

1954

The influence of identification with a religious group on expressed and inventoried choice of occupation

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THE INFLUENCE OF IDENTIFICATION WITH
A RELIGIOUS GROUP ON EXPRESSED AND
INVENTORIED CHOICE OF OCCUPATION

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THE INFLUENCE OF IDENTIFICATION WITH A RELIGIOUS
GROUP ON EXPRESSED AND INVENTORIED
CHOICE OF OCCUPATION

By

Jack L. Slatoff

Thesis Submitted In Partial Fulfillment Of The
Requirements For The Degree Of
Master Of Science

University of Massachusetts

June 1954

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CHAPTER I. INTRODUCTION.

The aim of this research is to investigate one of the several factors that may influence an individual's choice of occupation or, more specifically, his expressed and measured vocational interests, the development of these interests in the college years, and the effect that family pressures as associated with identification with a religious group may have upon the direction of these interests.

There are two basic means of discovering an individual's vocational interests. One of these is by the use of an interest inventory such as the Vocational Interest Blank by Strong, and the other is by having the individual state his occupational goal. An individual's scores on an inventoried interest test supply information about him that is disclosed neither by his tested ability nor by his tested achievement. These scores predict his interest in an occupation and his possible future satisfaction while engaged in that occupation.

Some investigators, namely Ginzberg and his associates (4), have suggested that an individual's vocational interests and his final choice of an occupation are the result of a long process beginning in the early years of school and culminating in early adulthood. Because of this long term development, the environmental factors involved must be considered. The factor that is the concern of this study is family differences which may be caused by differing religious backgrounds. There will be a comparison of the expressed and measured vocational interests of Jewish and non-Jewish fraternity men to determine any differences that there may be.

In this chapter will be discussed various definitions of interests,

moving from the more theoretical to the more applicable; a brief discussion of the development of the investigation of group interests which will lead into a more complete discussion of the Vocational Interest Blank by Strong; an analysis of another means of discovering a person's occupational interests, his merely stating his occupational goal; Ginzberg's approach to the study of the development of occupational choice; and the effect that family pressures which may result from religious identification might have upon the development of this occupational choice.

The importance of interests in the choice of an occupation was not recognized by early educators or by early industrialists. It was not until the late nineteenth century that psychologists such as Wilhelm Wundt in Germany, G. Stanley Hall in America, and James Sully in England began to recognize the right of the individual to be interested in and satisfied with his occupational choice (3). Interest was studied as a factor of experience, "a part of the conscious stream of mental activity" (3, p. 327). The structural psychologist defined interest "as feeling, an element of experience, or as a complex thought experience with a strong feeling component" (3, p. 327). The functional psychologist defined interest "as a moving, habitual experience with ideas of future reference and with a strong feeling component" (3, p. 327). Wundt's definition stems from the above--"Interests have come to be regarded as complex configurations of feeling experience." (1, p. 137)

Super (18, p. 377), in the twentieth century, has left the more theoretical approach to interests and has arrived at a more practical outlook. He has divided interest into four categories--expressed,

manifest, tested, and inventoried. "Expressed interest is the verbal profession of interest in an object, activity, task, or occupation. Manifest interest is synonymous with participation in an activity or occupation. Tested interest refers to interest as measured by objective tests other than inventories" (such as the Michigan Vocabulary Test). "Inventoried interest is assessed by means of lists of activities and occupations which bear a superficial resemblance to some questionnaires for the study of expressed interest, for each item in the list is responded to with an expression of preference." Expressed and inventoried interests will be dealt with in the present study.

Aside from his practical definitions of interest, Super (18, p. 406) also has arrived at a theory of the development of interests. He suggests that interests are the product of the interaction between inherited aptitudes and endocrine factors on the one hand and opportunity and social evaluation on the other hand. An individual behaves in a certain manner which gives him a feeling of satisfaction and status with his peers and which results in the development of interests in that direction. Some aspects of his peers, such as their intellect or their personality, appeal to him, and he identifies with them. If he is on the same intellectual level or of the same general personality type, he retains this identification, but if he is not, he seeks other identifications, self-concepts, and patterns of interests. Super also feels that interest patterns are generally rather stable because of the stability of hereditary endowment and the relative stability of the social environment.

Among the first psychologists to attempt to investigate group interests was Kent (3, p. 329), in 1903, who found that constructing a

steam engine was an adolescent activity of 32% of the successful engineers studied by him. His work and work like it was an impetus to the group that began a systematized study of the measurement of group interests by the interest inventory. The development of this type of inventory occurred in 1919 with the work of Yoakum and his students in a graduate student seminar at the Carnegie Institute of Technology (3, p. 61). The earliest investigation of this group was an undertaking by Bruce Moore (3, p. 62) in which he attempted to measure the mechanical and social interests of engineers. He constructed a list of twenty items, ten of which were judged to be of interest primarily to those in mechanical pursuits, and ten of which were judged to be of interest primarily to those in social pursuits. He scattered the items in his inventory and used the judged lists as the scoring key. Other early investigations from this group were studies made by Ream, who attempted to distinguish between successful and unsuccessful salesmen by their interests, and by Freyd, who, following Moore, made a further attempt to distinguish between mechanical and social groups of people. Ream (3, p. 74) administered the first edition of the Carnegie Interest Inventory to two groups of salesmen clearly defined by their student practice selling of insurance as successful or unsuccessful. He was unable to distinguish between them. Freyd (3, p. 61) revised the Carnegie Interest Inventory in his extension of Moore's work.

Among currently used interest inventories, the Vocational Interest Blank for Men designed by Strong (17) is probably the most satisfactory instrument in terms of demonstrated reliability and validity. This instrument stems directly from the Carnegie Interest Inventory in its

design. Strong (17, p. 107) states two different uses for his interest blank--"(1) to differentiate and classify occupations in terms of interest and (2) to designate with which occupation or occupations a particular individual has interests most in harmony." Strong's research has indicated that inventoried interest patterns of men in specific occupations differ significantly from men in general. As a corollary to this, he found that men engaged in specific occupations have characteristic interests that differentiate them from men in other specific occupations.

This interest blank consists of 400 items grouped according to content. These groups are (1) types of occupations, (2) school subjects, (3) amusements, (4) activities (hobbies), (5) peculiarities of people, (6) vocational activities, (7) factors effecting vocational satisfaction, (8) well-known persons exemplifying occupational stereotypes, (9) officers in clubs, and (10) ratings of abilities and personality characteristics. The subject indicates like, dislike, or indifference to each of the 400 items. The responses on the blank can be scored for each of 40 occupations and/or for six group keys which represent clusters of the separate occupations.

The subject's responses to the 400 items are compared with the response patterns of criterion groups in specific occupations. These groups consisted of men who had to have been in their respective occupations for at least three years. Also used in the selection of these men were annual income, level of education, certification or licensing, professional society membership, and selection by "competent" authorities. Superior, average, and inferior persons were included from every occupation.. Each of these took the Vocational Interest Blank, and

their raw scores for each occupation were placed on a normal curve and converted into standard scores and ratings. To determine the standard scores, (17 , p. 65) the mean raw score for each occupation was obtained and assigned the standard score of fifty and the standard deviation of the distribution was called a range of ten standard scores, i.e. a standard score of sixty is one standard deviation above the mean and a standard score of forty is one standard deviation below the mean. All of the raw scores were converted in this manner. The ratings (17, p. 85) are A, B~~/~~, B, B-, C~~/~~, and C and are obtained by assigning A to 69.1% of the criterion group obtaining the highest scores, B~~/~~ to the next 15%, and the others to the remaining 15.9%. The criterion groups' raw scores, standard scores, and ratings have been compiled, and an individual's raw scores in the test can be compared with the corresponding scores of each criterion group to determine the individual's standard scores and ratings.

In the past twenty-five years, there has been extensive research on the reliability and the validity of this interest blank. Strong has conducted three major follow-up studies, a nine and ten year study, a nineteen year study, and a twenty-two year study. The nine and ten year study (17, p. 391) was conducted on 175 Stanford University freshmen and 168 Stanford University seniors. The freshmen were retested nine years after their freshmen year, and the seniors were retested ten years after their graduation. The reliability coefficient for the freshmen was .56 and for the seniors .71. The seniors (17, p. 366) at the original testing had 12% of their ratings as A and 34% as C. Ten years later, of the 12% A ratings, 7.4% remained A, 2.0% became B~~/~~, and 1.9% became B ratings. This seemed to indicate that if a senior had

an A rating at his original testing, there was very little chance of his receiving anything but A, B~~/~~, or B a decade later. Ten years later, of the 34% C ratings, 21.4% remained C, 5.5% became C~~/~~, 4% became B-, and 2.0% became B ratings. This seemed to indicate that if a senior had a C rating at the original testing there was only 2.3 chances in 100 that his rating could change to B~~/~~ and .9 chances in 100 it could change to A. The above small amount of change in ten years indicates that a person's inventoried interests are relatively stable. Strong also tested the validity for this same group and an adequate relationship was shown between interests in college and subsequent occupational careers. In the senior group, three-fifths had not changed their vocational choice and one-fifth had; in the freshmen group, however, there was slightly less validity which he feels may be due to immaturity.

The nineteen year study (13) was conducted on the engineer interest scale of 306 Stanford University freshmen who were tested in 1930 and retested in 1931, 1939, and 1949. He related the engineer interest scale to selection of college majors, occupational choices when freshmen, and occupations engaged in nineteen years later. The reliability of the engineer interest scores was .91 over one year, .77 over nine years, and .76 over nineteen years. Freshmen who later became engineers had 99% overlap with the criterion group of 513 adult engineers; those who later became physicists and geologists had 91% overlap, and those who later became lawyers had 16% overlap. As the correlations of these other occupations with engineers move from ~~/~~1 to -1, the percentage of overlap decreases, proving that as the above occupations correlate less and less with engineering, the interests of the persons in those

occupations are less and less like those of engineers. As the engineer score decreases from 68 to 0, the students' majors shift from engineering to physical sciences, to biological sciences, to accounting and business, to social sciences, to law, and to foreign languages, indicating that there is a close relationship between the engineer interest scores of freshmen and their majors. As the engineer mean score increases from 22 to 50, the occupations engaged in nineteen years later by these freshmen approximate more and more closely that of engineering, demonstrating the close relationship between the engineer interest scores of freshmen and their occupations nineteen years later.

