ten scales are at a maximum when the OL score of the man tested is in the range of 50 to 60. Such P_2 scores decrease in size as the man's OL score deviates from this optimum range.

On the basis of this evidence, Strong advises that men be scored on scales based upon a men-in-general group at about the level to which the man belongs:

In terms of the man's score on the OL scale, men with OL scores of 60 or higher should certainly be scored on P_1 scales; men with intermediate scores i.e. 45 to 60 may be scored on either P_1 or P_2 scales, but preferably on the former; and men with OL scores of 44 and below should be scored on P_2 scales.

We can conclude, therefore, that a Catholic Clergy scale should be based on this P_1 scale as a point of reference since the Catholic Clergy would be classified among the professional groups. Two cases of our sample were tested on the OL scale produced scores of 65 and 67. We presume that this P_1 scale is the better one for our group.

To conclude this chapter on constructing a new scale for the Catholic Clergy, a brief review of its contents as applicable to our sample might be worth of consideration. The chapter dealt with calculation of weights, a discussion of the sample, and that of the men-in-general group which is the point of reference for the determination of the interest tendencies of a particular group. In constructing a new scale there is no problem in the mechanics of setting up the scale, but the last two points merit consideration.

For validity and reliability, the sample of the projected scale must have certain qualities. It is thought that our sample has these qualifications. That a group such as Ministers is heterogenous and can be readily seen from the diversity of their sects. Our group is homogenous - more so than the Minister group. The education of Ministers is something which is not standardized and whereas the sample Strong has averages 18.2 years of education, - yet census figures for Ministers show

less than 12 years as average. Every case that we have or that we intend to obtain has an education of 19 years or more and everyone of the cases will attain at least 20 years of schooling. Furthermore, although most of our cases are still in school, yet they are all stable so far as their future is concerned because they are all ordained men which precludes the possibility of change of work. The average age of our group or that of new additions to our group will be such that according to research, their interests are considered stable and therefore not a problem for validity.

As for reliability, there would be little difficulty in obtaining its requisite - a sufficient sample. A sample of 400 to 500 cases which Strong thinks would be best, can be obtained. In the United States there are a total of 55 seminaries with seminarians for the secular priesthood numbering 10,109 students according to the Catholic Directory¹ of 1944. At least 1,500 of these are ordained every year - during their last year are Deacons which means they are permanent members of the Clergy. Therefore it would not be too difficult to obtain another 400 cases.

The men-in-general group would be a problem to obtain. The only recourse is to use the group set up by Strong into which so much research has gone and which could be obtained from the Vocational Guidance Bureau of Stanford University.

1. Official Catholic Directory, P. J. Kenedy and Sons, 1944, General Summary, p. 1.

The determining of one's life's work demands a difficult decision, For many individuals the problem is so great that counsel is needed, in fact it is advisable for all. That is why vocational guidance came into existence. One of the important duties of this counseling is to direct persons into vocations wherein they will find satisfaction and happiness as well as success. Research has determined that the former achievement can be best attained by having the interests connected with one's work while the latter concerns ability and intelligence. Many tests are available for guidance in ability but until lately the factor of advising for satisfaction in one's occupation has been difficult because of the subjective nature of the interests of the individual. While research into the nature of interests has produced many tests in this regard, the most apt and useful at the present time seems to be the Strong Vocational Interest Blank.

This blank devised by Edward Strong, Professor of Psychology of Stanford University in California, wherein the individual checks his attitude of like, indifference, and dislike towards 400 objects and situations of interest. By statistical analysis, the interests of 37 occupations for men and 19 for women have been differentiated by means of comparison with the interests of men or women in general. For each of these occupations scales, based on criterion groups have been determined so that the results of individuals taking the test can be corrected to ascertain with which occupations they have or have not interests in common. Among these scales, there is one for Ministers, based on a criterion group of 256 cases with an average age of 42.6 years and

an average education of 18.2 grades. Since no scale was available for the highly specialized group of Catholic priests, it was decided to obtain a sample of them and correct with this Minister scale.

Therefore, a sample of 105 cases was taken from among the ranks of the Catholic Clergy: 24 from the University of Ottawa in Canada and 81 from the University of St. Mary's in Baltimore, Maryland. This sample is thought^{to}/be a fair representation of the Catholic Clergy. They averaged 25.6 years of age and had an education of 19 grades. Because research shows interests to be permanent at the age of 25 years, this gave value to our sample. Although most of them were not priests, all had been ordained to some Sacred Order which permanently placed them in the ranks of the Clergy which precluded change of vocation which is an advantage. They represented wide areas: 19 states, 2 provinces in Canada, and Newfoundland. Among them, were listed 9 nationalities.

After correction on the Minister scale, the results were tabulated and showed considerable divergence from that of the group of Ministers. Only 56.2 percent of the Catholic priests were considered to have the interests of this group compared with 90 percent of Ministers. A correlation of these two groups was found to be $.64 \pm .02$. We conclude then that this scale would not be useful for ascertaining the interests of the Catholic Clergy but other that a new scale should be set up for this group alone

Confirmation of this conclusion was obtained by an analysis of the likes, indifferences and dislikes of these groups which showed great agreement but differences appeared indicating there was a basis for

differentiation since significant differences showed for "likes" in the section on occupations, for "dislikes" in the section on school subjects and for "indifferences" in the sections on occupations, school subjects, activities and comparison between two items.

Because of these results, there is every reason and the opportunity exists to set up a new scale for the Catholic Clergy if the Vocational Interest blank is to be of use for this group. On the basis of the already tabulated responses of the 105 cases and the calculation of the percent of each like, indifference, and dislike, a scale is already possible. But it would not be as valid^{as}/a scale based on 400 to 500 cases. This increase can be obtained since there are at least a potential 1,500 cases in seminaries in the United States that would satisfy the requirements. To set up the scale, the data on the percentages of men-in-general would have to be obtained from Professor Strong of Stanford University, who would be willing to cooperate in extending the research on this interest blank. We are looking forward, therefore, to the near future, when we hope this scale will become a reality.

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Use of the table in this article for calculation of overlapping was made.

APPENDIX 1

VOCATIONAL INTEREST BLANK FOR MEN (Revised)

VOCATIONAL INTEREST BLANK FOR MEN (Revised)

By EDWARD K. STRONG, JR.

Professor of Psychology, Stanford University

Published by STANFORD UNIVERSITY PRESS, Stanford University, California

It is possible with a fair degree of accuracy to determine by this test whether one would like certain occupations or not. The test is not one of intelligence or school work. It measures the extent to which one's interests agree or disagree with those of successful men in a given occupation.

Your responses will, of course, be held strictly confidential.

Date.....

1. Name..... 2. Age..... 3. Sex.....

4. Address to which correspondence should be sent.....

If you are still attending school or expect to return to school, answer items 5-12; if you have left school, answer items 13-20.

Any additional remarks may be entered at 21.

5. Grade I am now in: Grammar School 1 2 3 4 5 6 7 8 High School 1 2 3 4 College 1 2 3 4 5 6 7
(PUT A CIRCLE AROUND APPROPRIATE GRADE)

6. School grade I expect to complete.....

7. School subjects I am now most interested in.....

8. School subjects I expect to specialize in later on.....

9. Occupation I am planning to enter..... 10. Sure of this..... Not sure.....

11. Jobs I have been employed at (e.g., clerical, retail selling, farming, giving number of months employed at each).....

12. Occupations I have formerly considered entering.....

To be Answered by Those Who Have Left School

13. Last grade you finished in school (e.g., Grammar 6th, High School 2nd, College 4th).....

14. What technical or business courses have you taken? (Underline those you finished).....

15. Occupation (e.g., Carpenter)..... 16. Years of experience in it.....

17. Just what do you do?.....

18. Why did you select the above occupation?.....

19. What occupations, other than your present one, have you at one time or another engaged in?.....

20. What occupations, if any, have you in mind entering? Why?

21. Remarks

Part I. Occupations. Indicate after each occupation listed below whether you would like that kind of work or not. Disregard considerations of salary, social standing, future advancement, etc. Consider only whether or not you would like to do what is involved in the occupation. You are not asked if you would take up the occupation permanently, but merely whether or not you would enjoy that kind of work, regardless of any necessary skills, abilities, or training which you may or may not possess.

Draw a circle around L if you like that kind of work

Draw a circle around I if you are indifferent to that kind of work

Draw a circle around D if you dislike that kind of work

Work rapidly. Your first impressions are desired here. Answer all the items. Many of the seemingly trivial and irrelevant items are very useful in diagnosing your real attitude.

