

A SURVEY OF VOCATIONAL CHOOSING

by

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENT.....	ii
LIST OF TABLES.....	iv
I. INVESTIGATION.....	1
A. Problems of Investigation.....	1
1. Statement of Major Problem.....	1
2. Statement of Minor Problems.....	1
B. Reasons for Interest in the Questions..	1
C. Related Investigations.....	1
D. Procedure of Investigation.....	2
E. Procedure of Transferring Data into Tables.....	4
II. RESULTS.....	6
A. Results of Table I.....	10
B. Results of Table II.....	12
C. Results of Table III.....	14
D. Results of Table IV.....	28
E. Results of Table V.....	31
F. Results of Table VI.....	36
III. CONCLUSION.....	38
A. Shortcomings and Mistakes.....	38
B. Further Work To Be Done.....	38
C. Summary.....	39
D. Conclusions Drawn from This Study.....	40
E. Practical Application.....	43
IV. APPENDIX.....	44

LIST OF TABLES

Table	Page
I. Distribution of Cases by Occupations and Sex.....	7
II. Geographical Distribution of Cases.....	11
III. Distribution of Cases by Age and Sex.....	13
IV. Distribution of Cases by Ages of Decision and Sex...	15
IVa. Teachers.....	16
IVb. Merchants.....	17
IVc. Farmers.....	18
IVd. Railroaders.....	19
IVe. Clerical Workers.....	20
IVf. Salesmen and Salesladies.....	21
IVg. Physicians and Surgeons.....	22
IVh. Barbers.....	23
IVi. Carpenters.....	24
IVj. Lawyers.....	25
IVk. Electricians.....	26
IVl. Government Workers.....	27
V. Cases That Entered Vocation at Age of Decision.....	30
VI. Reasons for Choosing Vocation.....	32

I. INVESTIGATION

A. Problems of Investigation

1. Statement of Major Problem. At what age do successful men and women choose their vocations?

2. Statement of Minor Problems. How long after becoming interested in a vocation does one actually enter the vocation?

Why have people chosen the various vocations?

Is it true that the ninth-grade is the logical time to make a vocational choice, if one expects to become successful in later life?

B. Reasons for Interest in the Questions

These questions have stimulated the investigator to find the answers to them through investigation, as he has the responsibility of guiding and giving vocational information to a large number of ninth-grade pupils.

One of the main theories upon which our present junior high school is founded is to help determine the vocational careers of its pupils. This study should help determine the validity of this theory.

C. Related Investigations

As far as the investigator is able to learn this is the only study ever made which tries to determine at what age a person makes a vocational choice. Several studies have been conducted that are closely related to this study.

Thorndike's study of two thousand boys and girls over a period of ten years has just been completed. His report

written up in his new book, "Prediction of Vocational Success" tried to determine whether or not we can forecast the vocational success of boys and girls at the age of fourteen.

F. M. Earle, of London, conducted a similar study to Thorndike's. He tested six hundred boys and girls, 14.6 years of age. They were again tested after a period of ten years. The only striking results found were that the correlation of prediction for girls was higher than for boys.¹

D. Procedure of Investigation

One thousand nine hundred and twenty-seven successfully engaged men and women were interviewed. Before the interview took place the subject had to qualify in the following ways:

1. He must be performing the duties of his vocation as well as, or better than the average person.
2. He must be earning enough for as comfortable a living as the average person.
3. In general, he must be as much as thirty years old, since one below that age may not be finally fixed in his vocational choice although he may think he is. Subjects under thirty were accepted only in cases that seemed to be definitely certain in their choices.
4. He must have pursued his present vocation as long or longer than five years.
5. Each subject must answer "No" to the following question: "If you were living your life over and knew what you know now, would you object to choosing the same vocation

¹Edward L. Thorndike, "Prediction of Vocational Success." Occupations. (Dec. 1933), pp. 21-25.

you are now engaged in?"

Except for the temporarily unemployed, these standards were set up in order to secure only the most successful and happy people, for it is the successful people we must follow if we are to guide pupils down successful paths of life.

A wide variety of vocations were desired in order to balance the early or late entrance of men and women into the various and specific vocations.

The investigator desired to know also if the reasons were the same for entering skilled vocations as for entering the professional field.

Housewives were not interviewed because they are not generally considered as vocational workers.

Unorganized and unskilled laborers were not used because they are not generally considered successful.

After the subject was deemed eligible to be interviewed he was asked to give the following data:

1. Name.
2. Address (town and state).
3. Present age (estimated).
4. Sex.
5. Vocation.
6. Age at which he first decided to enter the vocation he is now following.
7. Age at which he actually entered such vocation to earn money.
8. Age at which he finally decided to enter such vocation and since which he has never departed therefrom, either in

training or actual participation in something different, except as a temporary expedient with no thought of permanence or as a vocation.

9. Factors that influenced the choosing of this specific vocation.

E. Procedure of Transferring Data into Tables

1. The individual cards were cataloged according to the various vocations and within the vocation they were divided according to sex. From this was recorded the number of males and females which had been interviewed in the various vocations and the number of vocations pursued by the subjects.