The third of these long term follow-up studies was a twenty-two year study (14) of Stanford University seniors and freshmen. The seniors were first tested in 1927 and retested in 1932, 1937, and 1949. He investigated the amount of correlation between the standard scores of the thirty-four occupations of each individual on the first test with those on each of his retests. The correlation coefficients were .84 for five years, .82 for ten years, and .75 for twenty-two years. Strong (14) concludes "approximately the same rank order is maintained for occupational interest scores for intervals ranging from one to twenty-two years."

Another validation study was done by Kredt, Stone, and Paterson (6) on the personnel director's key by gathering data by mail from industrial relations executives, who would be considered directors by the criterion group definition. It was found to be an adequate measure of the vocational interests of industrial relations directors, personnel directors, training directors, and wage and salary administrators who were tested. These men correlate highly with the original

criterion group of this key.

Referring back to Super's four definitions of interests, it was mentioned that the two with which this study is concerned are the inventoried interests and the expressed interests. The information and studies dealing with Strong's Vocational Interest Blank constitute the inventoried, and now we will deal with the expressed interests of an individual. A student's expressed interest is obtained by merely asking him to state the occupation he plans to enter upon graduation from college.

Darley (2), in 1940, collected data from 1000 men from the files of the Counseling Bureau at the University of Minnesota on their expressed and inventoried interests. In this group there were 428 recent high school graduates, 246 freshmen, 129 sophomores, 43 juniors, 11 seniors, 14 graduate students, 4 unclassified students, 23 extension students, and 102 adults. Their expressed choice was obtained by a careful reading of each of their records. This expressed choice was theirs at the time they sought counseling. These choices were matched with the occupations on the scoring key for the Vocational Interest Blank. If there were no occupational key for the expressed choices, judges decided into what interest type they should be placed.

The overall contingency coefficient between the expressed and the inventoried interests was .43. There is a possibility that the expressed choices, having come from counselees, may be more inaccurate than if they had come from the average college population.

Interest types.

<u>Darley</u>	<u>Strong</u>
I Technical	Group I, group II, and farmer of group IV
II Verbal or Linguistic	Group X
III Business Contact	Group IX
IV-A Welfare or Uplift	Teacher and minister of Group V.
IV-B Welfare or Uplift	Group V excluding teacher and minister.
V Business Detail	Accountant, office worker, purchasing agent of Group VIII.
VI C. P. A.	C. P. A.

Darley found that of the 1000 men, only 161 were undecided as to what occupation they desired, only 9 chose any form of business and sales contact jobs, and only 80 chose welfare. Of the 500 men who chose occupations within the technical or verbal category, the majority of them chose professional careers, and of the 169 in the business detail category, all looked forward to executive positions in business.

A later study directed by Berdie (1) related Strong's Vocational Interest Blank and the Kuder Preference Record to self-ratings. Each man who came to the Counseling Bureau at the University of Minnesota during the first part of 1948 took the Vocational Interest Blank, the Kuder Preference Record, and a self-rating form. The rating scale covered broad areas such as biological sciences, artistic creation and appreciation, physical sciences, technical occupations, business detail, selling, and verbal or literary. Five hundred people took these forms, 195 pre-college, 19 non-college, and 214 freshmen and

sophomores at college. The median contingency coefficient between the Interest Blank and self-ratings was .43, with some areas as high as .61. The men seemed to have more difficulty estimating scientific interests than persuasive or sales interests.

Moffie (17, p. 356), in 1942, has reported a correlation of .22 between expressed choice and inventoried interests of 80 National Youth Administration boys. He suggested that the maturity and the experience of an individual accounts for his difference between inventoried and expressed interests. Strong (17) and Berdie (1) feel that validity of occupational preference increases with age and education, and an individual's choice becomes more realistic as he comes closer to entering the business world.

A different approach to the study of the development of occupational interests was made by Ginzberg and his associates (4) who concluded on the basis of selected interviews that an individual's choice of occupation is a long process from the beginning of school through early adulthood. He states that an individual passes through three stages of occupational choice--"the period of fantasy choice," from age four to eight, "the period of tentative choice," from age eleven to seventeen, and "the period of realistic choice," from age seventeen up. In "the period of fantasy choice," a child's ideas of occupations are grandiose, spectacular, and adventuresome. He imagines himself as an adult similar to his father and his mother and he feels that when the time comes his parents will make the decision for him. "The period of tentative choice" has four stages--"the interest stage" in which the pre-adolescent makes his choice primarily in terms of his likes and dislikes, "the capacity stage" in which the adolescent begins to

introduce realistic elements into his considerations and he begins to consider his capacities objectively, "the value stage" in which the adolescent attempts to find a place for himself in society--he must synthesize a range of factors and formulate and clarify his own goals and values, and "the transition stage" in which the individual must change his life either to go to work or to go to college. "The period of realistic choice" is the one in which the individual makes the more practical choice of occupation. In this period, the student explores, crystallizes, and specifies. He acquires new and different types of experience and he assesses a host of factors that are important to resolve his general choice of occupation. Lastly he breaks down this general choice of occupation into more specific branches.

Because there may be this long term development of occupational choice, the factors that are involved in this process must be considered. Interests which are intimately related to the choice of an occupation are learned phenomena and are related to the totality of activities and objects in the environment. The factors that influence this learning such as school, family, and peers should be studied in order that we may better define and specify the factors involved in this long term development of occupational choice.

The factor that is pertinent to this study is the family, more specifically, familial differences which might result from different religious backgrounds. Herschberg and Gilliland (1, p. 142) conducted an investigation showing the similarity of attitudes between parents and children by comparing their scores on different attitude scales, and they arrived at correlations ranging from .25 to .66. They concluded that this similarity may be due to exposure to mutual in-

fluences or to a conditioning effect exerted by the parents on their children. Berdie (1) states "the family undoubtedly has a profound influence upon the evaluation aspects of the child's development, his desires, his satisfactions, his dissatisfactions, and his sense of values." According to Fryer (3), "Our training, the environment in which we live determines the number, kind, and complexity of our interests." Peters (7) invited 700 seniors to attend a vocational guidance conference, and had each of them fill out a card checking the first and second factors which most influenced their choice of occupation. He concluded "The home is the greatest single agency for the determination of a vocation for the young people of our country."

One might expect then that differences in the religious background of students might exert different pressures toward certain occupations. These differences will be investigated, using Jewish and non-Jewish students, all of whom are members of fraternities. Lehrer (8) states that Jewish children raised in a Jewish environment have certain common feelings, attitudes, and information regardless of their formal schooling. Similarly, the Jewish student who has joined a Jewish fraternity has accepted this identification with and is a part of his religious group.

According to Schermerhorn (9), as the early Jews moved into positions of higher economic rank, they followed their traditional inclination for learning by supplying it for their children either in the direction of white collar business or in professions. Jews are little interested in technology or mechanical devices, and they have been unable to find positions in key industries. Rose and Rose (8) stated three reasons why second and third generation Ameri-

can Jews have entered professions: (1) Parents have encouraged them to get a higher education and have made great financial sacrifices; (2) The Jews have a long tradition of respect for learning; and (3) Financial success has not always brought social success, but professional status raises social status. Havemann and West (5) analyzed data obtained from questionnaires received from 9,064 graduates of over 1000 colleges and universities, and one of these analyses was by religious preference. They found that even though there was very little difference among Jews and non-Jews as to whether they were family supported or self-supporting, and even though there was very little difference as far as college grades were concerned, 78% of the Jews were proprietors, managers, executives, or in the non-teaching professions, whereas only from 58-68% of the non-Jews were in these occupations, and the Jewish graduates had higher incomes as well as higher job status. They suggest that Jewish students have the greatest motivation to succeed and that they are drawn toward professions since many types of businesses and industries are closed to them.

It is evident that items on the Vocational Interest Blank encompass a wide range of activities and preferences, most of which are not obviously related to a single occupation; however, expressed interests involve only the naming of an occupation. It may be, therefore, that immediate familial or other situational pressures would be reflected in expressed interests to a maximum degree and in scores on the Vocational Interest Blank to a lesser degree.

Since the vocational and educational histories differ in certain significant ways for the Jewish and non-Jewish students, and since there are indications that the Jewish student is under immediate

familial and social pressures to express interest in and strive for certain professional, managerial, and proprietary occupations, one would expect greater discrepancies between the inventoried and the expressed interests of the Jewish student when compared with the non-Jewish student. If the expressed and inventoried interests of Jewish students are not more frequently discrepant, we must then conclude that the familial or situational pressures, if they do in fact exist, include the attitudes, opinions, and preferences that make up the entire broad range of factors which are present in the Vocational Interest Blank for Men designed by Strong.

If, as Ginzberg has concluded, the development of vocational interests is a continuing and long term process, it would be expected that the expressed interests of seniors would reflect a more realistic choice than those of freshmen. Also since inventoried vocational interests as derived from the Vocational Interest Blank have been shown to be relatively stable during the four college years, it should follow that the number and magnitude of discrepancies between expressed and inventoried vocational interests would decline from the freshmen to the senior year.

The previous discussion leads to these specific hypotheses to be tested:

1. The discrepancy between expressed and inventoried interests of the Jewish students will be greater than the discrepancy between the expressed and inventoried interests of the non-Jewish students.
2. There will be a difference between the inventoried interests of the Jewish group and the inventoried interests of the non-Jewish group.

3. There will be a difference between the expressed interests of the Jewish group and the expressed interests of the non-Jewish group.

4. The discrepancy between expressed and inventoried interests will decrease from the first two years of college to the last two years of college.

CHAPTER II. PROCEDURE AND TREATMENT OF DATA.