1 Actor (not movie)	L	I	D	46 Jeweler	L	I	D
2 Advertiser	L	I	D	47 Judge	L	I	D
3 Architect	L	I	D	48 Labor Arbitrator	L	I	D
4 Army Officer	L	I	D	49 Laboratory Technician	L	I	D
5 Artist	L	I	D	50 Landscape Gardener	L	I	D
6 Astronomer	L	I	D	51 Lawyer, Criminal	L	I	D
7 Athletic Director	L	I	D	52 Lawyer, Corporation	L	I	D
8 Auctioneer	L	I	D	53 Librarian	L	I	D
9 Author of novel	L	I	D	54 Life Insurance Salesman	L	I	D
10 Author of technical book	L	I	D	55 Locomotive Engineer	L	I	D
11 Auto Salesman	L	I	D	56 Machinist	L	I	D
12 Auto Racer	L	I	D	57 Magazine Writer	L	I	D
13 Auto Repairman	L	I	D	58 Manufacturer	L	I	D
14 Aviator	L	I	D	59 Marine Engineer	L	I	D
15 Bank Teller	L	I	D	60 Mechanical Engineer	L	I	D
16 Bookkeeper	L	I	D	61 Mining Superintendent	L	I	D
17 Building Contractor	L	I	D	62 Musician	L	I	D
18 Buyer of merchandise	L	I	D	63 Music Teacher	L	I	D
19 Carpenter	L	I	D	64 Office Clerk	L	I	D
20 Cartoonist	L	I	D	65 Office Manager	L	I	D
21 Cashier in bank	L	I	D	66 Orchestra Conductor	L	I	D
22 Certified Public Accountant	L	I	D	67 Pharmacist	L	I	D
23 Chemist	L	I	D	68 Photo Engraver	L	I	D
24 Civil Engineer	L	I	D	69 Physician	L	I	D
25 Civil Service Employee	L	I	D	70 Playground Director	L	I	D
26 Clergyman	L	I	D	71 Poet	L	I	D
27 College Professor	L	I	D	72 Politician	L	I	D
28 Consul	L	I	D	73 Printer	L	I	D
29 Dentist	L	I	D	74 Private Secretary	L	I	D
30 Draftsman	L	I	D	75 Railway Conductor	L	I	D
31 Editor	L	I	D	76 Rancher	L	I	D
32 Electrical Engineer	L	I	D	77 Real Estate Salesman	L	I	D
33 Employment Manager	L	I	D	78 Reporter, general	L	I	D
34 Explorer	L	I	D	79 Reporter, sporting page	L	I	D
35 Factory Manager	L	I	D	80 Retailer	L	I	D
36 Factory Worker	L	I	D	81 Sales Manager	L	I	D
37 Farmer	L	I	D	82 School Teacher	L	I	D
38 Floorwalker	L	I	D	83 Scientific Research Worker	L	I	D
39 Florist	L	I	D	84 Sculptor	L	I	D
40 Foreign Correspondent	L	I	D	85 Secretary, Chamber of Commerce	L	I	D
41 Governor of a State	L	I	D	86 Secret Service Man	L	I	D
42 Hotel Keeper or Manager	L	I	D	87 Ship Officer	L	I	D
43 Interior Decorator	L	I	D	88 Shop Foreman	L	I	D
44 Interpreter	L	I	D	89 Social Worker	L	I	D
45 Inventor	L	I	D	90 Specialty Salesman	L	I	D

Part I. Occupations, continued.

91 Statistician	L	I	D
92 Stock Broker	L	I	D
93 Surgeon	L	I	D
94 Toolmaker	L	I	D
95 Traveling Salesman	L	I	D
96 Typist	L	I	D
97 Undertaker	L	I	D
98 Watchmaker	L	I	D
99 Wholesaler	L	I	D
100 Worker in Y.M.C.A., K. of C., etc...	L	I	D

Part II. School Subjects. Indicate as in Part I your interest when in school.

101 Algebra	L	I	D
102 Agriculture	L	I	D
103 Arithmetic	L	I	D
104 Art	L	I	D
105 Bookkeeping	L	I	D
106 Botany	L	I	D
107 Calculus	L	I	D
108 Chemistry	L	I	D
109 Civics	L	I	D
110 Dramatics	L	I	D
111 Economics	L	I	D
112 English Composition	L	I	D
113 Geography	L	I	D
114 Geology	L	I	D
115 Geometry	L	I	D
116 History	L	I	D
117 Languages, ancient	L	I	D
118 Languages, modern	L	I	D
119 Literature	L	I	D
120 Mathematics	L	I	D
121 Manual Training	L	I	D
122 Mechanical Drawing	L	I	D
123 Military Drill	L	I	D
124 Music	L	I	D
125 Nature Study	L	I	D
126 Philosophy	L	I	D
127 Physical Training	L	I	D
128 Physics	L	I	D
129 Psychology	L	I	D
130 Physiology	L	I	D
131 Public Speaking	L	I	D
132 Shop work	L	I	D
133 Sociology	L	I	D
134 Spelling	L	I	D
135 Typewriting	L	I	D
136 Zoölogy	L	I	D

Part III. Amusements. Indicate in the same manner as in Part I whether you like the following or not. If in doubt, consider your most frequent attitude. *Work rapidly.* Do not think over various possibilities. Record your first impression.

137 Golf	L	I	D
138 Fishing	L	I	D
139 Hunting	L	I	D
140 Tennis	L	I	D
141 Driving an automobile.....	L	I	D
142 Taking long walks.....	L	I	D
143 Boxing	L	I	D
144 Chess	L	I	D
145 Poker	L	I	D
146 Bridge	L	I	D
147 Observing birds (nature study)....	L	I	D
148 Solving mechanical puzzles.....	L	I	D
149 Performing sleight-of-hand tricks...	L	I	D
150 Collecting postage stamps.....	L	I	D
151 Drilling in a company.....	L	I	D
152 Chopping wood	L	I	D
153 Amusement parks	L	I	D
154 Picnics	L	I	D
155 Excursions	L	I	D
156 Smokers	L	I	D
157 "Rough house" initiations	L	I	D
158 Conventions	L	I	D
159 Full-dress affairs	L	I	D
160 Auctions	L	I	D
161 Fortune tellers	L	I	D
162 Animal zoos	L	I	D
163 Art galleries	L	I	D
164 Museums	L	I	D
165 Vaudeville	L	I	D
166 Musical comedy	L	I	D
167 Symphony concerts	L	I	D
168 Pet canaries	L	I	D
169 Pet monkeys	L	I	D
170 Snakes	L	I	D
171 Sporting pages	L	I	D
172 Poetry	L	I	D
173 Detective stories	L	I	D
174 "Time"	L	I	D
175 "Judge"	L	I	D
176 "New Republic"	L	I	D
177 "System"	L	I	D
178 "National Geographic Magazine"....	L	I	D
179 "American Magazine"	L	I	D
180 "Popular Mechanics"	L	I	D
181 "Atlantic Monthly"	L	I	D
182 Educational movies	L	I	D
183 Travel movies	L	I	D
184 Social problem movies.....	L	I	D
185 Making a radio set.....	L	I	D

Part IV. Activities. Indicate your interests as in Part I.

186 Repairing a clock.....	L	I	D
187 Adjusting a carburetor.....	L	I	D
188 Repairing electrical wiring.....	L	I	D
189 Cabinetmaking	L	I	D
190 Operating machinery	L	I	D
191 Handling horses	L	I	D
192 Giving "first aid" assistance.....	L	I	D
193 Raising flowers and vegetables.....	L	I	D
194 Decorating a room with flowers.....	L	I	D
195 Arguments	L	I	D
196 Interviewing men for a job.....	L	I	D
197 Interviewing prospects in selling...	L	I	D
198 Interviewing clients	L	I	D
199 Making a speech.....	L	I	D
200 Organizing a play	L	I	D
201 Opening conversation with a stranger	L	I	D
202 Teaching children	L	I	D
203 Teaching adults	L	I	D
204 Calling friends by nicknames.....	L	I	D
205 Being called by a nickname.....	L	I	D
206 Meeting and directing people.....	L	I	D
207 Taking responsibility	L	I	D
208 Meeting new situations.....	L	I	D
209 Adjusting difficulties of others.....	L	I	D
210 Drilling soldiers	L	I	D
211 Pursuing bandits in sheriff's posse..	L	I	D
212 Doing research work.....	L	I	D
213 Acting as yell-leader.....	L	I	D
214 Writing personal letters.....	L	I	D
215 Writing reports	L	I	D
216 Entertaining others	L	I	D
217 Bargaining ("swapping")	L	I	D
218 Looking at shop windows.....	L	I	D
219 Buying merchandise for a store.....	L	I	D
220 Displaying merchandise in a store..	L	I	D
221 Expressing judgments publicly regardless of criticism.....	L	I	D
222 Being pitted against another as in a political or athletic race.....	L	I	D
223 Methodical work	L	I	D
224 Regular hours for work.....	L	I	D
225 Continually changing activities.....	L	I	D
226 Developing business systems.....	L	I	D
227 Saving money	L	I	D
228 Contributing to charities.....	L	I	D
229 Raising money for a charity.....	L	I	D
230 Living in the city.....	L	I	D
231 Climbing along edge of precipice...	L	I	D
232 Looking at a collection of rare laces.	L	I	D
233 Looking at a collection of antique furniture	L	I	D

Part V. Peculiarities of People. Record your first impression. Do not think of various possibilities or of exceptional cases. "Let yourself go" and record the feeling that comes to mind as you read the item.