2. Since the primary concern of the survey was to find the ages at which the subjects made their vocational choices, the cards were next cataloged so that, in each vocation the following ages of the subjects could be recorded: first, the present ages of the subjects interviewed; second, the ages at which they first became interested in the vocations they are following; third, the ages at which they actually entered the vocations, that is, worked for money; fourth, the ages at which they finally decided to remain in the vocations in which they were pursuing at the time of the interviews. After this information was recorded for each individual vocation the information was placed in a table which would show the total number of the ages for all vocations recorded.

3. The next record made was a table showing the number of persons who entered the vocations at the same time they

became interested in them.

4. The cards were then cataloged according to the reasons given by the subjects for choosing the specific vocations, and a "Table of Reasons" was made.

While going over these individual cards and cataloging them, in order to find the desired information, a number of other interesting items were discovered. It was found that sex and race differences were insignificant. This was more or less to be expected because all the subjects were highly successful.

In many cases some of the ages given were merely guesses.

Some of the reasons were, no doubt, given with very little sincerity.

It is very doubtful in the investigator's mind that a person thinks seriously of entering a vocation under the age of twelve years.

It is also questionable that people choose vocations because they naturally like them. They have learned to enjoy the vocations by continuously coming in contact with them.

Remuneration is given so many times that it seems faulty, for every one expects remuneration from any vocation.

Because of the limited number of cases in some of the vocations, the conclusions cannot be very valid.

Many times, in compiling the reasons, the investigator was forced to interpret the reasons given by the subjects. Interpretations very often may be faulty.

II. RESULTS

The results shown in the following tables are the combination of data gathered from nine hundred and seventy-seven interviews, eight hundred and forty-one males and one hundred and thirty-six females, held by Dr. J. R. Shannon and his students, and of nine hundred and fifty, seven hundred and seventy-two males and one hundred and seventy-eight females, held by the investigator.

The data¹ gathered by Dr. Shannon, although taken some two years earlier, vary but little from those gathered by the investigator. The ages and the reasons are approximately the same; for example, out of the five reasons ranking first, in each case, four are identical.

The results of each table are listed individually because of the vast difference in the nature and the importance of the tables to the study.

Tables I, II, and III are of very little statistical value but the material found in them is valuable in introducing Tables IV, V, and VI.

¹J. R. Shannon, "Survey of Adult Vocational Placement" Junior-Senior Clearing House (Nov. 1933), pp. 180-185.

TABLE I

DISTRIBUTION OF CASES BY OCCUPATIONS AND SEX

	Male	Female	Total
Teachers.....	98	114	212
Merchants.....	129	6	135
Farmers.....	126	-	126
Railroaders.....	105	-	105
Clerical workers.....	48	57	105
Salesmen and salesladies.....	89	15	104
Mechanics and garagemen.....	100	-	100
Physicians and surgeons.....	63	-	63
Carpenters.....	43	-	43
Barbers.....	43	-	43
Factory workers.....	24	12	36
Lawyers.....	34	1	35
Coal miners and operators.....	35	-	35
Electricians.....	33	-	33
Pharmacists.....	33	-	33
Government workers.....	30	2	32
Engineers (stationary).....	31	-	31
Dentists.....	28	1	29
Bankers.....	28	-	28
Clergymen.....	27	1	28
Insurance agents.....	24	3	27
Foremen and superintendents.....	26	-	26
Journalists.....	23	1	24
Nurses.....	-	23	23
Restaurant owners.....	10	13	23
Painters and decorators.....	18	2	20

TABLE I (Continued)

	Male	Female	Total
Steel workers.....	18	-	18
Drivers (truck and bus).....	18	-	18
Telephone workers.....	9	7	16
Butchers.....	16	-	16
Contractors.....	16	-	16
Blacksmiths.....	13	-	13
Real Estate dealers.....	12	1	13
Beauty Operators.....	-	13	13
Librarians.....	-	13	13
Social workers.....	4	8	12
Musicians.....	8	3	11
Sheet metal workers.....	10	-	10
Plumbers.....	10	-	10
Cobblers.....	10	-	10
Morticians.....	9	1	10
Jewelers.....	9	-	9
Chemists.....	9	-	9
Moulders.....	8	-	8
Boiler makers.....	8	-	8
Welders.....	7	-	7
Pipe fitters.....	7	-	7
Tailors and seamstresses.....	4	3	7
Oil station attendants.....	7	-	7
Janitors.....	7	-	7
Policemen and women.....	5	1	6
Masons.....	6	-	6

TABLE I (Continued)

	Male	Female	Total
Laundry workers.....	4	2	6
Florists and nurserymen.....	5	1	6
Cooperage workers.....	6	-	6
Chiropodists.....	6	-	6
Bakers.....	3	2	5
Motion Picture operators.....	5	-	5
Osteopaths.....	3	2	5
Bookbinders.....	2	2	4
Steamboat workers.....	4	-	4
Cooks.....	4	-	4
Telegraphers.....	4	-	4
Advertising managers.....	4	-	4
Opticians.....	4	-	4
Veterinarians.....	4	-	4
Printers.....	4	-	4
Draftsmen.....	4	-	4
Toolmakers.....	3	-	3
Timbermen.....	3	-	3
Undertakers.....	3	-	3
Tire makers.....	3	-	3
All others (less than three)...	57	4	61
Total.....	1613	314	1927

A. Results of Table I

The wide range of vocations shown in Table I resulted from the fact that the interviews were held regardless of the vocation engaged in by the subject.

Vocations with less than three cases were not selected for separate lists, as results from such a small grouping would be of little value to the study.