To perform this study, 209 men were used who were active members of four fraternities¹ at the University of Massachusetts.² Two of the fraternities had an entirely Jewish membership, whereas the other two had no majority membership in any one ethnic group and had no Jewish members.

This means of determining the participants was decided upon, because these students were voluntarily associating themselves with a known Jewish or non-Jewish group, thereby identifying themselves either as Jews or non-Jews. Another method considered and rejected was to obtain a random sample of the University of Massachusetts male population, and obtain the religious preferences of this sample either by the chaplains' records or by a questionnaire. Information received from the chaplains' records would be incomplete as some students did not register with their chaplains, and it was too impractical for our purposes to administer a questionnaire to as large a sample as would be necessary to obtain one hundred Jewish students.

The 209 men were divided as follows:

	<u>Jews</u>	<u>Non-Jews</u>
Freshmen	29	24
Sophomores	34	29
Juniors	30	22
Seniors	20	21
Total	113	96

¹ The four fraternities were Tau Epsilon Phi, Q. T. V., Alpha Epsilon Pi, and Phi Mu Delta.

² The University of Massachusetts is a land grant college with an enrollment of about 4000.

The materials³ consisted of the Vocational Interest Blank booklets, the Vocational Interest Blank Answer Sheets, IBM pencils, and a check-list for self-estimate of future occupation. The check-list consisted of the forty occupations listed by Strong so that an objective comparison could be made between the expressed interests obtained on this form and the inventoried interests obtained on the Vocational Interest Blank. If any subject could not find among the forty occupations any in which he was primarily interested, he was directed, as the instructions quoted below indicate, to write his choices at the bottom of the page.

The interest blank and the check-list were administered to groups of members of each of the fraternities. There were eight group administrations, two in each fraternity. Each fraternity held a special meeting of upper-classmen and one of freshmen for the purpose of these administrations.

Before the interest blank and the check-list were administered, the students were told that their results and the interpretations of their results would be available to them through the University Guidance Office.⁴

Each of the students was given the Vocational Interest Blank, an answer sheet, an IBM pencil, and the check-list. They were asked to complete the check-list first, and the following instructions were given them orally and written on the front page of the check-

³ Appendix A contains a copy of the Vocational Interest Blank and a check-list for self-estimate of future occupation.

⁴ The cooperation received was excellent and at least forty of the students have already received results from the guidance office.

list.

Before you is a list of occupations. Please place in the space provided on the left hand side, along side of the occupations, your first, second, and third choice of what you would like to be or do upon finishing your college career. The number one in the space provided will signify your first choice, number two your second choice, and number three your third choice. If you do not find the occupation listed, please write your choice at the bottom.

The check-list was collected upon completion and the general directions for finishing the Vocational Interest Blank were given to them from the front sheet of the test booklet. There was no time limit on the test; the students were told that they might pass in the materials as soon as they finished.

Treatment of the Data

Each of the interest blanks was scored for thirty-five occupations⁵ using the IBM Test Scoring Machine, and the raw scores were transmuted into standard scores and ratings as determined by Strong (Chapter 1, page 5). Also the check-lists were examined to determine if they were adequately completed, and the occupations that were written in by the students were categorized into the most similar of Strong's groups by an expert judge⁶ who did not know the identity of the subjects.

Two master tally sheets were constructed, one for the inventoried interests from the interest blank and the other for the expressed interests from the check-list. Each inventoried interest

⁵ Appendix B contains a list of the 35 occupation keys used in scoring each blank.

⁶ Dr. William F. Field, Director of Guidance, University of Massachusetts.

rated A or B~~/~~ for any student was tallied beside its respective occupation on one tally sheet and each expressed interest for every student stated as either first or second choice was tallied beside its respective occupation on the other. Both sheets were divided into Jewish students and non-Jewish students, and under each of these were the subdivisions freshmen-sophomore and junior-senior.

Another tally sheet was constructed by the groups determined by Strong, each group consisting of similar occupations that were highly correlated. This tally was based on a comparison of the number of Jews and non-Jews in these different groups. The number of occupations in a group ranged from one to six, and because of the high correlation between occupations in a group, many of the subjects received more than one A and/or B~~/~~'s in some of the groups. The only way that this comparison could be made was to have every subject, no matter how many A's and/or B~~/~~'s he had in a group, fall only once into that group.

To determine the difference between the inventoried interests of the Jewish group and the inventoried interest of the non-Jewish group (see second hypothesis), chi squares⁷ were computed between the number of A's and B~~/~~'s for each of the occupational groups for the total Jewish group as compared with the total non-Jewish group, the Jewish freshmen-sophomore group as compared with the non-Jewish freshmen-sophomore group, and the Jewish junior-senior group as compared with the non-Jewish junior-senior group. Chi squares were also

⁷ In all of the computations of chi square, if the difference in proportions between occupations or groups of occupations compared were .10 or less, no chi square was computed as there was obviously no significant difference.

computed between the number of A's and B's for each occupation for each of the above groups.

To determine the difference between the expressed interests of the Jewish group and the expressed interests of the non-Jewish group (see third hypothesis), chi squares were computed between the number of first choices for each occupation for the total Jewish group as compared with the total non-Jewish, the Jewish freshman-sophomore group as compared with the non-Jewish, and the Jewish junior-senior group as compared with the non-Jewish. Chi squares were also computed between the number of second choices for each occupation for each of the above groups.

Next a comparison was made of the discrepancies between expressed and inventoried interests of the Jewish students and the non-Jewish students, to determine if the discrepancy between expressed and inventoried interests of the Jewish group was greater (see first hypothesis). Each student's first stated choice and each student's second stated choice was compared with his inventoried interests and he was classified as a "discrepant" or as an "agree," according to the following criteria:

1. Those students with an A or B in an inventoried occupation which is the same as their first stated choice are "agrees."
2. Those students with an A or B in an inventoried occupation which is the same as their second stated choice are "agrees."
3. If the judged stated occupations fell into inventoried interest groups consisting of four or more occupations, those students with two or more A's, or one A and two B's, or three B's in those groups are "agrees."
4. If the judged stated occupations fell into inventoried

interest groups consisting of less than four occupations, those students with one or more A's, or one A and one B~~/~~, or two B~~/~~'s in those groups are "agrees."

Anything that did not fall under the preceding four criteria was considered "discrepant." Chi squares were computed between the number of "discrepant" and "agrees" for the total Jewish group as compared with the total non-Jewish group, for the Jewish freshmen-sophomore group as compared with the non-Jewish, and for the Jewish junior-senior group as compared with the non-Jewish.

A last comparison was made of the discrepancies between the expressed and inventoried interests of the freshmen-sophomore group as compared with the discrepancies of the junior-senior group to determine if the discrepancies decreased from the first two years of college to the last two years of college (see fourth hypothesis).

CHAPTER III. RESULTS

This chapter will deal with the results obtained by the procedures mentioned above. For the purpose of clarity, and to facilitate direct comparisons, twenty tables were constructed to illustrate these results, and the succeeding section will include these tables with a description of each. Tables 1-6 are concerned with inventoried interests, tables 7-18 with expressed interests, and tables 19-26 with discrepancies between the expressed and inventoried interests. Each of these groups of tables will contain comparisons of the total Jewish and non-Jewish group tested, the Jewish and non-Jewish freshmen-sophomore group, and the Jewish and non-Jewish junior-senior group according to the occupational groups cited by Strong and the individual occupations that are included in these groups. So that it would be less difficult to refer from one occupational group to another, hypothetical descriptive titles have been assigned by the author to each of Strong's occupational groups.⁸

The first six tables presented are those concerned with the inventoried interests. The second hypothesis, "there will be a difference between the inventoried interests of the Jewish group and the inventoried interests of the non-Jewish group" can be accepted as illustrated by the following results. The first three of these tables are based on occupational groups and the last three on individual occupations.

⁸ These descriptive titles are group I, professional; group II, physical science; group III, production manager; group IV, miscellaneous-skilled; group V, welfare; group VI, musician; group VII, C. P. A. partner; group VIII, business detail; group IX, sales contact; and group X, verbal or linguistic.

Table 1. A Comparison of the Number and Percentage of all Jewish and Non-Jewish Fraternity Men Who Achieved High Scores on Strong's Vocational Interest Blank Within Each Of the Ten Occupational Groups.

Inventoried Interests		Total Jews N = 113	Total Non-Jews N = 96	Chi-Squares
Group	Number of Occupations			
I (Professional)	7	23 (20%)	23 (24%)	-----
II (Physical Sciences)	4	19 (17%)	27 (28%)	-----
III (Production Manager)	1	25 (22%)	24 (25%)	-----
IV (Miscellaneous Skilled)	6	42 (37%)	58 (60%)	10.33***
V (Welfare)	4	48 (41%)	37 (39%)	-----
VI (Musician)	1	28 (25%)	26 (27%)	-----
VII (C.P.A. Partner)	1	17 (15%)	4 (4%)	8.04***
VIII (Business Detail)	4	62 (55%)	56 (58%)	-----
IX (Sales Contact)	3	86 (76%)	56 (58%)	8.36***
X (Verbal or Linguistic)	3	65 (58%)	27 (28%)	19.4***

***Below .01 level of confidence.

Table 2. A Comparison of the Number and Percentage of the Jewish and Non-Jewish Junior-Senior Group Who Achieved High Scores on Strong's Vocational Interest Blank Within Each of the Ten Occupational Groups.

Inventoried Interests		Jewish	Non-Jewish	Chi-Squares
Groups	Number of Occupations	Junior-Senior N = 50	Junior-Senior N=43	
I (Professional)	7	8 (16%)	9 (21%)	---
II (Physical Sciences)	4	9 (18%)	11 (26%)	---
III (Production Manager)	1	14 (28%)	16 (37%)	---
IV (Miscellaneous Skilled)	6	18 (36%)	27 (63%)	5.65**
V (Welfare)	4	25 (50%)	22 (51%)	---
VI (Musician)	1	13 (26%)	12 (28%)	---
VII (C.P.A. Partner)	1	8 (16%)	3 (7%)	2.76
VIII (Business Detail)	4	27 (54%)	27 (63%)	---
IX (Sales Contact)	3	38 (76%)	24 (56%)	5.19*
X (Verbal or Linguistic)	3	27 (54%)	10 (23%)	10.43***

*** Below .01 level of confidence.

** Below .02 level of confidence.

* Below .05 level of confidence.