234 Progressive people	L	I	D
235 Conservative people	L	I	D
236 Energetic people	L	I	D
237 Absent-minded people	L	I	D
238 People who borrow things.....	L	I	D
239 Quick-tempered people	L	I	D
240 Optimists	L	I	D
241 Pessimists	L	I	D
242 People who are natural leaders....	L	I	D
243 People who assume leadership.....	L	I	D
244 People easily led.....	L	I	D
245 People who have made fortunes in business	L	I	D
246 Emotional people	L	I	D
247 Thrifty people	L	I	D
248 Spendthrifts	L	I	D
249 Talkative people	L	I	D
250 Religious people	L	I	D
251 Irreligious people	L	I	D
252 People who have done you favors...	L	I	D
253 People who get rattled easily.....	L	I	D
254 Gruff men	L	I	D
255 Foreigners	L	I	D
256 Sick people	L	I	D
257 Nervous people	L	I	D
258 Very old people.....	L	I	D
259 Cripples	L	I	D
260 Side-show freaks	L	I	D
261 People with gold teeth.....	L	I	D
262 People with protruding jaws.....	L	I	D
263 People with hooked noses.....	L	I	D
264 Blind people	L	I	D
265 Deaf mutes	L	I	D
266 Self-conscious people	L	I	D
267 People who always agree with you..	L	I	D
268 People who talk very loudly.....	L	I	D
269 People who talk very slowly.....	L	I	D
270 People who talk about themselves...	L	I	D
271 Fashionably dressed people.....	L	I	D
272 Carelessly dressed people.....	L	I	D
273 People who don't believe in evolution	L	I	D
274 Socialists	L	I	D
275 Bolsheviks	L	I	D
276 Independents in politics.....	L	I	D
277 Men who chew tobacco.....	L	I	D
278 Men who use perfume.....	L	I	D
279 People who chew gum.....	L	I	D
280 Athletic men	L	I	D

Part VI. Order of Preference of Activities. Indicate which three of the following ten activities you would enjoy most by checking (✓) opposite them in column 1; also indicate which three you would enjoy least by checking opposite them in column 3. Check the remaining four activities in column 2.

- | | 1 | 2 | 3 | |
|-----|-----|-----|-----|--|
| 281 | () | () | () | Develop the theory of operation of a new machine, e.g., auto |
| 282 | () | () | () | Operate (manipulate) the new machine |
| 283 | () | () | () | Discover an improvement in the design of the machine |
| 284 | () | () | () | Determine the cost of operation of the machine |
| 285 | () | () | () | Supervise the manufacture of the machine |
| 286 | () | () | () | Create a new artistic effect, i.e., improve the beauty of the auto |
| 287 | () | () | () | Sell the machine |
| 288 | () | () | () | Prepare the advertising for the machine |
| 289 | () | () | () | Teach others the use of the machine |
| 290 | () | () | () | Interest the public in the machine through public addresses |

Indicate in the same way what you consider are the three most important factors affecting your work; also the three least important factors. Check the remaining four items in column 2. Be sure you have marked three items under 1, three items under 3, and four items under 2.

- | | 1 | 2 | 3 | |
|-----|-----|-----|-----|---|
| 291 | () | () | () | Salary received for work |
| 292 | () | () | () | Steadiness and permanence of work |
| 293 | () | () | () | Opportunity for promotion |
| 294 | () | () | () | Courteous treatment from superiors |
| 295 | () | () | () | Opportunity to make use of all one's knowledge and experience |
| 296 | () | () | () | Opportunity to ask questions and to consult about difficulties |
| 297 | () | () | () | Opportunity to understand just how one's superior expects work to be done |
| 298 | () | () | () | Certainty one's work will be judged by fair standards |
| 299 | () | () | () | Freedom in working out one's own methods of doing the work |
| 300 | () | () | () | Co-workers—congenial, competent, and adequate in number |

Indicate in the same way the three men you would most like to have been; also the three you would least like to have been. Check the remaining four men in column 2.

- | | 1 | 2 | 3 | |
|-----|-----|-----|-----|--------------------------------|
| 301 | () | () | () | Luther Burbank, "plant wizard" |
| 302 | () | () | () | Enrico Caruso, singer |
| 303 | () | () | () | Thomas A. Edison, inventor |
| 304 | () | () | () | Henry Ford, manufacturer |
| 305 | () | () | () | Charles Dana Gibson, artist |
| 306 | () | () | () | J. P. Morgan, financier |
| 307 | () | () | () | J. J. Pershing, soldier |
| 308 | () | () | () | William H. Taft, jurist |
| 309 | () | () | () | Booth Tarkington, author |
| 310 | () | () | () | John Wanamaker, merchant |

Indicate in the same way the three positions you would most prefer to hold in club or society; also the three you least prefer to hold. Check the remaining four in column 2.

- | | 1 | 2 | 3 | |
|-----|-----|-----|-----|-----------------------------------|
| 311 | () | () | () | President of a Society or Club |
| 312 | () | () | () | Secretary of a Society or Club |
| 313 | () | () | () | Treasurer of a Society or Club |
| 314 | () | () | () | Member of a Society or Club |
| 315 | () | () | () | Chairman, Arrangement Committee |
| 316 | () | () | () | Chairman, Educational Committee |
| 317 | () | () | () | Chairman, Entertainment Committee |
| 318 | () | () | () | Chairman, Membership Committee |
| 319 | () | () | () | Chairman, Program Committee |
| 320 | () | () | () | Chairman, Publicity Committee |

Part VII. Comparison of Interest between Two Items. Indicate your choice of the following pairs by checking (✓) in the first space if you prefer the item to the left, in the second space if you like both equally well, and in the third space if you prefer the item to the right. Assume other things are equal except the two items to be compared.

Work rapidly.

- | | | | | |
|--|-----|-----|-----|---|
| 321 Street-car motorman | () | () | () | Street-car conductor |
| 322 Policeman | () | () | () | Fireman (fights fire) |
| 323 Chauffeur | () | () | () | Chef |
| 324 Head waiter | () | () | () | Lighthouse tender |
| 325 House to house canvassing..... | () | () | () | Retail selling |
| 326 House to house canvassing..... | () | () | () | Gardening |
| 327 Repair auto | () | () | () | Drive auto |
| 328 Develop plans | () | () | () | Execute plans |
| 329 Do a job yourself..... | () | () | () | Delegate job to another |
| 330 Persuade others | () | () | () | Order others |
| 331 Deal with things..... | () | () | () | Deal with people |
| 332 Plan for immediate future..... | () | () | () | Plan for five years ahead |
| 333 Activity which produces tangible returns..... | () | () | () | Activity which is enjoyed for its own sake |
| 334 Taking a chance..... | () | () | () | Playing safe |
| 335 Definite salary | () | () | () | Commission on what is done |
| 336 Work for yourself..... | () | () | () | Carry out program of superior who is respected |
| 337 Work which interests you with modest income | () | () | () | Work which does not interest you with large income |
| 338 Work in a large corporation with little chance
of becoming president until age of 55..... | () | () | () | Work for self in small business |
| 339 Selling article, quoted 10% below competitor.. | () | () | () | Selling article, quoted 10% above competitor |
| 340 Small pay, large opportunities to learn during
next 5 years..... | () | () | () | Good pay, little opportunity to learn during next
5 years |
| 341 Work involving few details..... | () | () | () | Work involving many details |
| 342 Outside work | () | () | () | Inside work |
| 343 Change from place to place..... | () | () | () | Working in one location |
| 344 Great variety of work..... | () | () | () | Similarity in work |
| 345 Physical activity | () | () | () | Mental activity |
| 346 Emphasis upon quality of work..... | () | () | () | Emphasis upon quantity of work |
| 347 Technical responsibility (head of a department
of 25 people engaged in technical, research
work) | () | () | () | Supervisory responsibility (head of a department
of 300 people engaged in typical business
operation) |
| 348 Present a report in writing..... | () | () | () | Present a report verbally |
| 349 Listening to a story..... | () | () | () | Telling a story |
| 350 Playing baseball | () | () | () | Watching baseball |
| 351 Amusement where there is a crowd..... | () | () | () | Amusement alone or with one or two others |
| 352 Nights spent at home..... | () | () | () | Nights away from home |
| 353 Reading a book..... | () | () | () | Going to movies |
| 354 Belonging to many societies..... | () | () | () | Belonging to few societies |
| 355 Few intimate friends..... | () | () | () | Many acquaintances |
| 356 Many women friends..... | () | () | () | Few women friends |
| 357 Fat men | () | () | () | Thin men |
| 358 Tall men | () | () | () | Short men |
| 359 Jealous people | () | () | () | Conceited people |
| 360 Jealous people | () | () | () | Spendthrifts |

Part VIII. Rating of Present Abilities and Characteristics. Indicate below what kind of a person you are right now and what you have done. Check in the *first* column ("Yes") if the item really describes you, in the *third* column ("No") if the item does not describe you, and in the *second* column (?) if you are not sure. (Be frank in pointing out your weak points, for selection of a vocation must be made in terms of them as well as your strong points.)