The heavy grouping of the female cases in the teaching profession was expected, as the requirements for the interviews would eliminate most all other types of female workers.

TABLE II
GEOGRAPHICAL DISTRIBUTION OF CASES

State	Frequencies
Alabama.....	1
California.....	18
Florida.....	3
Georgia.....	1
Illinois.....	256
Indiana.....	1110
Iowa.....	1
Kansas.....	1
Kentucky.....	308
Michigan.....	3
Mississippi.....	1
Missouri.....	134
Montana.....	5
Nebraska.....	1
New York.....	1
Ohio.....	14
Oklahoma.....	3
Pennsylvania.....	14
Tennessee.....	12
Texas.....	16
Virginia.....	13
Washington.....	1
Wisconsin.....	8
Canada.....	1
Cuba.....	1
Total.....	1927

B. Results of Table II

The geographical location of the subjects shown in Table II have very little to do with the study except from the fact that it shows that the study was not restricted to any certain area.

TABLE III
DISTRIBUTION OF CASES BY AGE AND SEX

Ages	Male	Female	Total
81-85.....	2	-	2
76-80.....	3	-	3
71-75.....	15	2	17
66-70.....	45	2	47
61-65.....	69	4	73
56-60.....	117	11	128
51-55.....	159	10	169
46-50.....	227	36	263
41-45.....	275	34	309
36-40.....	343	53	396
31-35.....	279	127	406
26-30.....	73	25	98
21-25.....	6	10	16
Total.....	1613	314	1927
3d quartiles.....	53	43	48
Medians.....	43	38	40
1st quartiles.....	33	33	33

C. Results of Table III

Although the applicant to qualify for the interview was to have been at least thirty years of age, a few exceptions were made when it was evident that the subject qualified in all other respects.

Table III reveals the fact that the median age of the subjects interviewed is forty years. This fact would lead us to believe that these people have had sufficient experience to give valid answers to the interviews.

By checking the final decisions of these subjects we find the median to be 21.4 years. As the median age is forty years, we find that the subjects have been engaged in their various vocations about eighteen years.

TABLE IV

DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX

Ages	First Decided			Actually Entered			Finally Decided		
	^x M	^y F	^z T	M.	F.	T.	M.	F.	T.
Over									
30	126	22	148	184	34	218	256	47	299
30	31	7	38	44	9	53	62	12	74
29	9	5	14	19	4	23	27	5	32
28	43	1	44	59	5	64	65	10	75
27	15	5	20	42	7	49	64	7	71
26	25	-	25	59	8	67	55	10	65
25	45	13	58	90	14	104	110	12	122
24	42	3	45	85	8	93	82	11	93
23	44	4	48	86	12	98	80	12	92
22	62	2	64	131	15	146	120	14	134
21	64	8	72	115	25	140	110	26	136
20	147	23	170	155	27	172	133	27	160
19	80	15	95	86	34	120	76	26	102
18	153	37	190	146	63	209	132	57	189
17	128	25	153	82	29	111	68	20	88
16	148	24	172	103	8	111	74	10	84
15	100	25	125	41	6	47	36	5	41
14	99	21	120	42	3	45	33	2	35
13	44	10	54	24	1	25	14	-	14
12	62	14	76	13	1	14	10	1	11
Under									
12	146	50	196	7	1	8	10	-	10
Total	1613	314	1927	1613	314	1927	1613	314	1927
3d quartiles	22.1	19.9	21.	25.1	25.	25.	27.1	17.6	22.3
Medians	18.6	16.8	17.7	21.8	19.3	20.5	22.6	20.3	21.4
1st quartiles	15.1	14.	14.5	17.6	17.5	17.5	18.2	23.1	20.6
^x Male	^y Female	^z Total							

TABLE IVa

DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX

TEACHERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	2	2	4	2	2	4	9	4	13
30	-	-	-	-	-	-	3	1	4
29	-	-	-	-	-	-	1	-	1
28	1	-	1	2	-	2	2	-	2
27	-	1	1	1	3	4	-	4	4
26	2	-	2	5	1	6	5	1	6
25	-	1	1	3	2	5	11	2	13
24	2	-	2	6	2	8	5	5	10
23	1	-	1	7	1	8	12	3	15
22	2	-	2	13	7	20	11	6	17
21	7	1	8	14	10	24	7	11	18
20	9	6	15	13	18	31	9	16	25
19	7	4	11	10	13	23	4	10	14
18	14	14	28	14	33	47	11	34	45
17	18	6	24	7	16	23	6	12	18
16	7	10	17	-	2	2	-	3	3
15	5	11	16	1	3	4	-	2	2
14	8	11	19	-	-	-	1	-	1
13	2	5	7	-	-	-	-	-	-
12	7	9	16	-	1	1	1	-	1
Under 12	4	33	37	-	-	-	-	-	-
Total	98	114	212	98	114	212	98	114	212
Medians	16.9	13.9	15.6	20.3	18.	19.2	21.9	18.6	19.9

DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
MERCHANTS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	19	1	20	26	2	28	33	3	36
30	3	-	3	3	-	3	6	-	6
29	-	1	1	1	1	2	-	1	1
28	6	-	6	7	-	7	7	-	7
27	2	-	2	2	-	2	6	-	6
26	2	-	2	2	-	2	5	-	5
25	4	1	5	9	2	11	8	1	9
24	3	1	4	5	-	5	3	-	3
23	7	-	7	7	-	7	5	-	5
22	4	-	4	8	-	8	6	-	6
21	6	-	6	10	-	10	9	-	9
20	15	-	15	12	1	13	13	1	14
19	2	-	2	-	-	-	-	-	-
18	9	-	9	11	-	11	9	-	9
17	7	1	8	7	-	7	5	-	5
16	12	-	12	8	-	8	4	-	4
15	6	-	6	4	-	4	3	-	3
14	4	-	4	3	-	3	2	-	2
13	3	1	4	4	-	4	3	-	3
12	6	-	6	-	-	-	1	-	1
Under 12	9	-	9	-	-	-	1	-	1
Total	129	6	135	129	6	135	129	6	135
Medians	19.4	24.	20.5	21.5	25.	27.9	24.1	29.	24.3

TABLE IVc
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 FARMERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	3	-	3	5	-	5	11	-	11
30	3	-	3	3	-	3	6	-	6
29	1	-	1	1	-	1	-	-	-
28	-	-	-	2	-	2	2	-	2
27	-	-	-	-	-	-	2	-	2
26	-	-	-	-	-	-	1	-	1
25	2	-	2	3	-	3	8	-	8
24	4	-	4	5	-	5	4	-	4
23	-	-	-	6	-	6	5	-	5
22	1	-	1	4	-	4	12	-	12
21	2	-	2	5	-	5	13	-	13
20	10	-	10	19	-	19	14	-	14
19	7	-	7	10	-	10	5	-	5
18	2	-	2	11	-	11	9	-	9
17	3	-	3	5	-	5	3	-	3
16	18	-	18	20	-	20	18	-	18
15	7	-	7	6	-	6	5	-	5
14	8	-	8	7	-	7	6	-	6
13	8	-	8	8	-	8	-	-	-
12	5	-	5	4	-	4	-	-	-
Under 12	42	-	42	2	-	2	-	-	-
Total	126	-	126	126	-	126	126	-	126
Medians	14.8	-	14.8	18.5	-	18.5	20.4	-	20.4

DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX

RAILROADERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	5	-	5	8	-	8	12	-	12
30	-	-	-	4	-	4	2	-	2
29	1	-	1	1	-	1	2	-	2
28	1	-	1	2	-	2	3	-	3
27	1	-	1	2	-	2	1	-	1
26	1	-	1	1	-	1	1	-	1
25	2	-	2	3	-	3	9	-	9
24	2	-	2	4	-	4	7	-	7
23	4	-	4	10	-	10	9	-	9
22	2	-	2	7	-	7	8	-	8
21	5	-	5	12	-	12	9	-	9
20	15	-	15	17	-	17	15	-	15
19	5	-	5	5	-	5	4	-	4
18	10	-	10	8	-	8	10	-	10
17	15	-	15	8	-	8	6	-	6
16	10	-	10	10	-	10	6	-	6
15	8	-	8	2	-	2	1	-	1
14	3	-	3	1	-	1	-	-	-
13	1	-	1	-	-	-	-	-	-
12	6	-	6	-	-	-	-	-	-
Under 12	8	-	8	-	-	-	-	-	-
Total	105	-	105	105	-	105	105	-	105
Medians	17.6	-	17.6	20.1	-	20.1	21.2	-	21.2

TABLE IVe
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 CLERICAL WORKERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	7	2	9	7	4	11	9	8	17
30	-	-	-	-	1	1	1	-	1
29	-	1	1	-	1	1	-	1	1
28	1	-	1	2	1	3	3	2	5
27	-	1	1	1	1	2	1	2	3
26	-	-	-	1	1	2	2	-	2
25	7	3	10	7	1	8	4	3	7
24	2	-	2	2	-	2	1	-	1
23	2	1	3	2	2	4	1	1	2
22	3	-	3	2	1	3	3	2	5
21	3	1	4	1	4	5	3	2	5
20	4	4	8	6	4	10	7	5	12
19	3	8	11	3	15	18	4	11	15
18	4	8	12	8	13	21	5	12	17
17	2	11	13	1	6	7	1	4	5
16	4	6	10	3	2	5	2	2	4
15	3	5	8	1	-	1	1	1	2
14	3	5	8	1	-	1	-	1	1
13	-	1	1	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-
Under 12	-	-	-	-	-	-	-	-	-
Total	48	57	105	48	57	105	48	57	105
Medians	20.2	17.1	18.5	21.	18.5	18.9	21.3	18.8	19.7

TABLE IVf
DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
SALESMEN AND SALESLADIES

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	8	3	11	11	4	15	13	5	18
30	4	1	5	4	1	5	8	2	10
29	1	1	2	3	1	4	1	-	1
28	5	-	5	1	1	2	5	1	6
27	1	-	1	6	-	6	-	-	-
26	3	-	3	4	-	4	5	1	6
25	4	2	6	5	1	6	6	-	6
24	3	-	3	5	-	5	6	-	6
23	4	-	4	7	-	7	6	-	6
22	8	-	8	8	-	8	11	-	11
21	5	1	6	7	2	9	7	3	10
20	5	1	6	8	1	9	4	1	5
19	3	1	4	1	-	1	1	-	1
18	10	1	11	4	1	5	5	1	6
17	4	-	4	6	-	6	6	-	6
16	4	2	6	3	2	5	3	1	4
15	3	1	4	2	1	3	-	-	-
14	4	-	4	3	-	3	2	-	2
13	4	-	4	1	-	1	-	-	-
12	3	-	3	-	-	-	-	-	-
Under 12	3	1	4	-	-	-	-	-	-
Total	89	15	104	89	15	104	89	15	104
Medians	20.3	20.3	20.3	22.2	21.5	22.3	22.9	26.5	23.2