Table 3. A Comparison of the Number and Percentage of the Jewish and Non-Jewish Freshmen-Sophomore Group Who Achieved High Scores on Strong's Vocational Interest Blank with Each of the Ten Occupational Groups.

Inventoried Interests		Jewish	Non-Jewish	Chi-Squares
Groups	Number of Occupations	Freshmen-Sophomore N = 63	Freshmen-Sophomore N = 53	
I (Professional)	7	15 (24%)	14 (26%)	---
II (Physical Sciences)	4	10 (16%)	16 (30%)	2.6
III (Production Manager)	1	11 (17%)	8 (15%)	---
IV (Miscellaneous Skilled)	6	24 (38%)	31 (58%)	5.41**
V (Welfare)	4	23 (37%)	15 (28%)	1.29
VI (Musician)	1	15 (24%)	14 (26%)	---
VII (C.P.A. Partner)	1	9 (14%)	1 (2%)	7.30***
VIII (Business Detail)	4	35 (56%)	29 (51%)	---
IX (Sales Contact)	3	48 (76%)	32 (60%)	4.11*
X (Verbal or Linguistic)	3	38 (60%)	17 (32%)	10.14***

*** Below .01 level of confidence.

** Below .02 level of confidence.

* Below .05 level of confidence.

Tables 1-3 illustrated that the Jewish group achieved significantly more high scores in groups VII, C.P.A. partner, IX, sales contact, and X, verbal or linguistic, and the non-Jewish group achieved significantly more high scores in group IV, miscellaneous-skilled. The same significant differences occurred between the Jewish and non-Jewish freshmen-sophomore group and between the Jewish and non-Jewish junior-senior group. High scores indicate closeness of interest with an occupational group or individual occupation under consideration.

Tables 4-6 will indicate the significant differences between the Jewish and non-Jewish groups in the individual occupations which comprise the above groups.

Table 4. A Comparison of the Number of all Jewish and Non-Jewish Fraternity Men who Achieved High Scores on Strong's Vocational Interest Blank for Each of the Thirty-five Occupations.

Inventoried Interests		Total Jews N = 113	Total Non-Jews N = 96	Chi-Square
I	Artist	7	7	---
	Psychologist	4	1	---
	Architect	10	10	---
	Physician	14	16	---
	Psychiatrist	0	0	---
	Dentist	12	17	1.60
	Veterinarian	0	0	---
II	Physicist	0	0	---
	Chemist	15	24	3.96*
	Mathematician	5	5	---
	Engineer	11	24	7.62***
III	Production Manager	25	25	---
IV	Farmer	20	40	13.4***
	Carpenter	9	17	3.68
	Printer	25	36	4.26*
	Math Science Teacher	20	34	7.55***
	Policeman	12	26	8.38***
	Forest Service	1	10	7.65***
V	Personnel Manager	30	22	---
	Public Administration	11	11	---
	Vocational Counselor	20	19	---
	Social Science Teacher	40	28	---
VI	Musician	27	27	---
VII	C. P. A. Partner	16	5	5.64**
VIII	Senior C.P.A.	26	32	---
	Accountant	15	15	---
	Office Worker	39	35	---
	Purchasing Agent	41	27	---
IX	Sales Manager	65	35	10. . ***
	Real Estate Salesman	82	50	10. . *
	Life Insurance Salesman	59	35	5.86**
X	Advertising Man.	57	22	19. . ***
	Lawyer	33	11	11. . ***
	Author-Journalist	21	11	---

*** Significant below .01 level of confidence.

** Significant below .02 level of confidence.

* Significant below .05 level of confidence.

Table 5. A Comparison of the Number of the Jewish and Non-Jewish Junior-Senior Group Who Achieved High Scores on Strong's Vocational Interest Blank for Each of the Thirty-five Occupations.

Inventoried Interests		Jewish Junior-Senior N = 50	Non-Jewish Junior-Senior N = 43	Chi Squares
I	Artist	1	2	---
	Psychologist	2	1	---
	Architect	5	4	---
	Physician	5	6	---
	Psychiatrist	0	0	---
	Dentist	4	6	---
	Veterinarian	0	0	---
II	Physicist	0	0	---
	Chemist	8	11	---
	Mathematician	2	3	---
	Engineer	4	9	2.0
III	Production Manager	14	17	---
IV	Farmer	9	17	4.32*
	Carpenter	5	7	---
	Printer	11	14	---
	Math Science Teacher	9	17	4.32*
	Policeman	4	11	4.07*
	Forest Service	0	6	5.35**
V	Personnel Manager	16	17	---
	Public Administration	9	9	---
	Vocational Counselor	11	11	---
	Social Science Teacher	19	14	---
VI	Musician	12	12	---
VII	C. P. A. Partner	8	3	2.76
VIII	Senior C.P.A.	12	19	---
	Jr. Accountant	7	7	---
	Office Worker	15	14	---
	Purchasing Agent	20	11	---
IX	Sales Manager	33	15	11.7***
	Real Estate Salesman	37	20	8.7***
	Life Insurance Salesman	27	15	4.44*
X	Advertising Man.	25	7	13. ***
	Lawyer	12	6	2.
	Author-Journalist	9	5	---

*** Below .01 level of confidence.

** Below .02 level of confidence.

* Below .05 level of confidence.

Table 6. A Comparison of the Number of the Jews and Non-Jewish Freshmen-Sophomore Group Who Achieved High Scores on Strong's Vocational Interest Blank for Each of Thirty-Five Occupations.

Inventoried Interests		Jewish Freshmen-Sophomore N = 63	Non-Jewish Freshmen-Sophomore N = 53	Chi Squares
I	Artist	6	5	---
	Psychologist	2	0	---
	Architect	5	6	---
	Physician	9	10	---
	Psychiatrist	0	0	---
	Dentist	8	11	.7
	Veterinarian	0	0	---
II	Physicist	0	0	---
	Chemist	7	13	2.73
	Mathematician	3	2	---
	Engineer	7	15	4.47*
III	Production Manager	11	8	---
IV	Farmer	11	23	8.11***
	Carpenter	4	10	3.15
	Printer	14	22	4.14*
	Math.Science Teacher	11	17	2.6
	Policeman	8	15	3.48
	Forest Service	1	4	---
V	Personnel Manager	14	5	2.91
	Public Administration	2	2	---
	Vocational Counselor	9	8	---
	Social Science Teacher	21	14	---
VI	Musician	15	15	---
VII	C. P. A. Partner	8	2	4.15*
VIII	Senior C.P.A.	14	13	---
	Jr. Accountant	8	8	---
	Office Worker	21	21	---
	Purchasing Agent	21	16	---
IX	Sales Manager	32	20	2.55
	Real Estate Salesman	45	30	3.45*
	Life Insurance Salesman	32	20	2.54
X	Advertising Man	32	15	7.01***
	Lawyer	21	5	11. . *
	Author-Journalist	12	6	1.9

*** Below .01 level of confidence.

** Below .02 level of confidence.

* Below .05 level of confidence.

There were significantly more Jewish students than non-Jewish students who achieved high scores in all three of the occupations that comprise group IX, sales manager, real estate salesman, and life insurance salesman, and in two of the three occupations that comprise group X, advertising man and lawyer. In group IV, there were significantly more non-Jewish students than Jewish students who achieved high scores in farmer, printer, mathematics-science teacher, policeman and forest service and in group II, which showed no significant difference as a whole, in chemist and engineer.

When the total group is divided into a freshmen-sophomore group and a junior-senior group, there were slightly different significances. In the junior-senior group, the significances are the same as in group IX in the total group, but in group X only advertising man showed significantly more high scores for the Jewish students than the non-Jewish students. In group IV all of the significances are the same as the total group except that printer loses its significance and in group II there are no significant differences.

In the freshmen-sophomore group, in group IX only sales manager showed significantly more high scores for the Jewish students, whereas group X showed the same significances as in the total group. In group IV, mathematics-science teacher, policeman, and forest service lost their significance and in group II only chemist showed significantly more high scores for the non-Jewish students.

Tables 7-18 suggest that hypothesis three "there will be a difference between the expressed interests of the Jewish group and the expressed interests of the non-Jewish group" be accepted. Tables 7-9 indicate the first choices of expressed interests, and tables 10-12 indicate the second choices of expressed interests.

Table 7. A Comparison of the Number of Expressed First Choices of Occupational Goals of All Jewish and Non-Jewish Fraternity Men Categorized According to Strong's Ten Occupational Groupings.

Occupational Groups	Total Jews N = 113	Total Non-Jews N = 96	Chi-Squares
I (Professional)	26	10	5.74**
II (Physical Sciences)	23	32	4.51*
III (Production Manager)	5	2	---
IV (Miscellaneous Skilled)	1	12	12.00***
V (Welfare)	11	12	---
VI (Musician)	0	1	---
VII (C.P.A. Partner)	1	0	---
VIII (Business Detail)	20	10	2.24
IX (Sales Contact)	7	5	---
X (Verbal or Linguistic)	21	11	2.03

*** Below .01 level of confidence.

** Below .02 level of confidence.

* Below .05 level of confidence.

Table 8. A Comparison of the Number of Expressed First Choices of Occupational Goals of the Jewish and Non-Jewish Freshmen-Sophomore Group Categorized According to Strong's Ten Occupational Groupings.

Occupational Groups	Jewish Freshmen-Sophomore N = 63	Non-Jewish Freshmen-Sophomore N = 53	Chi Squares
I (Professional)	18	7	4.02*
II (Physical Sciences)	10	18	5.14*
III (Production Manager)	2	0	---
IV (Miscellaneous Skilled)	0	4	---
V (Welfare)	5	8	---
VI (Musician)	0	1	---
VII (C.P.A. Partner)	0	0	---
VIII (Business Detail)	11	7	---
IX (Sales Contact)	4	2	---
X (Verbal or Linguistic)	12	7	---

* Below .05 level of confidence.