	YES	?	NO
361 Usually start activities of my group.....	()	()	()
362 Usually drive myself steadily (do not work by fits and starts)	()	()	()
363 Win friends easily.....	()	()	()
364 Usually get other people to do what I want done.....	()	()	()
365 Usually liven up the group on a dull day.....	()	()	()
366 Am quite sure of myself.....	()	()	()
367 Accept just criticism without getting sore.....	()	()	()
368 Have mechanical ingenuity (inventiveness).....	()	()	()
369 Have more than my share of novel ideas.....	()	()	()
370 Can carry out plans assigned by other people.....	()	()	()
371 Can discriminate between more or less important matters.....	()	()	()
372 Am inclined to keep silent (reticent) in confidential and semi-confidential affairs.....	()	()	()
373 Am always on time with my work.....	()	()	()
374 Remember faces, names, and incidents better than the average person	()	()	()
375 Can correct others without giving offense.....	()	()	()
376 Able to meet emergencies quickly and effectively.....	()	()	()
377 Get "rattled" easily.....	()	()	()
378 Can write a concise, well-organized report.....	()	()	()
379 Have good judgment in appraising values.....	()	()	()
380 Plan my work in detail.....	()	()	()
381 Follow up subordinates effectively.....	()	()	()
382 Put drive into the organization.....	()	()	()
383 Stimulate the ambition of my associates.....	()	()	()
384 Show firmness without being easy.....	()	()	()
385 Win confidence and loyalty.....	()	()	()
386 Smooth out tangles and disagreements between people.....	()	()	()
387 Am approachable	()	()	()
388 Discuss my ideals with others.....	()	()	()

Check (✓) in the first, second, or third column at the right according as the first, second, or third statement in each item below applies to you.

	(1st)	(2nd)	(3rd)
389 (1) Feelings easily hurt (2) Feelings hurt sometimes (3) Feelings rarely hurt.....	()	()	()
390 (1) Usually ignore the feelings of others (2) Consider them sometimes (3) Carefully consider them..	()	()	()
391 (1) Loan money to acquaintances (2) Loan only to certain people (3) Rarely loan money.....	()	()	()
392 (1) Rebel inwardly at orders from another, obey when necessary (2) Carry out instructions with little or no feeling (3) Enter into situation and enthusiastically carry out program	()	()	()
393 (1) When caught in a mistake usually make excuses (2) Seldom make excuses (3) Practically never make excuses	()	()	()
394 (1) Best-liked friends are superior to me in ability (2) Equal in ability (3) Inferior in ability.....	()	()	()
395 (1) Handle complaints without getting irritated (2) Become annoyed at times (3) Lose my temper at times..	()	()	()
396 (1) Borrow frequently (for personal use) (2) Borrow occasionally (3) Practically never borrow..	()	()	()
397 (1) Tell jokes well (2) Seldom tell jokes (3) Practically never tell jokes	()	()	()
398 (1) My advice sought by many (2) Sought by few (3) Practically never asked...	()	()	()
399 (1) Frequently make wagers (2) Occasionally make wagers (3) Never make wagers.....	()	()	()
400 (1) Worry considerably about mistakes (2) Worry very little (3) Do not worry.....	()	()	()

Be Sure You Have Not Omitted Any Part: Note Particularly the Second Columns on Pages 2, 3, and 4.

Key Number.....

Occupation	Artist	Psychologist	Architect	Physician	Dentist	Mathematician	Engineer	Chemist	Production Manager	Farmer
Raw Score										
Standard Score										
Rating										
Occupation	Carpenter	Printer	Mathematics Science Teacher	Policeman	Forest Service	Y.M.C.A. Physical Director	Personnel	Y.M.C.A. General Secretary	Social Science Teacher	City School Superintendent
Raw Score										
Standard Score										
Rating										
Occupation	Minister	Musician	Certified Public Accountant	Accountant	Office Worker	Purchasing Agent	Banker	Sales Manager	Real Estate Salesman	Life Insurance Salesman
Raw Score										
Standard Score										
Rating										
Occupation	Advertising Man	Lawyer	Author-Journalist	President, M'g Concern	Occupational Level	Masculinity-Femininity	Interest Maturity	Aviator		
Raw Score										
Standard Score										
Rating										
Occupation										
Raw Score										
Standard Score										
Rating										

APPENDIX 2

Total Scores and Ratings of the Roman Catholic Clergy Scored on the Minister Scale.

Case Number	Raw Score	Standard Score	Rating	Case Number	Raw Score	Standard Score	Rating
1 ...	50	33	B-	27 ...	144	48	A
2 ...	87	38	B	28 ...	113	43	B /
3 ...	108	42	B /	29 ...	85	38	B
4 ...	121	44	B /	30 ...	103	41	B /
5 ...	83	38	B	31 ...	52	33	B-
6 ...	70	36	B	32 ...	119	43	B /
7 ...	120	44	B /	33 ...	62	34	B-
8 ...	83	38	B	34 ...	-60	14	C
9 ...	57	33	B-	35 ...	163	51	A
10 ...	190	56	A	36 ...	-78	11	C
11 ...	72	36	B	37 ...	44	31	B-
12 ...	26	28	C /	38 ...	118	43	B /
13 ...	164	51	A	39 ...	76	37	B
14 ...	54	33	B-	40 ...	115	43	B /
15 ...	39	30	B-	41 ...	121-	44	B /
16 ...	-29	20	C	42 ...	120	44	B /
17 ...	21	27	C /	43 ...	108	42	B /
18 ...	135	47	A	44 ...	29	28	C /
19 ...	37	30	B-	45 ...	139	17'	C
20 ...	-13	21	C	46 ...	187	55	A
21 ...	127	45	A	47 ...	182	55	A
22 ...	34	29	C /	48 ...	65	35	B
23 ...	137	47	A	49 ...	102	41	B /
24 ...	125	45	A	50 ...	38	30	B-
25 ...	41	31	B-	51 ...	21	27	C /
26 ...	19	26	C /	52 ...	108	42	B /

continued -

Total Scores and Ratings of the Roman Catholic Clergy Scored on the Minister Scale.

Case Number	Raw Score	Standard Score	Rating	Case Number	Raw Score	Standard Score	Rating
53 ...	95	40	B /	79 ...	144	48	A
54 ...	-36	17	C	80 ...	-30	19	C
55 ...	184	55	A	81 ...	134	46	A
56 ...	101	41	B /	82 ...	27	28	C /
57 ...	128	45	A	83 ...	109	42	B /
58 ...	148	49	A	84 ...	92	39	B
59 ...	93	39	B	85 ...	29	28	C /
60 ...	32	29	C /	86 ...	-26	19	C
61 ...	49	32	B-	87 ...	129	45	A
62 ...	142	48	A	88 ...	34	29	C /
63 ...	176	54	A	89 ...	-64	13	C
64 ...	-81	10	C	90 ...	-47	16	C
65 ...	17	26	C /	91 ...	101	41	B /
66 ...	88	38	B	92 ...	26	27	C /
67 ...	55	33	B-	93 ...	163	51	A
68 ...	-5	23	C	94 ...	138	47	A
69 ...	76	31	B	95 ...	133	46	A
70 ...	47	32	B-	96 ...	14	26	C /
71 ...	32	29	C /	97 ...	150	50	A
72 ...	142	48	A	98 ...	139	47	A
73 ...	114	43	B /	99 ...	103	41	B /
74 ...	86	38	B	100 ...	41	31	B-
75 ...	28	28	C /	101 ...	-10	22	C
76 ...	94	40	B /	102 ...	32	29	C /
77 ...	51	33	B-	103 ...	135	47	A
78 ...	51	33	B-	104 ...	43	31	B-
				105 ...	123	44	A

APPENDIX 3

Total Results of Each Item of Like, Indifferent, and Dislike for
Ministers and Roman Catholic Clergy

Item	Ministers (N=255)						R.C. Clergy (N=105)					
	Likes		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part I Occupations												
1. Actor	107	42	84	33	62	25	48	46	29	28	28	26
2. Advertiser	82	32	107	42	65	26	35	33	40	38	30	29
3. Architect	113	46	88	36	45	18	38	36	43	41	24	23
4. Army Officer	29	11	55	22	168	67	51	49	31	29	23	22
5. Artist	91	36	128	51	32	13	32	42	38	30	35	28
6. Astronomer	116	46	112	44	25	10	35	33	38	36	32	31
7. Athletic director	73	29	134	53	44	18	63	61	24	23	17	16
8. Auctioneer	21	8	68	28	158	64	13	22	27	26	65	62
9. Author of novel	125	50	104	42	20	8	43	41	34	32	28	27
10. Author of technical book	59	24	129	24	60	24	31	30	38	30	36	34
11. Auto salesman	22	9	100	40	128	51	16	15	29	28	60	57
12. Auto racer	11	4	64	26	177	70	19	18	25	24	61	58
13. Auto repair man	46	18	90	36	114	46	26	25	26	25	53	50
14. Aviator	55	22	119	47	77	31	62	59	28	27	15	14
15. Bank teller	30	12	122	48	100	40	14	13	41	39	49	47
16. Bookkeeper	25	10	97	39	129	51	15	14	40	38	50	48
17. Building Contractor	57	23	131	53	61	24	27	25	46	45	32	30
18. Buyer of merchandise	50	20	115	46	85	34	23	22	44	42	38	36
19. Carpenter	106	42	106	42	37	16	46	45	42	30	27	26
20. Cartoonist	62	25	145	59	39	16	29	28	47	44	29	28
21. Cashier in bank	49	20	125	50	76	30	19	18	31	30	55	52
22. C. P. Accountant	28	11	114	45	109	44	21	20	32	30	52	50
23. Chemist	64	26	120	48	66	26	44	42	27	26	34	32
24. Civil engineer	76	30	130	52	44	18	36	34	45	43	24	23
25. Civil service	28	11	148	50	73	29	33	31	45	43	27	26
26. Clergyman	248	98	6	2	0	0	105	100	0	0	0	0
27. College Professor	206	81	40	16	8	3	75	71	20	19	10	10
28. Consul	106	42	127	50	19	8	56	53	36	34	13	13
29. Dentist	6	2	84	34	161	64	9	9	36	34	60	57
30. Draftsman	49	20	126	50	76	30	18	17	40	38	47	45

Total Results of Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy.