TABLE IVg
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 PHYSICIANS AND SURGEONS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	-	-	-	6	-	6	8	-	8
30	1	-	1	-	-	-	3	-	3
29	-	-	-	2	-	2	3	-	3
28	-	-	-	7	-	7	4	-	4
27	-	-	-	6	-	6	5	-	5
26	1	-	1	7	-	7	2	-	2
25	-	-	-	9	-	9	3	-	3
24	3	-	3	8	-	8	4	-	4
23	-	-	-	4	-	4	5	-	5
22	2	-	2	3	-	3	-	-	-
21	-	-	-	4	-	4	1	-	1
20	1	-	1	3	-	3	4	-	4
19	6	-	6	1	-	1	1	-	1
18	11	-	11	1	-	1	11	-	11
17	2	-	2	-	-	-	3	-	3
16	6	-	6	2	-	2	1	-	1
15	5	-	5	-	-	-	1	-	1
14	7	-	7	-	-	-	1	-	1
13	1	-	1	-	-	-	1	-	1
12	4	-	4	-	-	-	1	-	1
Under 12	13	-	13	-	-	-	-	-	-
Total	63	-	63	63	-	63	63	-	63
Medians	15.5	-	15.5	24.6	-	24.6	23.3	-	23.3

TABLE IVh
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 BARBERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	2	-	2	3	-	3	4	-	4
30	1	-	1	1	-	1	1	-	1
29	-	-	-	1	-	1	1	-	1
28	1	-	1	1	-	1	3	-	3
27	-	-	-	1	-	1	1	-	1
26	1	-	1	2	-	2	3	-	3
25	2	-	2	2	-	2	1	-	1
24	-	-	-	1	-	1	1	-	1
23	2	-	2	2	-	2	3	-	3
22	2	-	2	4	-	4	5	-	5
21	1	-	1	1	-	1	1	-	1
20	8	-	8	6	-	6	6	-	6
19	-	-	-	2	-	2	3	-	3
18	3	-	3	1	-	1	1	-	1
17	3	-	3	6	-	6	3	-	3
16	3	-	3	2	-	2	2	-	2
15	2	-	2	2	-	2	2	-	2
14	7	-	7	3	-	3	1	-	1
13	3	-	3	2	-	2	1	-	1
12	2	-	2	-	-	-	-	-	-
Under 12	-	-	-	-	-	-	-	-	-
Total	43	-	43	43	-	43	43	-	43
Medians	16.5	-	16.5	19.6	-	19.6	21.5	-	21.5

TABLE IVi
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 CARPENTERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	3	-	3	4	-	4	7	-	7
30	-	-	-	2	-	2	3	-	3
29	-	-	-	1	-	1	-	-	-
28	-	-	-	-	-	-	1	-	1
27	-	-	-	1	-	1	2	-	2
26	2	-	2	4	-	4	4	-	4
25	-	-	-	-	-	-	-	-	-
24	2	-	2	4	-	4	2	-	2
23	1	-	1	1	-	1	4	-	4
22	4	-	4	6	-	6	7	-	7
21	2	-	2	2	-	2	1	-	1
20	6	-	6	6	-	6	2	-	2
19	2	-	2	-	-	-	2	-	2
18	-	-	-	3	-	3	2	-	2
17	4	-	4	3	-	3	2	-	2
16	5	-	5	4	-	4	3	-	3
15	2	-	2	-	-	-	1	-	1
14	5	-	5	2	-	2	-	-	-
13	-	-	-	-	-	-	-	-	-
12	3	-	3	-	-	-	-	-	-
Under 12	2	-	2	-	-	-	-	-	-
Total	43	-	43	43	-	43	43	-	43
Medians	17.2	-	17.2	21.3	-	21.3	22.8	-	22.8

TABLE IVj
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 LAWYERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	1	-	1	2	-	2	2	-	2
30	-	-	-	-	-	-	1	-	1
29	-	-	-	1	-	1	3	-	3
28	-	-	-	4	-	4	1	-	1
27	1	-	1	4	-	4	4	-	4
26	-	-	-	2	-	2	3	-	3
25	1	-	1	3	1	4	4	1	5
24	-	-	-	4	-	4	5	-	5
23	1	-	1	1	-	1	2	-	2
22	3	-	3	2	-	2	6	-	6
21	2	-	2	2	-	2	2	-	2
20	2	-	2	3	-	3	-	-	-
19	3	-	3	3	-	3	-	-	-
18	3	-	3	2	-	2	-	-	-
17	4	-	4	1	-	1	-	-	-
16	5	-	5	-	-	-	-	-	-
15	2	-	2	-	-	-	-	-	-
14	2	-	2	-	-	-	-	-	-
13	1	-	1	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-
Under 12	3	1	4	-	-	-	-	-	-
Total	34	1	35	34	1	35	34	1	35
Medians	17.	10.	16.8	23.7	25.	23.9	24.2	25.	24.6