Table 9. A Comparison of the Number of Expressed First Choices of Occupational Goals of the Jewish and Non-Jewish Junior-Senior Groups Categorized According to Strong's Ten Occupational Groupings.

Occupational Groups	Jewish Junior-Senior N = 50	Non-Jewish Junior-Senior N = 43	Chi-Squares
I (Professional)	7	3	1.23
II (Physical Sciences)	12	14	---
III (Production Manager)	3	2	---
IV (Miscellaneous Skilled)	1	8	7.29***
V (Welfare)	6	4	---
VI (Musician)	0	0	---
VII (C.P.A. Partner)	1	0	---
VIII (Business Detail)	9	3	2.51
IX (Sales Contact)	3	3	---
X (Verbal or Linguistic)	7	4	---

*** Below .01 level of confidence.

For the stated first choices, significantly more Jewish students chose group I, professions, and group II, physical sciences, whereas significantly more non-Jewish students chose group IV, miscellaneous-skilled. In the freshmen-sophomore group, groups I and II showed the same significance as the total group, but there was no significant difference shown in group IV. In the junior-senior group, only group IV showed the same significance as the total group.

Second choices are indicated in tables 10-12.

Table 10. A Comparison of the Number of Expressed Second Choices of Occupational Goals of All of the Jewish and Non-Jewish Fraternity Men Categorized According to Strong's Ten Occupational Groupings.

Occupational Groups	Total Jews N = 113	Total Non-Jews N = 96	Chi-Squares
I (Professional)	21	14	.596
II (Physical Sciences)	15	18	---
III (Production Manager)	8	7	---
IV (Miscellaneous Skilled)	6	14	5.16*
V (Welfare)	11	15	1.65
VI (Musician)	0	2	---
VII (C.P.A. Partner)	5	2	---
VIII (Business Detail)	9	11	---
IX (Sales Contact)	14	5	3.24
X (Verbal or Linguistic)	20	9	3.01

* Below .05 level of confidence.

Table 11. A Comparison of the Number of Expressed Second Choices of Occupational Goals of the Jewish and Non-Jewish Freshmen-Sophomore Group Categorized According to Strong's Ten Occupational Groupings.

Occupational Groups	Jewish Freshmen-Sophomore N = 63	Non-Jewish Freshmen-Sophomore N = 53	Chi- Squares
I (Professional)	15	8	1.37
II (Physical Sciences)	8	12	1.98
III (Production Manager)	3	1	---
IV (Miscellaneous Skilled)	1	10	10.01***
V (Welfare)	7	8	---
VI (Musician)	0	1	---
VII (C.P.A. Partner)	3	1	---
VIII (Business Detail)	5	7	---
IX (Sales Contact)	5	3	---
X (Verbal or Linguistic)	14	3	6.31**

*** Below .01 level of confidence.

** Below .02 level of confidence.

Table 12. A Comparison of the Number of Expressed Second Choices of Occupational Goals of the Jewish and Non-Jewish Junior-Senior Group Categorized According to Strong's Ten Occupational Groupings.

Occupational Groups	Jewish Junior-Senior N = 50	Non-Jewish Junior-Senior N = 43	Chi-Squares
I (Professional)	6	6	---
II (Physical Sciences)	7	7	---
III (Production Manager)	5	6	---
IV (Miscellaneous Skilled)	5	4	---
V (Welfare)	4	7	1.52
VI (Musician)	0	1	---
VII (C.P.A. Partner)	2	1	---
VIII (Business Detail)	4	4	---
IX (Sales Contact)	9	2	3.95*
X (Verbal or Linguistic)	6	5	---

* Below .05 level of confidence.

For the stated second choices, significantly more non-Jewish students chose group IV, and group X approached significance with more Jewish students choosing it than non-Jewish students. In the fresh-men-sophomore group, group IV showed the same significance as the total group, and group X became significant. In the junior-senior group, group IX showed significance with more Jewish students choosing it than non-Jewish students.

Tables 13-18 illustrate the differences in the individual occupations that are contained in the groups. Tables 13-15 deal with the first choices and tables 16-18 with the second choices.

Table 13. A Comparison of the Number of Expressed First Choices of Occupational Goals of all the Jewish and Non-Jewish Fraternity Men in Each of the Thirty-five Occupations.

Expressed Interests		Total Jews N = 113	Total Non-Jews N = 96	Chi Squares
I	Artist	1	0	---
	Psychologist	4	1	---
	Architect	2	1	---
	Physician	7	3	---
	Psychiatrist	1	2	---
	Dentist	4	1	---
	Veterinarian	5	2	---
II	Physicist	0	2	---
	Chemist	5	5	---
	Mathematician	1	2	---
	Engineer	11	18	---
III	Production Manager	2	2	---
IV	Farmer	0	2	---
	Carpenter	0	0	---
	Printer	0	0	---
	Math. Science Teacher	0	1	---
	Policeman	0	0	---
	Forest Service	0	5	---
V	Personnel Manager	2	4	---
	Public Administration	5	0	---
	Vocational Counselor	1	1	---
	Social Science Teacher	1	5	---
VI	Musician	0	1	---
VII	C.P.A. Partner	1	0	---
VIII	Sr. C. P. A.	13	7	---
	Jr. Accountant	0	0	---
	Office Worker	0	0	---
	Purchasing Agent	2	1	---
IX	Sales Manager	5	4	---
	Real Estate Salesman	2	0	---
	Life Insurance Salesman	0	0	---
X	Advertising man	2	4	---
	Lawyer	12	2	7.6***
	Author-Journalist	6	4	---

*** Below .01 level of confidence.

Table 14. A Comparison of the Number of Expressed First Choices of Occupational Goals of the Jewish and Non-Jewish Freshmen-Sophomore Groups in Each of the Thirty-five Occupations.

Expressed Interests		Jewish Freshmen-Sophomore N = 63	Non-Jewish Freshmen-Sophomore N = 53	Chi Squares
I	Artist	1	0	---
	Psychologist	3	0	---
	Architect	2	1	---
	Physician	4	2	---
	Psychiatrist	1	2	---
	Dentist	2	1	---
	Veterinarian	4	1	---
II	Physicist	0	1	---
	Chemist	5	3	---
	Mathematician	0	1	---
	Engineer	5	11	3.01
III	Production Manager	1	0	---
IV	Farmer	0	1	---
	Carpenter	0	0	---
	Printer	0	0	---
	Math.Science Teacher	0	0	---
	Policeman	0	0	---
	Forest Service	0	0	---
V	Personnel Manager	0	2	---
	Public Administration	3	0	---
	Vocational Counselor	0	1	---
	Social Science Teacher	1	4	---
VI	Musician	0	1	---
VII	C. P. A. Partner	0	0	---
VIII	Sr. C. P. A.	9	6	---
	Jr. Accountant	0	0	---
	Office Worker	0	0	---
	Purchasing Agent	0	0	---
IX	Sales Manager	2	2	---
	Real Estate Salesman	2	0	---
	Life Insurance Salesman	0	0	---
X	Advertising Man	1	2	---
	Lawyer	7	1	5.0*
	Author-Journalist	4	4	---

* Below .05 level of confidence.

Table 15. A Comparison of the Number of Expressed First Choices of Occupational Goals of the Jewish and Non-Jewish Junior-Senior Group in Each of the Thirty-five Occupations.

Expressed Interests		Jewish Junior-Senior N = 50	Non-Jewish Junior-Senior N = 43	Chi Squares
I	Artist	0	0	---
	Psychologist	1	1	---
	Architect	0	0	---
	Physician	3	1	---
	Psychiatrist	0	0	---
	Dentist	2	0	---
	Veterinarian	1	1	---
II	Physicist	0	1	---
	Chemist	0	2	---
	Mathematician	1	1	---
	Engineer	6	7	---
III	Production Manager	1	2	---
IV	Farmer	1	1	---
	Carpenter	0	0	---
	Printer	0	0	---
	Math. Science Teacher	0	1	---
	Policeman	0	0	---
	Forest Service	0	3	---
V	Personnel Manager	2	2	---
	Public Administration	2	0	---
	Vocational Counselor	1	0	---
	Social Science Teacher	0	1	---
VI	Musician	0	0	---
VII	C. P. A. Partner	1	0	---
VIII	Sr. C. P. A.	4	1	---
	Jr. Accountant	0	0	---
	Office Worker	0	0	---
	Purchasing Agent	2	1	---
IX	Sales Manager	3	2	---
	Real Estate Salesman	0	0	---
	Life Insurance Salesman	0	0	---
X	Advertising Man	1	2	---
	Lawyer	5	1	3.6
	Author-Journalist	2	0	---

For stated first choices, only one occupation showed a significant difference for the total Jewish and non-Jewish group. This was lawyer with more Jewish students choosing it than non-Jewish students. In the freshmen-sophomore group, lawyer showed the same significance as in the total group, but engineer approached significance with more non-Jewish students choosing it than Jewish students. For the junior-senior group, there were no significant differences in any of the occupations between the Jewish and non-Jewish students, but advertising man approached significance with more Jewish students choosing it than non-Jewish students.

Tables 16-18 deal with the stated second choices.

Table 16. A Comparison of the Number of Expressed Second Choices of Occupational Goals of All Jewish and Non-Jewish Fraternity Men in Each of the Thirty-five Occupations.