Item	Ministers (N=255)						R.C. Clergy (N=105)					
	Likes		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part I Occupations - Con't.												
31. Editor	158	63	81	32	13	5	55	51	32	31	18	17
32. Electrical Engineer	50	20	154	62	45	18	33	31	42	40	30	29
33. Employment manager	81	32	117	47	52	21	40	38	33	31	32	31
34. Explorer	154	61	77	30	22	9	56	53	36	34	13	13
35. Factory manager	49	20	131	53	69	28	27	26	42	40	36	34
36. Factory worker	10	4	92	37	147	59	10	9	28	27	67	64
37. Farmer	107	43	86	34	58	23	48	46	19	18	38	36
38. Floorwalker	15	6	62	25	173	69	7	7	30	28	68	65
39. Florist	67	27	133	53	50	20	19	18	36	34	50	48
40. Foreign Correspondent	87	35	122	48	42	17	59	62	25	26	11	12
41. Governor of a State	66	26	137	55	48	19	38	36	35	33	32	31
42. Hotel keeper	36	14	98	39	118	47	28	27	33	31	44	42
43. Interior Decorator	39	15	148	59	65	26	25	24	40	38	40	38
44. Interpreter	39	24	127	51	64	25	48	46	42	40	15	14
45. Inventor	101	40	120	48	29	12	45	43	40	38	20	19
46. Jeweler	16	6	156	63	78	31	10	10	55	52	40	38
47. Judge	110	44	103	41	38	15	72	69	23	22	10	9
48. Labor Arbitrator	110	44	88	35	53	21	56	53	28	27	21	20
49. Laboratory Technician	18	7	138	55	95	38	29	28	33	31	43	41
50. Landscape Gardner	108	43	109	43	36	14	37	35	40	38	28	27
51. Lawyer, criminal	64	26	65	26	121	48	54	51	22	21	29	28
52. Lawyer, Corporation	60	24	84	34	105	42	29	28	34	32	42	40
53. Librarian	98	39	113	45	38	16	39	37	39	37	27	26
54. Life Ins. Salesman	26	10	82	33	141	57	9	9	28	26	68	65
55. Locomotive engineer	82	33	114	46	53	21	37	35	28	27	40	38
56. Machinist	60	24	125	50	64	26	29	28	31	29	45	43
57. Magazine writer	145	58	96	38	10	4	42	40	48	46	25	24
58. Manufacturer	43	18	163	64	43	18	24	23	46	45	33	32
59. Marine Engineer	19	8	165	66	66	26	25	24	45	43	34	33
60. Mechanical Engineer	49	20	141	56	59	24	30	29	37	35	37	36

continued -

Total Results of Each Item of Like, Indifferent, and Dislike for
Ministers and Roman Catholic Clergy

Item	Ministers (N=255)						R.C. Clergy (N=105)					
	Likes		Indiffer- ent		Dislike		Like		Indiffer- ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part I Occupations - Con't.												
61. Mining Supt.	20	8	160	64	68	28	25	24	31	30	48	46
62. Musician	155	62	74	30	20	8	68	66	22	21	14	13
63. Music teacher	33	13	142	57	75	30	16	15	46	44	42	41
64. Office clerk	13	5	85	34	152	61	19	18	38	37	47	45
65. Office manager	49	20	128	52	70	28	33	32	39	37	32	31
66. Orchestra Conductor	87	35	116	46	47	19	41	39	34	33	28	27
67. Pharmacist	20	8	127	51	102	41	25	24	46	44	32	31
68. Photo Engraver	10	4	140	56	98	40	19	18	54	52	31	30
69. Physician	147	59	71	29	31	12	70	69	19	18	13	13
70. Playground Director	83	33	133	53	34	14	58	56	32	31	14	13
71. Poet	111	45	113	45	26	10	39	37	38	36	27	27
72. Politician	51	20	81	33	118	47	22	21	28	27	54	52
73. Printer	40	16	136	55	72	29	14	14	54	52	36	34
74. Private Secretary	28	11	132	53	90	36	16	15	42	41	46	44
75. Railway Conductor	35	14	122	49	90	37	19	18	29	28	56	54
76. Rancher	86	35	100	40	61	25	45	43	31	30	28	27
77. Real Estate Salesman	26	11	87	35	134	54	12	11	30	29	63	60
78. Reporter, gen.	66	26	106	43	77	31	51	49	30	29	23	22
79. Reporter, sport page	27	11	107	43	114	46	45	43	28	27	31	30
80. Retailer	23	9	134	54	91	37	8	8	49	47	47	45
81. Sales Mgr.	38	16	127	51	83	33	20	19	36	35	48	46
82. School teacher	146	59	80	32	22	9	78	75	11	11	15	14
83. Scientific Re- search worker	105	42	111	45	33	13	45	43	35	34	24	23
84. Sculptor	50	20	150	61	48	19	25	24	42	40	38	36
85. Secretary Conf.	33	14	131	53	83	33	11	10	44	43	49	47
86. Secret Service Man	34	14	106	43	106	43	55	53	34	33	15	14
87. Ship officer	32	13	125	50	91	37	47	46	37	35	20	19
88. Shop foreman	17	7	133	54	98	39	19	18	46	44	29	28
89. Social worker	151	61	78	31	19	8	74	71	20	19	10	10
90. Specialty Salesman	14	6	119	49	113	46	10	10	47	45	47	45

continued -

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy.

Item	Ministers (N=256)						R.C. Clergy (N=105)					
	Likes		Indiffer- ent		Dislike		Like		Indiffer- ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part I Occupations - Con't.												
91. Statistician	43	18	101	46	103	41	14	13	32	31	59	56
92. Stock Broker	16	6	90	37	140	57	6	6	35	33	64	61
93. Surgeon	113	45	81	33	56	22	71	68	13	12	21	20
94. Toolmaker	20	8	141	57	85	35	25	24	37	35	43	41
95. Traveling Salesman	30	12	99	40	120	48	24	23	26	24	55	53
96. Typist	13	5	103	42	132	53	24	23	46	44	35	33
97. Undertaker	14	6	59	24	175	70	8	8	26	24	71	68
98. Watchmaker	11	4	127	51	110	45	13	12	42	40	50	48
99. Wholesaler	19	8	136	55	93	37	17	16	46	44	42	40
100. Worker in Y.M.C.A., K.of C, etc.	126	51	98	39	26	10	46	44	38	36	21	20
Part II School Subjects												
101. Algebra	145	58	46	18	60	24	61	58	15	14	29	28
102. Agriculture	96	39	118	49	29	12	30	31	42	43	26	26
103. Arithmetic	147	58	60	24	45	18	66	63	11	10	28	27
104. Art	125	50	105	42	19	8	46	45	32	31	25	24
105. Bookkeeping	54	22	126	51	66	27	25	25	47	47	28	28
106. Botany	139	56	85	34	24	10	44	42	42	41	18	17
107. Calculus	52	22	105	44	84	34	27	27	35	35	37	38
108. Chemistry	107	43	95	39	44	18	53	52	25	24	25	24
109. Civics	178	71	67	26	7	3	56	53	36	34	13	13
110. Dramatics	147	58	95	38	10	4	62	60	28	27	14	13
111. Economics	163	65	79	31	9	4	64	61	23	22	18	17
112. English composition	171	68	67	26	15	6	63	60	25	24	17	16
113. Geography	194	77	54	21	6	2	69	66	29	28	7	8
114. Geology	162	65	79	32	8	3	38	37	45	44	19	19
115. Geometry	141	56	63	25	46	19	61	58	17	16	27	26
116. History	225	88	27	11	3	1	84	80	17	16	4	4
117. Languages, ancient	121	48	75	30	57	22	60	57	35	33	10	10
118. Languages, modern	121	49	91	37	36	14	71	68	27	26	6	6
119. Literature	220	88	26	10	5	2	79	75	22	21	4	4
120. Mathematics	129	51	68	27	54	22	62	59	13	12	30	29
121. Manual Training	114	46	95	38	38	16	42	41	35	35	24	24
122. Mechanical drawing	61	35	132	55	49	20	20	20	43	44	35	36
123. Military Drill	48	20	67	27	129	53	37	37	37	37	26	26
124. Music	174	69	64	25	14	6	74	72	20	19	9	9
125. Nature Study	175	69	68	27	11	4	50	49	31	30	21	21

continued -

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy.