TABLE IVk
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 ELECTRICIANS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	-	-	-	1	-	1	6	-	6
30	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	3	-	3
28	2	-	2	2	-	2	4	-	4
27	1	-	1	2	-	2	-	-	-
26	1	-	1	-	-	-	-	-	-
25	1	-	1	1	-	1	5	-	5
24	-	-	-	1	-	1	-	-	-
23	-	-	-	-	-	-	-	-	-
22	1	-	1	2	-	2	4	-	4
21	2	-	2	4	-	4	4	-	4
20	2	-	2	3	-	3	2	-	2
19	1	-	1	5	-	5	-	-	-
18	4	-	4	7	-	7	4	-	4
17	2	-	2	-	-	-	-	-	-
16	4	-	4	1	-	1	-	-	-
15	6	-	6	1	-	1	-	-	-
14	1	-	1	3	-	3	1	-	1
13	1	-	1	-	-	-	-	-	-
12	1	-	1	-	-	-	-	-	-
Under 12	3	-	3	-	-	-	-	-	-
Total	33	-	33	33	-	33	33	-	33
Medians	16.2	-	16.2	18.9	-	18.9	25.3	-	25.3

TABLE IV1
 DISTRIBUTION OF CASES BY AGES OF DECISION AND SEX
 GOVERNMENT WORKERS

Ages	First Decided			Actually Entered			Finally Decided		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Over 30	4	-	4	5	-	5	6	-	6
30	1	-	1	1	-	1	2	-	2
29	-	-	-	3	-	3	4	1	5
28	2	-	2	3	-	3	3	-	3
27	3	-	3	2	-	2	4	-	4
26	2	-	2	3	-	3	4	-	4
25	4	-	4	3	-	3	2	-	2
24	2	-	2	1	-	1	1	-	1
23	2	-	2	2	1	3	-	1	1
22	-	-	-	-	1	1	-	-	-
21	3	2	5	3	-	3	2	-	2
20	2	-	2	2	-	2	2	-	2
19	3	-	3	1	-	1	-	-	-
18	1	-	1	-	-	-	-	-	-
17	1	-	1	1	-	1	-	-	-
16	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-
Under 12	-	-	-	-	-	-	-	-	-
Total	30	2	32	30	2	32	30	2	32
Medians	24.2	21.	24.	25.6	22.	25.3	27.3	23.	27.

D. Results of Table IV

The three ages listed by the subjects who were interviewed constitute the most valuable data of the report. The major problem of the study is solved in this table: At what age do people make vocational choices?

These successful people were found to have made their first decision much later in life than is generally suspected. One hundred and forty-eight of the subjects were over thirty years of age before they had any idea of entering their favorite vocations. Two hundred and eighteen actually entered their vocations to earn money after they were over thirty years of age. Two hundred and ninety-nine were over thirty years of age when they made their final decision to stay in their present vocations.

The median of the first decision of all the cases was 17.7 years. Women enter vocations much earlier in life than men. These results correlate with other studies of the same nature. One reason for the vast difference may be the fact that women finish or quit school some two years earlier than men.

The actual decision median is 20.6 years, while the final decision median was found to be 21.4 years. These statistics prove two very potent questions: First, that people enter vocations without much determination of staying in the vocation; second, that almost one year of their life is wasted by floundering in a state of uncertainty. Although men enter vocations some two years later than women, their permanence is no better. Women make their final decisions at the age of 20.3 years, one year after they enter

the vocation. Men make their final decision two years after entering their favorite vocation.

Those cases which gave their actual entering age as sixteen and under were found to be, in most cases, coal miners and machinists. They enter at this early age and work their way up to an executive position. This, of course, could not happen in our present age on account of our present labor laws.

Since the core of this study is found in Table IV, individual tables were made of some of the vocations. These tables show the wide range of ages given by the various vocations represented.

Dividing the vocations into the three logical divisions, business, professional, and skilled craftsmen, we find very little difference in the final deciding ages. The average of the medians of business vocations is 23.6 years, professional vocations 23.8 years, and skilled workers 24.1 years. Various opinions could be drawn from these results. The fact that skilled craftsmen make the final decision later than the professional workers is a surprise at first thought. Professional workers as a rule are satisfied as to their vocations soon after they have completed their long study and have secured a position, while skilled workers are in a stage of uncertainty until they have been promoted to higher ranks.

TABLE V

CASES THAT ENTERED VOCATION AT AGE OF DECISION

Ages	Male	Female	Total
Over 30.....	97	11	108
30.....	18	4	22
29.....	3	4	7
28.....	23	-	23
27.....	5	8	13
26.....	14	-	14
25.....	25	3	28
24.....	20	1	21
23.....	25	2	27
22.....	27	2	29
21.....	32	3	35
20.....	56	5	61
19.....	25	5	30
18.....	50	15	65
17.....	40	4	44
16.....	68	2	70
15.....	13	3	16
14.....	22	2	24
13.....	14	-	14
12.....	13	1	14
Under 12.....	6	-	6
Total.....	596	75	680
3d quartiles.....	26.2	27.	26.6
Medians.....	20.4	21.9	21.1
1st quartiles.....	17.4	18.5	17.9

E. Results of Table V

Table V shows that six hundred and eighty, or thirty-two per cent of all the subjects, entered their vocations at the age of their first decision.