Expressed Interests		Total Jews N = 113	Total Non-Jews N = 96	Chi-Squares
I	Artist	3	1	---
	Psychologist	5	1	---
	Architect	3	3	---
	Physician	2	4	---
	Psychiatrist	5	1	---
	Dentist	1	1	---
	Veterinarian	0	2	---
II	Physicist	4	1	---
	Chemist	4	1	---
	Mathematician	1	7	4.2*
	Engineer	5	7	---
III	Production Manager	7	7	---
IV	Farmer	1	2	---
	Carpenter	0	0	---
	Printer	0	0	---
	Math. Science Teacher	0	1	---
	Policeman	0	0	---
	Forest Service	0	1	---
V	Personnel Manager	6	7	---
	Public Administration	0	1	---
	Vocational Counselor	2	0	---
	Social Science Teacher	2	1	---
VI	Musician	0	2	---
VII	C. P. A. Partner	5	2	---
VIII	Sr. C. P. A.	1	2	---
	Jr. Accountant	2	3	---
	Office Worker	1	0	---
	Purchasing Agent	3	4	---
IX	Sales Manager	10	3	---
	Real Estate Salesman	3	1	---
	Life Insurance Salesman	1	1	---
X	Advertising Man	10	1	7.6***
	Lawyer	7	4	---
	Author-Journalist	3	2	---

*** Below .01 level of confidence.

* Below .05 level of confidence.

Table 17. A Comparison of the Number of Expressed Second Choices Of Occupational Goals of the Jewish and Non-Jewish Freshmen-Sophomore Group in Each of the Thirty-five Occupations.

Expressed Interests		Jewish Freshmen-Sophomore N = 63	Non-Jewish Freshmen-Sophomore N = 53	Chi- Squares
I	Artist	2	0	---
	Psychologist	4	1	---
	Architect	3	2	---
	Physician	1	3	---
	Psychiatrist	4	1	---
	Dentist	1	1	---
	Veterinarian	0	0	---
II	Physicist	3	0	---
	Chemist	2	0	---
	Mathematician	1	6	3.9*
	Engineer	2	4	---
III	Production Manager	2	1	---
IV	Farmer	0	2	---
	Carpenter	0	0	---
	Printer	0	0	---
	Math. Science Teacher	0	1	---
	Policeman	0	0	---
	Forest Service	0	1	---
V	Personnel Manager	4	2	---
	Public Administration	0	0	---
	Vocational Counselor	1	0	---
	Social Science Teacher	1	1	---
VI	Musician	0	1	---
VII	C. P. A. Partner	3	1	---
VIII	Sr. C. P. A.	0	2	---
	Jr. Accountant	2	3	---
	Office Worker	1	0	---
	Purchasing Agent	1	1	---
IX	Sales Manager	3	1	---
	Real Estate Salesman	2	1	---
	Life Insurance Salesman	0	1	---
X	Advertising Man	5	0	4.5*
	Lawyer	6	2	---
	Author-Journalist	3	0	---

* Below .05 level of confidence.

Table 18. A Comparison of the Number of Expressed Second Choices of Occupational Goals of the Jewish and Non-Jewish Junior-Senior Group in Each of the Thirty-five Occupations.

Expressed Interests		Jewish Junior-Senior N = 50	Non-Jewish Junior-Senior N = 43	Chi-Squares
I	Artist	1	1	---
	Psychologist	1	0	---
	Architect	0	1	---
	Physician	1	1	---
	Psychiatrist	1	0	---
	Dentist	0	0	---
	Veterinarian	0	2	---
II	Physicist	1	1	---
	Chemist	2	1	---
	Mathematician	0	1	---
	Engineer	3	3	---
III	Production Manager	5	6	---
IV	Farmer	1	0	---
	Carpenter	0	0	---
	Printer	0	0	---
	Math. Science Teacher	0	0	---
	Policeman	0	0	---
	Forest Service	0	0	---
V	Personnel Manager	2	5	---
	Public Administration	0	1	---
	Vocational Counselor	1	0	---
	Social Science Teacher	1	0	---
VI	Musician	0	1	---
VII	C. P. A. Partner	2	1	---
VIII	Sr. C. P. A.	1	0	---
	Jr. Accountant	1	0	---
	Office Worker	0	0	---
	Purchasing Agent	2	3	---
IX	Sales Manager	7	2	4.1*
	Real Estate Salesman	1	0	---
	Life Insurance Salesman	1	0	---
X	Advertising Man	5	1	3.6
	Lawyer	1	2	---
	Author-Journalist	0	2	---

* Below .05 level of confidence.

For stated second choices, there were two occupations that showed significance, mathematician and advertising man with more non-Jewish students choosing mathematician and more Jewish students choosing advertising man. In the freshmen-sophomore group, the same occupations were significant, but in the junior-senior group only sales manager showed significance with more Jewish students choosing it than non-Jewish students and advertising man approached significance in the same direction as the total group.

Tables 19-24 illustrate that hypothesis one, "the discrepancy between the expressed and inventoried interests of the Jewish students will be greater than the discrepancy between the expressed and inventoried interests of the non-Jewish students" will be rejected according to the technique used, which was assigning expressed choices to either "discrepant" or "agree" according to the four criteria cited in Chapter 2.

Table 19. A Comparison of the Number of All of the Jewish and Non-Jewish Fraternity Men whose Expressed First Choices of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation.*

	Discrepants	Agrees
Total Jews	61	51
Total Non-Jews	45	51

* $\chi^2 = 1.2$ not significant.

Table 20. A comparison of the Number of all of the Jewish and Non-Jewish Fraternity Men whose Expressed Second Choices of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation.* **

	Discrepants	Agrees
Total Jews	55	55
Total Non-Jews	50	46

* χ^2 not significant.

** Refer to footnote Chapter II, p. 20.

Table 21. A Comparison of the Number of the Jewish and Non-Jewish Freshmen-Sophomore Group whose Expressed First Choice of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy Between their Expressed Goal and Inventoried Occupation.*

	Discrepants	Agrees
Jewish		
Freshmen-Sophomore Group	34	29
Non-Jewish		
Freshmen-Sophomore Group	25	28

* x^2 not significant

Table 22. A Comparison of the Number of the Jewish and Non-Jewish Freshmen-Sophomore Group whose Expressed Second Choice of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation.*

	Discrepants	Agrees
Jewish		
Freshmen-Sophomore Group	32	30
Non-Jewish		
Freshmen-Sophomore Group	29	23

* x^2 not significant.

Table 23. A Comparison of the Number of the Jewish and Non-Jewish Junior-Senior Group whose Expressed First Choice of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation.*

	Discrepants	Agrees
Jewish		
Junior-Senior Group	27	22
Non-Jewish		
Junior-Senior Group	20	23

* x^2 not significant.

Table 24. A Comparison of the Number of the Jewish and Non-Jewish Junior-Senior Group whose Expressed Second Choice of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation.*

	Discrepants	Agrees
Jewish		
Junior-Senior Group	23	25
Non-Jewish		
Junior-Senior Group	21	22

* x^2 not significant

The last two tables 25 and 26 illustrate that hypothesis four, "the discrepancy between expressed and inventoried interests will decrease from the first two years of college to the last two years of college" will be rejected according to the technique used.

Table 25. A Comparison of the Number of the Freshmen-Sophomore and Junior-Senior Group whose Expressed First Choice of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation. *

	Discrepants	Agrees
Freshmen-Sophomore Group	59	57
Junior-Senior Group	47	45

* χ^2 not significant.

Table 26. A Comparison of the Number of the Freshmen-Sophomore and Junior-Senior Group whose Expressed Second Choice of Occupational Goal Agreed with their Inventoried Occupation and of Similar Students who had a Discrepancy between their Expressed Goal and Inventoried Occupation.*

	Discrepants	Agrees
Freshmen-Sophomore Group	61	53
Junior-Senior Group	44	47

* χ^2 not significant.

In general, the results indicate that there are significant differences between the Jewish and non-Jewish group in inventoried interests and expressed interests both first and second choice, but not in the discrepancy between inventoried and expressed interests. In inventoried interests, the Jewish group had significantly more high scores in the C. P. A. partner, sales contact, and verbal or linguistic groups whereas the non-Jewish group had significantly more high scores in the miscellaneous-skilled group.

In the first choice of expressed interests, the Jewish group chose the professional and physical science groups significantly more than did the non-Jewish group, and the non-Jewish group chose the miscellaneous-skilled group significantly more than did the Jewish group. In the second choice of expressed interests, the miscellaneous-skilled group showed the same significance as in the first choice and the verbal or linguistic group approached significance with more Jewish students choosing it than non-Jewish students.

CHAPTER IV. CONCLUSIONS AND SUMMARY.

The present study investigated the effect that identification with a religious group might have upon a student's expressed interests, inventoried interests, and the ratio of agreement or disagreement between his expressed and inventoried interests. The two groups compared were Jewish and non-Jewish fraternity men who each took the Vocational Interest Blank for Men designed by Strong and a check-list for self-estimation of future occupation.

Ginzberg (4) and his associates have indicated that choice of occupation is a long term process beginning in the early years of school and culminating in early adulthood with the choice of occupation becoming more and more realistic as the individual's age increases. Starting with the development of occupational choice is the growth of identification with one's religious group, encouraged and accentuated by the family. This encouragement of identification with a religious group by the family may influence the attitudes being developed around choice of occupation.

The major significant conclusion derived from this study is that the Jewish students tested differ significantly from the non-Jewish students tested both in inventoried and expressed interests. The Jewish students' inventoried interests seem to lie more in sales contact and verbal or linguistic occupations than the non-Jewish students (significant below the .01 level of confidence) and the non-Jewish students' inventoried interests seem to lie more in miscellaneous-skilled and physical science occupations. The Jewish students' expressed interests seem to lie more in professional and

physical science occupations and the non-Jewish students' expressed interests seem to lie more in miscellaneous-skilled occupations.

According to the technique used of placing expressed choices into "discrepant" or "agree" by the use of four objective criteria, there were no significant differences between the Jewish and non-Jewish groups, but the above data seems to indicate that the Jewish group is more discrepant than the non-Jewish group. The Jewish students' more frequent expressed interests were in two different groups from their more frequent inventoried interests, whereas the non-Jewish students' more frequent expressed and more frequent inventoried interests were the same. Also it seems that the Jewish freshmen-sophomore group is causing this discrepancy, since the Jewish junior-senior group did not choose the professional and physical science groups any more than did the non-Jewish junior-senior group.