Item	Ministers (N=255)						R.C. Clergy (N=105)					
	Likes		Indiffer- ent		Dislike		Like		Indiffer- ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part II School Subjects-continued												
126. Philosophy	208	82	39	15	6	3	91	87	14	13	0	0
127. Physical training	124	50	97	39	29	11	80	70	28	24	7	6
128. Physics	129	52	89	35	33	13	51	49	32	30	22	21
129. Psychology	210	83	35	14	7	3	94	90	11	10	0	0
130. Physiology	163	65	79	32	7	3	73	70	28	27	3	3
131. Public speaking	206	82	38	15	8	3	77	73	20	19	8	8
132. Shop work	71	30	119	50	49	20	31	31	31	31	36	38
133. Sociology	207	83	41	16	3	1	85	83	17	16	1	1
134. Spelling	130	52	80	32	41	16	65	62	28	27	12	11
135. Typewriting	70	29	136	56	38	15	54	54	34	34	12	12
136. Zoology	132	53	102	41	14	6	46	45	40	39	16	16
Part III Amusements												
137. Golf	153	60	81	32	21	8	61	58	32	31	12	11
138. Fishing	174	68	58	23	22	9	68	55	25	24	12	11
139. Hunting	120	47	81	34	48	19	64	61	27	26	14	13
140. Tennis	192	76	53	21	8	3	83	79	19	18	3	3
141. Driving an auto	225	89	24	9	5	2	91	87	11	10	5	3
142. Long walks	185	73	59	23	10	4	78	74	19	18	8	8
143. Boxing	42	17	110	44	98	39	35	33	36	34	34	32
144. Chess	79	31	124	49	50	20	28	27	27	26	50	47
145. Poker	21	8	84	34	145	58	54	51	27	26	24	23
146. Bridge	40	16	96	38	115	46	41	39	38	37	25	24
147. Nature study	158	62	86	34	11	4	41	39	40	38	24	23
148. Mechanical puzzles	82	32	96	38	75	30	44	42	36	34	25	24
149. Sleight-of-hand tricks	67	27	144	57	41	16	34	32	49	47	28	28
150. Collecting postage stamps	41	16	138	55	73	29	12	11	38	36	35	53
151. Drilling in a company	43	17	78	31	131	52	33	32	35	33	37	35
152. Chopping wood	126	50	85	34	42	16	49	47	33	31	23	22
153. Amusement parks	54	21	114	45	85	34	58	55	36	34	11	11
154. Picnics	174	69	55	22	22	9	80	76	16	15	9	9
155. Excursions	131	52	94	37	29	11	81	77	18	17	6	6
156. Smokers	30	12	64	26	156	62	61	59	27	26	16	15
157. "Rough house" initiations	15	6	46	18	190	76	14	14	32	31	59	56
158. Conventions	84	33	105	42	64	25	24	23	34	32	47	45
159. Full-dress affairs	62	24	86	34	105	42	36	35	23	22	45	43
160. Auctions	40	16	111	44	102	40	23	22	42	39	41	39

continued -

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy.

Item	Ministers (N=255)						R. C. Clergy (N=105)					
	Likes		Indiffer- ent		Dislike		Like		Indiffer- ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part III Amusements-continued												
161. Fortune tellers	8	3	74	30	168	67	6	6	13	12	86	82
162. Animal zoos	176	70	57	23	19	7	61	58	33	31	11	11
163. Art galleries	220	86	33	13	2	1	58	55	37	35	10	10
164. Museums	211	83	39	15	5	2	67	64	29	28	9	8
165. Vaudeville	93	37	109	44	48	19	65	63	27	26	12	11
166. Musical comedy	119	47	113	45	21	8	83	80	13	12	8	8
167. Symphony concerts	220	86	39	12	5	2	76	72	20	19	9	9
168. Pet canaries	45	18	147	58	60	24	25	24	52	49	28	27
169. Pet monkeys	13	5	100	40	138	55	15	14	36	34	54	52
170. Snakes	10	4	57	23	184	73	7	7	18	17	80	76
171. Sporting pages	93	37	112	44	48	19	65	62	34	32	6	6
172. Poetry	198	78	53	21	2	1	65	62	31	29	9	9
173. Detective stories	138	55	86	34	29	11	51	49	37	35	17	16
174. "Time"	170	67	74	29	10	4	55	54	29	28	18	18
175. "Judge"	111	44	107	42	35	14	7	7	41	43	48	50
176. "New Republic"	115	47	120	49	11	4	8	9	53	56	33	35
177. "System"	41	18	167	72	24	10	2	2	65	72	23	26
178. "Nat'l Geographic magazine"	234	92	20	8	0	0	72	71	27	26	3	3
179. "American Magazine"	150	60	80	32	20	8	47	48	40	41	11	11
180. "Popular Mechanics"	129	52	110	44	11	4	50	48	39	38	15	14
181. "Atlantic Monthly"	197	78	52	21	2	1	37	38	55	57	5	5
182. Educational Movies	199	79	46	18	8	3	86	83	16	15	2	2
183. Travel movies	219	87	27	11	6	2	81	78	19	18	4	4
184. Social problem movies	147	58	78	31	27	11	75	71	27	26	3	3
185. Making a radio set	47	19	138	55	64	26	26	25	46	45	31	30
Part IV Activities												
186. Repairing a clock	91	36	94	38	65	26	35	33	48	46	22	21
187. Adjusting a carburetor	66	26	120	48	64	26	32	31	42	40	31	29
188. Repairing elec. wiring	114	45	88	35	51	20	51	48	28	27	26	25
189. Cabinetmaking	98	39	108	43	45	18	30	28	47	45	28	27
190. Operating machinery	149	60	68	27	33	13	49	47	26	25	39	28
191. Handling horses	154	61	55	22	44	17	43	41	37	35	25	24
192. Giving "first aid"	130	52	94	37	28	11	63	60	29	28	13	12
193. Raising flowers and vegetables	150	59	75	30	27	11	46	44	38	36	21	20
194. Decorating a room with flowers	78	31	144	57	30	12	35	33	39	37	31	30
195. Arguments	117	47	80	32	54	21	62	60	17	16	25	24

continued

Total Results for Each Item of Like, Indifferent, and Dislike
For Ministers and Roman Catholic Clergy.

Item	Ministers (N=255)						R. C. Clergy (N=105)					
	Likes		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part IV Activities - continued												
196. Interviewing men for a job	55	22	106	42	91	36	40	38	36	34	29	28
197. Interviewing prospects in selling	42	17	87	35	121	48	20	19	44	42	41	39
198. Interviewing clients	95	38	93	37	61	25	36	34	41	39	28	27
199. Making a speech	224	88	20	8	10	4	67	64	23	22	15	14
200. Organizing a play	101	41	115	46	33	13	52	50	31	29	22	21
201. Opening conversation with a stranger	132	52	80	32	41	16	61	58	23	22	21	20
202. Teaching children	177	70	65	26	10	4	79	75	18	17	8	8
203. Teaching adults	219	87	28	11	5	2	86	82	16	15	3	3
204. Calling friends by nicknames	90	36	104	41	59	23	84	73	20	17	11	10
205. Being called a nickname	89	35	92	37	69	28	66	63	26	25	13	12
206. Meeting, directing people	199	79	46	18	7	3	84	80	13	12	8	8
207. Taking responsibility	210	84	36	14	6	2	72	69	23	22	10	9
208. Meeting new situations	207	81	35	14	12	5	77	73	21	20	7	7
209. Adjusting difficulties of others	189	75	45	18	19	7	84	80	17	16	6	34
210. Drilling soldiers	32	13	68	27	153	60	30	29	42	40	33	31
211. Pursuing bandits in sheriff's posse	16	6	56	23	177	71	24	23	41	39	40	38
212. Doing research work	132	52	82	32	41	16	55	52	28	27	22	21
213. Acting as yell-leader	30	12	87	35	133	53	8	8	34	32	63	60
214. Writing personal letters	126	49	86	34	43	17	52	49	31	29	23	22
215. Writing reports	44	17	94	38	112	45	30	29	38	36	37	35
216. Entertaining others	113	45	107	42	32	13	59	56	28	27	18	17
217. Bargaining (\$wapping)	37	15	90	36	122	49	25	24	43	41	37	35
218. Looking at shop window	105	42	106	42	41	16	50	48	29	27	26	25
219. Buying merchandise for a store	42	17	138	54	73	29	18	17	45	43	41	40
220. Displaying merchandise in a store	35	14	145	59	66	27	20	19	40	38	45	43
221. Judge publically regard- less of criticism	33	53	86	34	32	13	39	37	31	30	35	33
222. Rival in political or athletic race	94	37	102	40	57	23	50	48	31	29	24	23
223. Methodical work	65	54	66	26	52	20	65	62	24	23	16	15
224. Reg. hrs. for work	163	65	57	22	32	13	79	75	15	14	11	11
225. Changing activities	80	32	75	30	97	38	46	44	20	19	39	37

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy.