This means that they entered the vocations and became successful without any previous thought or training. It means also, that accident probably was the main reason.

Another striking fact worthy of mention is brought out in this table and that is that the median of the female is higher than that of the male, that of the female being 21.6 years and that of the male 20.4 years. This shows that women who choose their vocations spontaneously are older than men.

TABLE VI

REASONS FOR CHOOSING VOCATION

	Teachers			Clerical workers		
	M. ^x	F. ^y	T. ^z	M.	F.	T.
1. Interest in, or liking for vocation....	38	25	63	13	8	21
2. Remuneration.....	18	16	34	1	2	3
3. Accident or chance opportunity.....	3	2	5	13	10	23
4. Family tradition.....	6	5	11	2	1	3
5. Influence of relative or family.....	15	20	35	1	7	8
6. Inability or dislike for other work....	10	9	19	-	7	7
7. Prospect of immediate employment.....	19	6	25	2	2	4
8. Recognition of aptitude or talent.....	11	2	13	-	-	-
9. Influence of friend.....	5	4	9	1	3	4
10. Prospect of promotion.....	3	1	4	2	1	3
11. Environment.....	4	1	5	1	-	1
12. Opportunity for service.....	6	6	12	-	-	-
13. Influence of school.....	4	2	6	3	7	10
14. Interest developed from previous work..	-	-	-	2	1	3
15. Liking for contacts with public.....	1	2	3	1	3	4
16. Prospect of permanent employment.....	-	1	1	-	-	-
17. Demand for workers greater than supply.	1	-	1	4	-	4
18. Independent work.....	-	1	1	-	4	4
19. Opportunity for self-improvement.....	4	10	14	2	-	2
20. Short period of training.....	3	1	4	-	2	2
21. Outdoor work.....	-	-	-	-	-	-
22. Easy work.....	1	-	1	-	-	-
23. Admiration for workers in the field....	6	6	12	-	-	-
24. Work interesting or fascinating.....	-	-	-	1	-	1
25. Short hours.....	2	-	2	2	1	3
26. Clean work.....	2	1	3	2	1	3
27. Contact with workers in the field.....	1	3	4	-	-	-
28. Variety of work.....	-	-	-	1	-	1
29. Opportunity for self-expression.....	1	1	2	-	-	-
30. Position open by resignation of another	-	-	-	1	-	1
31. All other reasons not specified above..	-	1	1	-	-	-

^x Male ^y Female ^z Total

TABLE VI (Continued)

	Salesmen and salesladies			Merchants			Government workers			Nurses	Carpenters
	M.	F.	T.	M.	F.	T.	M.	F.	T.	F.& T.	M.& T.
1.	26	6	35	42	-	42	6	1	7	4	10
2.	14	1	15	20	1	21	8	1	9	1	6
3.	21	5	26	24	-	24	7	-	7	-	3
4.	7	-	7	27	-	27	1	-	1	1	4
5.	7	-	7	10	-	10	2	1	3	1	-
6.	8	4	12	10	2	12	4	-	4	-	-
7.	4	-	4	5	-	5	-	-	-	-	2
8.	8	1	9	2	-	2	-	-	-	2	1
9.	1	1	2	2	-	2	-	-	-	-	2
10.	12	3	15	1	-	1	3	-	3	1	3
11.	1	-	1	1	-	1	-	-	-	2	3
12.	1	-	1	2	-	2	-	-	-	-	9
13.	1	1	2	2	-	2	-	-	-	1	1
14.	3	-	3	-	-	-	-	-	-	-	-
15.	11	3	14	5	1	6	3	-	3	3	-
16.	-	-	-	1	-	1	8	-	8	-	-
17.	-	-	-	1	-	1	-	-	-	-	-
18.	2	-	2	1	-	1	-	-	-	-	-
19.	2	1	3	-	-	-	1	-	1	-	-
20.	6	2	8	1	-	1	-	-	-	-	-
21.	2	-	2	-	-	-	-	-	-	1	-
22.	3	1	4	3	-	3	1	-	1	-	1
23.	-	-	-	1	-	1	-	-	-	-	-
24.	2	-	2	1	-	1	1	-	1	1	2
25.	1	-	1	1	-	1	-	-	-	1	-
26.	-	-	-	-	-	-	-	-	-	-	-
27.	-	-	-	-	-	-	-	-	-	-	-
28.	2	1	3	-	-	-	-	-	-	-	1
29.	-	-	-	-	-	-	-	-	-	-	-
30.	1	-	1	-	-	-	-	-	-	-	-
31.	-	-	-	-	-	-	1	-	1	3	1

TABLE VI (Continued)