This suggests that the non-Jewish students have a more consistent outlook, since their significant expressed interests agree with their significant inventoried interests. The inconsistent outlook that the Jewish students have, especially the freshmen-sophomore group, may have been caused by several factors, one of which could be familial pressures. Rose and Rose (8) and Schermerhorn (9) have indicated that Jewish parents tend to push their children toward professions and this seems to be borne out. As the Jewish freshmen-sophomore group have been away from the influence of the family the shortest length of time, the impressions to strive for professions is still with them in their expressed choice of occupation, but their actual inventoried interests are different; whereas the Jewish junior-senior group has reconciled their expressed interests with their inventoried interests. This also

bears out Ginzberg's work that as an individual increases in age his occupational choice becomes more realistic (that is, it fits his inventoried interests).

This study has suggested that there are definite differences between the Jewish and non-Jewish groups tested, and familial pressure, as associated with identification with a religious group, has been postulated to account for these differences. As the main concern of this study was to see if there were differences between the two groups, the subjects were chosen because of their identification with either a Jewish or non-Jewish fraternity. There are only two Jewish fraternities on campus and both of these were used, and there are ten non-Jewish fraternities and two of these were chosen. Now that there is an indication that differences do exist between the Jewish and non-Jewish groups, it will be the task of future studies on this topic to discover the causal factors involved in these differences. The subjects will have to be equated for age, intelligence, and socio-economic status. Also as a further step in the postulation of family pressures as a causal factor, a psycho-sociological study will have to be made of the backgrounds of the subjects to be tested. By this survey the future investigator will better understand the amount of family pressure involved and he will be better able to decide if there is a difference between those under a great deal of pressure in relation to those under a little.

There are certain practical implications from this study for the college guidance counselor. In the past some workers have thought that there might be a difference between the Jewish and non-Jewish student while others have thought that there are no real differences, and that it is just a matter of stereotype. This study strongly

suggests that there are differences and these differences may stem from the Jewish and non-Jewish students having different environmental backgrounds. Also Jewish students have more of a tendency to change their expressed occupations during the college years. In the first two years, the influence of the family is still strong and their expressed interests stem from this, but in the last two years their expressed interests become more and more like their inventoried interests. There is a gradual realization on the part of the Jewish student that everyone can not go into professions, and he begins to think more objectively of his real interests. The guidance counselor can aid this realization immeasurably.

Summary of principle findings.

The four hypotheses tested were: (1) The discrepancy between expressed and inventoried interests of the Jewish students will be greater than the discrepancy between the expressed and inventoried interests of the non-Jewish students; (2) there will be a difference between the inventoried interests of the Jewish group and the inventoried interests of the non-Jewish group; (3) there will be a difference between the expressed interests of the Jewish group and the expressed interests of the non-Jewish group; and (4) the discrepancy between the expressed and inventoried interests will decrease from the first two years of college to the last two years of college. The first and fourth were rejected and the second and third were accepted according to the techniques used.

I. Inventoried interests

A. Total group

1. The Jewish group had significantly more high scores in groups VII, C.P.A. partner, IX, sales contact, and X, verbal or linguistic, whereas the non-Jewish group had significantly more high scores in group IV, miscellaneous-skilled.
2. In group IX, the significant occupations were sales manager, real estate salesman, and life insurance salesman, in group X advertising man and lawyer, and in group IV farmer, printer, mathematics-science teacher, policeman, and forest service. In group II, physical science, which was not significant as a group, the non-Jewish group had significantly more high scores in chemist and engineer.

B. Freshmen-sophomore group

1. The Jewish freshmen-sophomore group had significantly more high scores in groups VII, C.P.A. partner, IX, sales contact, and X, verbal or linguistic, whereas the non-Jewish group had significantly more high scores in group IV, miscellaneous-skilled.
2. In group IX, only sales manager showed a significant difference, in group IV, mathematics-science teacher, policeman, and forest service lost their significance, in group II, only chemist showed a significant difference, and group X was the same as the total group, with advertising man and lawyer showing a significant difference.

C. Junior-senior group

1. The Jewish junior-senior group had significantly more

high scores in groups IX, sales contact, and group X, verbal or linguistic, whereas the non-Jewish group had significantly more high scores in group IV, miscellaneous-skilled.

2. In group IV only printer was not significant, in group X only advertising man showed a significant difference, and group IX was the same as the total group with sales-manager, real estate salesman, and life insurance salesman showing a significant difference.

II. Expressed interests

A. Total group

1. First choice

- (a) Significantly more Jewish students chose group I, professional and group II, physical science, whereas significantly more non-Jewish students chose group IV, miscellaneous-skilled.

- (b) There was only one occupation that showed a significant difference and that was lawyer of group X with more Jewish students choosing it.

2. Second choice

- (a) Group X, verbal or linguistic, approached significance with more Jewish students choosing it, and group IV was significant with more non-Jewish students choosing it.

- (b) There were two occupations that showed significance, mathematician and advertising man, with significantly more non-Jewish students choosing mathematician and more Jewish students choosing advertising man.

B. Freshmen-sophomore group

1. First choice

(a) Significantly more Jewish students chose groups I and II, professional and physical science, but there was no significant difference in group IV.

(b) Lawyer was the only significant occupation as in total group, but engineer approached significance with more non-Jewish students choosing it.

2. Second choice

(a) Group IV and X were significant in the direction of the total group (2a).

(b) Lawyer was the only significant occupation as in total group, but engineer approached significance with more non-Jewish students choosing it.

C. Junior-senior group

1. First choice

(a) Only group IV showed significance which was in the same direction as total group.

(b) In single occupations there were no significant differences between the Jewish and non-Jewish students.

2. Second choice

(a) Group IX was significant with more Jewish students choosing it.

(b) Sales manager was the only significant occupation with more Jewish students choosing it, but advertising man approached significance in the same direction.

III. Comparison of expressed with inventoried interests.

A. For the total Jewish and non-Jewish group, for the Jewish and non-Jewish freshman-sophomore group, for the Jewish and non-Jewish junior-senior group and for the total freshman-sophomore and junior-senior group, there was no significant difference in the number of students whose expressed choice of occupation matched their inventoried interest.

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APPENDIX A

LIST OF OCCUPATIONS

Artist

Personnel Manager

Psychologist

Public Administrator

Architect

Vocational Counselor

Physician

Y.M.C.A. Secretary

Psychiatrist

Social Science Teacher

Optometrist

City School
Superintendent

Dentist

Minister

Veterinarian

Musician

Physicist

C.P.A. Partner

Chemist

Senior C.P.A.

Mathematician

Junior Accountant

Engineer

Office Worker

Production Manager

Purchasing Agent

Farmer

Banker

Carpenter

Mortician

Printer

Pharmacist

Math. Science Teacher

Sales Manager

Policeman

Real Estate Salesman

Forest Service

Life Insurance Salesman

Army Officer

Advertising Man

Aviator

Lawyer

Y.M.C.A. Physical
Director

Author-Journalist

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.

GENERAL DIRECTIONS

In order that your test may be scored accurately, it is important for you to follow the directions carefully:

1. Use only the special pencil for the test.
2. Do not write on the test booklet. All responses must be made on the answer sheet.
3. Fill in the blanks at the side of the answer sheet.
4. Answer spaces, made by dotted lines on the answer sheet, are numbered to correspond to the numbering of the items in the test. You are to decide how you wish to mark the question, then blacken with your pencil the Answer Space that corresponds to this answer.

Example: Do you *like*, or are *indifferent* to, or *dislike* children? The answer sheet is as follows:

L	I	D	where L means <i>like</i>
.....	I means <i>indifferent</i>
.....	D means <i>dislike</i>

If you like children, you should black in the space below **L**, like this:

L	I	D

.....

Do not encircle or make check marks.

Go over the pencil mark two or three times with firm pressure. Make a solid black mark. If you make a mistake, erase the black mark completely; do not merely cross it out. Be very careful to touch your pencil on the sheet only when blacking in between the dotted lines, otherwise electrical contact may be made by the scoring machine, thus causing wrong answers.

Please do not mark on this test booklet at all. The arrangement of questions in columns of 25 each corresponds with the same arrangement on the answer sheet.

Part I. Occupations. Consider each occupation listed below and decide 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.

On your answer sheet, blacken the space between the dotted lines under **L** if you like that kind of work.

Blacken the space between the dotted lines under **I** if you are indifferent to that kind of work.

Blacken the space between the dotted lines under **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) | 26 Clergyman | 51 Lawyer, Criminal | 76 Rancher |
| 2 Advertiser | 27 College Professor | 52 Lawyer, Corporation | 77 Real Estate Sales- |
| 3 Architect | 28 Consul | 53 Librarian | man |
| 4 Army Officer | 29 Dentist | 54 Life Insurance Sales- | 78 Reporter, general |
| 5 Artist | 30 Draftsman | man | 79 Reporter, sporting |
| | | 55 Locomotive Engineer | page |
| 6 Astronomer | 31 Editor | | 80 Retailer |
| 7 Athletic Director | 32 Electrical Engineer | 56 Machinist | |
| 8 Auctioneer | 33 Employment Mana- | 57 Magazine Writer | 81 Sales Manager |
| 9 Author of novel | ger | 58 Manufacturer | 82 School Teacher |
| 10 Author of technical | 34 Explorer | 59 Marine Engineer | 83 Scientific Research |
| book | 35 Factory Manager | 60 Mechanical Engineer | Worker |
| | | | 84 Sculptor |
| 11 Auto Salesman | 36 Factory Worker | 61 Mining Superin- | 85 Secretary, Chamber |
| 12 Auto Racer | 37 Farmer | tendent | of Commerce |
| 13 Auto Repairman | 38 Floorwalker | 62 Musician | |
| 14 Aviator | 39 Florist | 63 Music Teacher | 86 Secret Service Man |
| 15 Bank Teller | 40 Foreign Corre- | 64 Office Clerk | 87 Ship Officer |
| | spondent | 65 Office Manager | 88 Shop Foreman |
| 16 Bookkeeper | | | 89 Social Worker |
| 17 Building Contractor | 41 Governor of a State | 66 Orchestra Conductor | 90 Specialty Salesman |
| 18 Buyer of Merchan- | 42 Hotel Keeper or | 67 Pharmacist | |
| dise | Manager | 68 Photo Engraver | 91 Statistician |
| 19 Carpenter | 43 Interior Decorator | 69 Physician | 92 Stock Broker |
| 20 Cartoonist | 44 Interpreter | 70 Playground Director | 93 Surgeon |
| | 45 Inventor | | 94 Toolmaker |
| 21 Cashier in bank | | 71 Poet | 95 Traveling Salesman |
| 22 Certified Public Ac- | 46 Jeweler | 72 Politician | |
| countant | 47 Judge | 73 Printer | 96 Typist |
| 23 Chemist | 48 Labor Arbitrator | 74 Private Secretary | 97 Undertaker |
| 24 Civil Engineer | 49 Laboratory Techni- | 75 Railway Conductor | 98 Watchmaker |
| 25 Civil Service Em- | cian | | 99 Wholesaler |
| ployee | 50 Landscape Gardener | | 100 Worker in Y.M.C.A., |
| | | | K. of C., etc. |

Part II. School Subjects.