Item	Ministers (N=255)						R. C. Clergy (N=105)					
	Likes		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part IV Activities - continued												
226. Developing business systems	40	16	139	56	71	28	21	22	38	40	36	38
227. Saving money	133	53	100	40	19	7	60	57	38	36	7	7
228. Contributing to charities	210	83	39	15	4	2	91	87	13	12	1	1
229. Raising money for charity	214	45	79	31	61	24	77	73	20	19	8	8
230. Living in the city	128	50	67	26	58	23	45	47	19	20	31	33
231. Climbing along edge of precipice	58	23	68	26	130	51	21	20	23	22	61	58
232. Looking at collection of rare laces	23	9	110	44	118	47	5	38	36	62	59	
233. Looking at collection of antique furniture	75	30	102	40	74	30	20	19	41	39	44	14
Part V Peculiarities of People												
234. Progressive people	233	91	19	8	3	1	85	81	13	12	7	7
235. Conservative people	86	34	108	43	57	23	48	46	38	37	18	17
236. Energetic people	224	88	27	11	4	1	93	89	9	8	3	3
237. Absent minded people	23	9	92	36	138	55	18	17	28	27	59	56
238. People who borrow	9	4	51	20	193	76	5	5	26	25	74	70
239. Quick tempered people	27	11	51	20	176	69	14	13	21	20	70	67
240. Optimists	198	78	44	17	12	5	81	77	18	6	6	6
241 Pessimists	14	6	70	28	167	66	4	4	18	17	83	79
242. People who are natural leaders	225	82	18	7	2	1	94	89	9	9	2	2
243. People who assume leadership	82	32	70	28	101	40	41	39	19	18	45	43
244. People easily led	34	13	106	42	114	45	20	19	43	41	42	40
245. People who make fortunes	70	28	152	60	30	12	15	14	77	74	12	12
246. Emotional people	64	25	110	44	78	31	40	38	35	24	29	28
247. Thrifty people	168	67	74	29	11	4	62	59	32	31	11	10
248. Spendthrifts	21	8	58	23	174	69	7	7	39	37	59	56
249. Talkative people	26	10	78	31	149	59	21	20	32	30	52	50
250. Religious people	214	85	31	12	8	3	102	97	3	3	0	0
251. Irreligious people	68	27	98	29	84	34	10	9	22	21	73	70
252. People who have done you favors	222	89	27	11	1	0	99	94	5	5	1	1
253. People who get rattled easily	24	18	109	40	119	42	16	14	51	50	38	36
254. Gruff men	42	10	75	43	136	47	15	14	31	30	58	56
255. Foreigners	142	56	105	42	6	2	46	44	55	52	4	4

Total Results for Each Item of Like, Indifferent, and Dislike for Ministers and Roman Catholic Clergy.

Item	Ministers (N=256)						R. C. Clergy (N=105)					
	Like		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part V Peculiarities of People												
256. Sick People	132	53	100	40	18	7	76	72	24	23	5	5
257. Nervous people	34	13	114	46	102	41	29	27	47	46	29	27
258. Very old people	179	71	63	25	10	4	73	69	28	27	4	4
259. Cripples	143	57	94	38	12	5	79	74	21	20	6	6
260. Side-show freaks	12	5	51	20	189	75	12	12	41	40	50	48
261. People with gold teeth	7	3	137	55	105	42	8	8	70	67	26	25
262. People with protruding jaw	15	6	137	55	98	39	12	11	76	73	17	16
263. People with hooked nose	10	4	148	59	91	37	7	7	80	76	18	17
264. Blind people	116	47	114	46	18	7	72	68	26	25	7	7
265. Deaf mutes	74	30	147	60	26	10	62	59	35	33	8	8
266. Self-conscious people	45	18	120	48	85	34	37	35	47	45	21	20
267. People who agree with you	21	8	96	38	135	54	19	18	39	37	47	45
268. People who talk very loudly	4	2	39	15	210	83	5	5	21	20	78	75
269. People who talk very slowly	23	9	135	54	92	37	12	11	42	40	51	49
270. People who talk about themselves	6	2	41	16	206	82	4	4	20	19	81	77
271. Fashionably dressed people	79	32	143	57	28	11	45	43	51	48	9	9
272. Carelessly dressed people	15	6	86	34	150	60	11	10	33	31	61	59
273. People who don't believe in evolution	26	10	164	66	60	24	32	32	68	65	4	4
274. Socialists	65	26	129	52	56	22	9	9	46	44	49	47
275. Bolshevists	16	6	107	43	128	51	2	2	13	13	88	85
276. Independents in politics	178	71	64	25	9	4	42	40	54	51	10	9
277. Men who chew tobacco	10	4	100	30	141	56	12	11	53	51	40	38
278. Men who use perfume	4	2	70	28	176	70	4	4	17	16	84	80
279. People who chew gum	6	2	154	62	90	36	18	17	70	67	17	16
280. Athletic men	188	74	62	24	4	2	86	82	18	17	1	1
Part VI Order of Preference of Activities												
281. Develop theory of operation of machine	62	25	71	29	114	46	40	39	25	24	39	37
282. Operate new machine	140	59	95	39	11	4	58	56	36	35	10	9
283. Improved design of machine	61	25	132	53	54	22	26	25	59	7	18	18
284. Determine cost to operate machine	42	17	101	41	104	42	6	6	46	45	51	49
285. Supervise manufacture of the machine	27	11	119	48	102	41	22	22	45	42	22	25

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy.

Item	Ministers (N=256)						R. C. Clergy (N=105)					
	Like		Indiffer- ent		Dislike		Like		Indiffer- ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part VI Order of Preference of Activities - continued												
286. Improve beauth of auto	66	27	129	52	52	21	33	32	43	42	26	26
287. Sell the machine	23	29	96	39	128	52	18	17	34	33	52	50
288. Prepare advertising of machine	70	28	97	39	80	33	23	23	44	43	35	34
289. Teach others use of mch.	110	45	100	40	37	15	53	51	36	35	14	14
290. Int.public in mach. by public addresses	140	57	54	22	53	21	36	35	29	28	38	37
291. Salary	27	11	96	38	128	51	22	22	20	19	61	59
292. Steadiness of work	100	40	123	49	28	11	44	42	41	40	19	18
293. Opportunity for promotion	43	16	101	41	107	43	24	23	27	26	53	51
294. Courteous treatment of superiors	8	3	139	55	104	42	36	35	49	47	19	18
295. Have facility to use your knowledge & experience	195	78	45	18	11	4	60	58	24	23	20	19
296. Able to ask questions on difficulties	13	5	144	57	94	38	27	26	51	50	25	24
297. Opportunity to understand superiors demands	10	4	91	36	150	60	20	19	52	50	32	31
298. Assurance of fair judg- ment of work	53	22	121	48	77	30	16	15	62	60	26	25
299. Co-workers-congenial, competent, adequate	184	73	48	19	19	8	26	25	39	33	38	37
300. Freedom in method of work	119	47	103	41	29	12	45	43	46	44	13	13
301. Luther Burbank	118	47	87	35	45	18	16	15	37	36	50	49
302. Enrico Caruso	82	33	98	39	70	28	60	58	28	27	15	15
303. Thomas A Edison	126	50	102	41	22	9	45	44	43	42	15	14
304. Henry Ford	57	23	133	53	60	24	24	23	46	45	33	32
305. Charles Dana Gibson	30	12	125	50	95	38	20	19	46	45	37	36
306. J. P. Morgan	22	9	85	34	143	57	11	11	31	30	61	59
307. J. J. Pershing	14	5	54	22	182	73	48	42	44	39	21	19
308. Wm. H. Taft	99	40	112	45	39	15	33	32	52	51	18	17
309. Booth Tarrington	96	38	124	50	30	12	47	46	40	39	16	15
310. John Wanamaker	102	41	101	40	47	19	8	8	47	46	47	46
311. Pres. of club	198	79	27	11	26	10	68	66	11	11	24	23
312. Secretary of club	49	19	89	36	113	45	21	20	37	36	46	44
313. Treasurer of club	19	8	85	34	147	38	9	9	38	36	57	55
314. Member of club	54	21	145	58	52	21	38	36	49	47	17	16
315. Chairman, arrangements	29	12	123	49	98	39	15	14	58	56	31	30

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy

Item	Ministers (N-255)						R. C. Clergy (N-105)					
	Like		Indifferent		Dislike		Like		Indifferent		Dislike	
	Responses	%	Responses	%	Responses	%	Responses	%	Responses	%	Responses	%
Part VI Order of Preference of Activities - continued-												
316. Chairman, Education	119	47	112	45	20	8	58	56	32	31	14	13
317. Chairman, Entertainment	31	12	131	52	89	36	39	37	38	33	30	30
318. Chairman, Membership	25	10	154	61	72	29	12	11	68	66	24	23
319. Chairman, Program	169	58	62	24	19	8	21	20	55	53	28	27
320. Chairman, Publicity	52	21	101	40	98	39	28	27	32	31	44	42
Part VII Comparison between Two Items												
321. Motorman-conductor	88	35	94	38	67	27	47	46	35	34	21	20
322. Policeman-Fireman	59	24	111	45	77	31	55	52	26	25	42	24
323. Chauffer-Chef	164	66	48	19	38	15	70	68	15	15	17	17
324. Head-waiter-light house tender	70	28	58	23	121	49	57	55	17	17	29	28
325. House selling-retail selling	8	3	47	19	193	78	12	12	23	22	67	66
326. House-selling gardening	16	6	22	9	212	85	19	18	14	14	69	68
327. Repair-drive auto	8	3	37	15	207	82	8	8	8	8	87	84
328. Develop-execute plans	97	38	88	35	68	27	32	31	23	22	49	47
329. Do job-delegate job	135	54	67	26	51	20	72	69	18	17	15	14
330. Persuade-order others	188	75	35	14	29	11	72	69	12	12	20	19
331. Deal with things, people	25	10	35	14	192	76	9	8	6	6	90	86
332. Plan immediate future five years	74	30	66	26	111	44	56	55	25	24	22	21
333. Take chance-play safe	103	40	65	26	86	34	52	50	23	22	29	28
334. Definite Salary - commission	82	33	74	29	96	38	38	37	19	18	47	45
335. Activity for results, for employment	215	85	24	10	13	5	69	67	19	18	15	15
336. Work for self - for superior	193	75	37	15	24	10	49	47	21	20	34	33
337. Interesting work, low income-no interest, large income	237	94	17	6	0	0	84	81	9	8	11	11
338. Work in big concern, Pres. at 55 - self in small business-	45	18	55	22	151	60	13	13	14	13	77	74
339. Selling 10% below competitor - 10% above	60	24	120	49	65	27	47	46	42	41	13	13
340. Small pay, learn for 5 years - good pay, little learned	206	83	31	13	11	4	86	83	11	11	6	6
341. Wk. of few details-many details	109	83	64	26	78	21	43	41	22	21	39	38
342. Outside-inside work	113	45	97	38	43	17	70	67	19	18	16	15
343. Chg. places-one place	51	20	63	25	138	55	45	43	21	20	39	39

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy

Item	Ministers (N256)						R.C. Clergy (105)					
	Like		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part VII-Comparison between two items - continued												
346. Quality-quality of work	223	88	26	10	5	2	85	81	11	10	9	9
347. Technical-supervisory responsibility	79	32	76	31	91	37	42	40	30	29	32	31
348. Report-written-verbally	76	30	66	26	112	44	37	36	25	24	41	40
349. Listen-tell story	62	24	98	39	94	37	58	15	29	28	23	22
350. Play-watch baseball	112	44	66	26	75	30	52	50	20	19	33	31
351. Enjoy crown-alone or few	58	23	86	34	106	43	39	37	32	31	33	32
352. Nights alone-away	194	77	48	19	9	4	52	50	42	40	11	10
353. Reading-movies	202	80	39	15	13	5	37	36	42	40	25	24
354. Member many societies -few	15	6	32	12	207	83	17	16	19	18	69	66
355. Few - many friends	128	51	74	29	51	20	47	45	19	18	39	37
356. Many women friends-few	57	23	117	46	77	31	18	17	44	43	41	40
357. XX Fat & thin men	22	9	191	76	39	15	18	17	77	72	12	11
358. Tall- short men	60	24	184	73	7	3	22	21	76	74	5	5
359. Jealous-conceited	30	12	171	70	43	9	28	27	63	62	11	11
360. Jealous-spendthrift	19	7	131	53	95	40	14	14	46	45	42	41
Part VIII - Rating of Abilities and Characteristics												
361. start activities in my group	195	77	39	16	18	7	40	39	23	22	40	39
362. Drive self steadily	165	65	43	17	45	18	61	58	10	10	33	32
363. Win friends easily	177	72	53	21	17	7	63	61	28	27	13	12
364. Get other people to do what I want	169	67	61	24	22	9	43	41	32	31	29	28
365. Liven up a group	105	42	109	43	38	15	40	38	35	34	29	28
366. Sure of self	124	50	80	32	46	18	40	38	42	XX 41	XX 22	21
367. Accept just criticism	177	71	53	21	20	8	77	74	16	15	11	11
368. Mechanical ingenuity	78	31	54	21	120	48	24	23	18	18	61	59
369. Many novel ideas	63	25	81	33	105	42	29	28	29	28	46	44
370. Carry out assigned plans	194	77	43	17	16	6	92	89	9	9	2	2
371. Discriminate matters	212	85	32	13	5	2	94	90	7	7	3	3
372. Silent about confidences	213	84	24	9	18	7	91	87	9	9	4	4
373. Am punctual	138	55	52	21	60	24	76	73	9	9	19	18
374. Remember faces, names, incidents	75	30	84	33	95	37	26	25	30	29	48	46
375. Correct others without offense	121	48	108	43	23	9	50	48	41	40	12	12

continued -

Total Results for Each Item of Like, Indifferent, and Dislike
for Ministers and Roman Catholic Clergy

Item	Ministers (N-255)						R. C. Clergy (N-105)					
	Like		Indiffer-ent		Dislike		Like		Indiffer-ent		Dislike	
	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%	Respon- ses	%
Part VII- Comparison between two items - continued												
376. Can meet emergencies	142	56	93	37	17	7	52	51	40	40	9	9
377. Not Get rattled easily	30	12	53	21	171	67	21	20	27	26	56	54
378. Write concise report	185	73	53	21	16	6	46	44	44	42	14	14
379. Good judgment in values	143	57	86	34	22	9	59	57	37	36	7	7
380. Plan work in detail	136	53	61	24	58	23	55	53	10	10	39	37
381. Follow up subordi nates	86	35	110	44	52	21	41	40	52	50	10	10
382. Put drive in organizat- ion	139	55	88	35	24	10	38	37	44	42	22	21
383. Stimulate ambition of others	134	53	106	42	13	5	51	50	35	34	17	16
384. Firm but not easy	120	47	104	41	29	12	54	52	26	25	24	23
385. Win confidence	202	82	46	18	1	0	72	69	26	25	6	6
386. Smooth disagreements	181	71	62	25	11	4	72	70	26	25	5	5
387. Am approachable	233	91	19	8	3	1	87	84	15	14	2	2
388. Discuss my ideals	211	83	20	8	24	9	87	84	10	9	7	7
389. Feelings hurt	28	11	138	54	89	35	30	29	58	55	17	16
390. Consider feelings of others	8	3	69	27	175	70	3	3	39	37	62	59
391. Loan money	38	15	56	22	158	63	63	61	22	21	18	18
392. Rebel at orders	48	19	76	30	129	51	14	14	35	34	54	52
393. Make excuses for error	68	27	140	56	43	14	40	40	46	45	15	15
394. Best likes friends are superior	111	45	129	52	8	3	33	33	64	64	113	113
395. Handle complaints well	101	40	134	53	19	7	25	25	62	61	14	14
396. Not Borrow frequently	7	3	92	36	153	61	3	3	42	41	57	56
397. Joke well	109	43	128	51	14	6	34	33	51	50	18	17
398. My advice sought	151	60	101	40	0	0	23	22	71	69	9	9
399. Wager frequently	2	1	18	7	229	92	11	11	61	60	30	29
400. Worry much	-	-	-	-	-	-	63	61	37	36	3	3

APPENDIX 4

An Abstract of An Evaluation of Strong's Minister Scale Applied to the Roman Catholic Clergy

Among the 39 occupational scales by which the Vocational Interest
¹
Blank For Men of Edward K. Strong, Jr., may be scored, there is one for
the Protestant Clergy called the Minister Scale. This thesis deals with
the application of this scale to the Roman Catholic Clergy.

To furnish a background for the understanding of the results obtain-
ed by testing Catholic priests on this scale, the first part of the thesis
presents a brief study of the nature of interests and of methods of their
measurement, and an explanation of the make-up and use of this interest
blank.

Chapters two and three analyze the results obtained when this test
was administered to 105 Catholic Clerics and the blanks then scored on the
Minister scale. Every member of this group was ordained to one or all of the
three major Sacred Orders of the Priesthood, and was a student at the
University Seminary of the University of Ottawa in Canada, or at St. Mary's
University, Baltimore, Maryland. Their average age was 25.6 years and their
education averaged 19 grades. They were representatives of 19 states, 2
provinces in Canada and the Dominion of Newfoundland. This was considered
a sample representative of Catholic priests. The data showed only 56.2
percent could be considered to have successfully passed it compared with
90 percent of the criterion group of Protestant Clergy. Correlation
between these two groups was $.64 \pm .02$. Therefore, it was concluded that

1. Vocational Interest Blank For Men (Revised) Stanford University
Press, Stanford University, California.

this scale was not valid for Catholic Clerics. Confirmation of this conclusion was shown in analysis of the responses wherein differences appeared indicating there was a basis for differentiation of the two groups and the possibility of developing a new scale for Catholic priests. Chapter five treats the method of constructing this new scale.

Appendix to the body of the thesis are the following:

1. Vocational Interest Blank for Men (Revised)
2. The total scores and ratings of the Roman Catholic Clergy scored on the Minister scale.
3. The total results in responses and percent for each item for Ministers and Roman Catholic Clergy.
4. An Abstract of an Evaluation of Strong's Minister Scale Applied to the Roman Catholic Clergy.