Indicate as in Part I your interest when in school.

- 101 Algebra
- 102 Agriculture
- 103 Arithmetic
- 104 Art
- 105 Bookkeeping
- 106 Botany
- 107 Calculus
- 108 Chemistry
- 109 Civics
- 110 Dramatics
- 111 Economics
- 112 English Composition
- 113 Geography
- 114 Geology
- 115 Geometry
- 116 History
- 117 Languages, ancient
- 118 Languages, modern
- 119 Literature
- 120 Mathematics
- 121 Manual Training
- 122 Mechanical Drawing
- 123 Military Drill
- 124 Music
- 125 Nature Study

- 126 Philosophy
- 127 Physical Training
- 128 Physics
- 129 Psychology
- 130 Physiology
- 131 Public Speaking
- 132 Shop work
- 133 Sociology
- 134 Spelling
- 135 Typewriting
- 136 Zoölogy

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
- 138 Fishing
- 139 Hunting
- 140 Tennis
- 141 Driving an automobile
- 142 Taking long walks
- 143 Boxing
- 144 Chess
- 145 Poker
- 146 Bridge
- 147 Observing birds (nature study)
- 148 Solving mechanical puzzles
- 149 Performing sleight-of-hand tricks
- 150 Collecting postage stamps

- 151 Drilling in a company
- 152 Chopping wood
- 153 Amusement parks
- 154 Picnics
- 155 Excursions
- 156 Smokers
- 157 "Rough house" initiations
- 158 Conventions
- 159 Full-dress affairs
- 160 Auctions
- 161 Fortune tellers
- 162 Animal zoos
- 163 Art galleries
- 164 Museums
- 165 Vaudeville
- 166 Musical comedy
- 167 Symphony concerts
- 168 Pet canaries
- 169 Pet monkeys
- 170 Snakes
- 171 Sporting pages
- 172 Poetry
- 173 Detective stories
- 174 "Time" 2
- 175 "Judge" 1

Part III. Amusements, continued:

- 176 "New Republic"
- 177 "System" |
- 178 "National Geographic Magazine"
- 179 "American Magazine"
- 180 "Popular Mechanics"
- 181 "Atlantic Monthly"
- 182 Educational movies
- 183 Travel movies
- 184 Social problem movies
- 185 Making a radio set ✓

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

- 186 Repairing a clock
- 187 Adjusting a carburetor
- 188 Repairing electrical wiring
- 189 Cabinetmaking
- 190 Operating machinery
- 191 Handling horses
- 192 Giving "first aid" assistance
- 193 Raising flowers and vegetables
- 194 Decorating a room with flowers
- 195 Arguments
- 196 Interviewing men for a job
- 197 Interviewing prospects in selling
- 198 Interviewing clients
- 199 Making a speech
- 200 Organizing a play

- 201 Opening conversation with a stranger
- 202 Teaching children
- 203 Teaching adults
- 204 Calling friends by nicknames
- 205 Being called by a nickname
- 206 Meeting and directing people
- 207 Taking responsibility
- 208 Meeting new situations
- 209 Adjusting difficulties of others
- 210 Drilling soldiers

- 211 Pursuing bandits in sheriff's posse
- 212 Doing research work
- 213 Acting as yell-leader
- 214 Writing personal letters
- 215 Writing reports
- 216 Entertaining others
- 217 Bargaining ("swapping")
- 218 Looking at shop windows
- 219 Buying merchandise for a store
- 220 Displaying merchandise in a store
- 221 Expressing judgments publicly regardless of criticism
- 222 Being pitted against another as in a political or athletic race
- 223 Methodical work
- 224 Regular hours for work
- 225 Continually changing activities

- 226 Developing business systems
- 227 Saving money
- 228 Contributing to charities
- 229 Raising money for a charity
- 230 Living in the city
- 231 Climbing along edge of precipice
- 232 Looking at a collection of rare laces
- 233 Looking at a collection of antique furniture

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
- 235 Conservative people
- 236 Energetic people
- 237 Absent-minded people
- 238 People who borrow things
- 239 Quick-tempered people
- 240 Optimists
- 241 Pessimists
- 242 People who are natural leaders
- 243 People who assume leadership
- 244 People easily led
- 245 People who have made fortunes in business
- 246 Emotional people
- 247 Thrifty people
- 248 Spendthrifts
- 249 Talkative people
- 250 Religious people

Part V. Peculiarities of People, continued.

- 251 Irreligious people
- 252 People who have done you favors
- 253 People who get rattled easily
- 254 Gruff men
- 255 Foreigners
- 256 Sick people
- 257 Nervous people
- 258 Very old people
- 259 Cripples
- 260 Side-show freaks
- 261 People with gold teeth
- 262 People with protruding jaws
- 263 People with hooked noses
- 264 Blind people
- 265 Deaf mutes
- 266 Self-conscious people
- 267 People who always agree with you
- 268 People who talk very loudly
- 269 People who talk very slowly
- 270 People who talk about themselves
- 271 Fashionably dressed people
- 272 Carelessly dressed people
- 273 People who don't believe in evolution
- 274 Socialists
- 275 Bolsheviks

- 276 Independents in politics
- 277 Men who chew tobacco
- 278 Men who use perfume
- 279 People who chew gum
- 280 Athletic men

Part VI. Order of Preference of Activities. Read the following list of ten activities; then decide which *three* you would enjoy the *most*. On your answer sheet mark between the dotted lines under **1**, opposite the numbers of these three activities. Then decide which *three* you would enjoy *least*; mark under **3** opposite the numbers of these three activities. Mark the remaining *four* activities under **2**. Of these ten activities you will have marked three items under **1**, four items under **2**, and three items under **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. Mark the remaining four items under **2**. Be sure you have marked three items under **1**, three items under **3**, and four items under **2**.

- 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

Part VI. Order of Preference of Activities, continued.

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. Mark the remaining four men under 2.

- 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. Mark the remaining four under 2.

- 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 Com.
- 317 Chairman, Entertainment Com.
- 318 Chairman, Membership Com.
- 319 Chairman, Program Committee
- 320 Chairman, Publicity Committee

Part VII. Comparison of Interest between Two Items. Indicate your choice of the following pairs of activities by marking between the dotted lines under 1 if you prefer the first item; mark under 3 if you prefer the second item, and under 2 if you like both equally well. 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
- 327 Repair auto
- 328 Develop plans
- 329 Do a job yourself
- 330 Persuade others

- 331 Deal with things
- 332 Plan for immediate future
- 333 Activity which produces tangible returns
- 334 Taking a chance
- 335 Definite salary

- 336 Work for yourself
- 337 Work which interests you with modest income
- 338 Work in a large corporation with little chance of becoming president until age of 55
- 339 Selling article, quoted 10% below competitor
- 340 Small pay, large opportunities to learn during next 5 years

- 341 Work involving few details
- 342 Outside work
- 343 Change from place to place
- 344 Great variety of work
- 345 Physical activity

- 346 Emphasis upon quality of work
- 347 Technical responsibility (head of a department of 25 people engaged in technical, research work)
- 348 Present a report in writing
- 349 Listening to a story
- 350 Playing baseball

- Gardening
- Drive auto
- Execute plans
- Delegate job to another
- Order others

- Deal with people
- Plan for five years ahead
- Activity which is enjoyed for its own sake
- Playing safe
- Commission on what is done

- Carry out program of superior who is respected
- Work which does not interest you with large income
- Work for self in small business

- Selling article, quoted 10% above competitor
- Good pay, little opportunity to learn during next 5 years

- Work involving many details
- Inside work
- Working in one location
- Similarity in work
- Mental activity

- Emphasis upon quantity of work
- Supervisory responsibility (head of a department of 300 people engaged in typical business operation)
- Present a report verbally
- Telling a story
- Watching baseball

Part VII. Comparison of Interest between Two Items, continued.

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 on the answer sheet what kind of a person you are right now and what you have done. Mark 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.)

- 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

Part VIII. Rating of Present Abilities and Characteristics, continued.

- 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

Mark in the first, second, or third column according as the first, second, or third statement in each item below applies to you.

- | | | |
|--|--|---|
| 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 |

APPENDIX B

THE THIRTY-FIVE OCCUPATION KEYS SCORED

- I Artist
 Psychologist
 Architect
 Physician
 Psychiatrist
 Dentist
 Veterinarian
- II Physicist
 Chemist
 Mathematician
 Engineer
- III Production Manager
- IV Farmer
 Carpenter
 Printer
 Math. Science Teacher
 Policeman
 Forest Service
- V Personnel Manager
 Public Administration
 Vocational Counselor
 Social Science Teacher
- VI Musician
- VII C. P. A. Partner
- VIII Sr. C. P. A.
 Jr. Accountant
 Office Worker
 Purchasing Agent
- IX Sales Manager
 Real Estate Salesman
 Life Insurance Salesman
- X Advertising Man
 Lawyer
 Author-Journalist

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