	Rail- roaders	Mechanics and garagemen	Physicians and surgeons	Farmers	Barbers	Lawyers	Elect- ricians
	M.& T.	M.& T.	M.& T.	M.& T.	M.& T.	M.& T.	M.& T.
1.	32	35	15	42	14	15	12
2.	43	26	9	9	9	2	2
3.	16	11	12	8	6	1	1
4.	7	6	12	71	3	3	-
5.	1	5	11	20	3	12	-
6.	1	9	3	15	4	1	-
7.	7	7	-	4	1	-	1
8.	-	5	7	1	-	4	4
9.	8	2	2	2	4	2	3
10.	8	1	6	-	-	-	1
11.	2	1	1	-	-	-	2
12.	-	-	11	1	1	-	-
13.	3	10	2	-	-	-	-
14.	7	8	-	2	-	2	1
15.	-	1	2	-	1	2	-
16.	10	4	-	1	1	-	1
17.	1	6	4	2	1	-	3
18.	4	2	2	9	2	-	1
19.	-	10	1	1	-	-	-
20.	4	-	-	2	2	1	2
21.	3	4	-	12	1	-	-
22.	4	-	-	-	1	-	-
23.	2	3	4	1	-	-	-
24.	7	2	4	-	2	-	1
25.	-	1	-	-	2	1	-
26.	-	2	2	-	1	-	-
27.	1	1	-	-	-	2	-
28.	-	-	1	-	-	-	-
29.	1	-	1	-	-	-	-
30.	-	-	-	-	-	1	-
31.	4	1	-	-	2	-	3

TABLE VI (Continued)

	Pharma-	Coal	All others			Total		
	cists	miners	M.	F.	T.	M.	F.	T.
	M.& T.	M.& T.						
1.	16	8	179	19	198	506	63	569
2.	4	14	112	15	127	297	37	334
3.	9	5	77	11	88	217	28	245
4.	7	-	78	-	78	232	9	241
5.	6	8	58	4	62	159	33	192
6.	4	5	34	4	38	108	26	134
7.	-	-	51	14	65	103	22	125
8.	-	-	53	5	58	94	12	106
9.	2	1	44	7	51	81	15	96
10.	1	2	26	1	27	69	7	76
11.	1	1	25	17	42	44	19	63
12.	-	-	21	1	22	43	16	59
13.	1	-	17	2	19	44	13	57
14.	-	-	29	2	31	54	3	57
15.	2	-	10	4	14	39	16	55
16.	2	-	21	1	22	49	2	51
17.	-	-	21	3	24	44	3	47
18.	-	-	15	2	17	38	7	45
19.	1	-	9	-	9	30	11	41
20.	-	-	9	3	12	31	8	39
21.	-	-	14	-	14	36	1	37
22.	-	1	16	3	19	31	4	35
23.	-	-	3	6	9	20	12	32
24.	-	-	1	1	2	24	2	26
25.	-	1	6	-	6	17	2	19
26.	-	-	7	-	7	14	2	16
27.	-	-	6	-	6	11	3	14.
28.	-	-	6	-	6	10	4	14
29.	-	-	6	-	6	9	1	10
30.	-	-	5	-	5	8	-	8
31.	4	1	68	12	80	84	17	101
			Total			2546	398	2944

F. Results of Table VI

In completing Table VI, the investigator was forced to interpret some of the reasons given, in order to reduce the table to some common terminology. However, the real meaning of the reasons given were never changed.

The reasons are listed according to their frequencies. Reasons given by the various vocations were also kept separate.

Reason number one, Interest or liking for the vocation, was expected to rank high because subjects are no doubt interested or they would not have become successful in their vocation. Although in some vocations, such as government workers, railroaders and coal miners, interest ranked second to remuneration. The nature of their work and the salary received would easily account for this result.

Professional people mentioned family tradition more often than any other reason. Accident or chance opportunity as a reason was given the highest number of times by the skilled craftsmen. Many times skilled craftsmen could not give any reason other than it was just a sheer accident that they first took up their present vocation.

Influence of school ranked very low, which would lead us to believe that the schools of the past offered very little in the way of aiding the boys and girls in finding their proper vocations.

Recognition of aptitude or talent was mentioned only one hundred and six times out of the total of two thousand nine hundred and forty-four reasons given. Guidance

people agree that this reason should rank first but at this writing no one is able to detect or discover native aptitudes early in life. As has been mentioned, to predict vocational success with our present course in schools is a total failure.¹

¹Edward L. Thorndike, The Prediction of Vocational Success. (Occupations. Dec. 1933) pp. 21-25.

III. CONCLUSION

A. Shortcomings and Mistakes

Probably the greatest fallacy of this study was the inability of the investigator to think for the subjects while they were being interviewed, or to get the subjects sufficiently interested in his study to secure serious consideration of the questions from them, for many answers were given without much thought or sincerity.

The art of giving clear and reasonable answers to an interviewer is an art mastered by very few people. It is the investigator's opinion that any study where the data are gathered from interviews is subject to great error.

Conclusions drawn from some of the individual vocations cannot be very valid because of the limited number of cases.

B. Further Work To Be Done

Trying to determine the relative ages at which people choose a vocation is merely a starter toward our great goal of seeing all people successfully and happily engaged in some worthy vocation. It is the investigator's most sincere opinion that every individual born on this earth has some aptitudes that would lead to a worthy vocation, if these aptitudes could be uncovered so the individual might be directed into the right vocation.

To correlate childhood likes and dislikes toward various vocations with their success or failure in these vocational fields would make a very worthy study and should aid greatly toward adjusting people vocationally.

Another problem that has arisen from this study is: Why did these people succeed or fail in their vocations? Merely finding the reasons for their choosing certain vocations has very little to do with the true reasons for their success.

C. Summary

Highly successful men and women make their first vocational decisions at the age of 17.7 years. The median of the actual entering age was found to be 20.5 years, while the final decisions were made at the age of 21.4 years.

Women make a vocational choice 1.7 years prior to that made by men, yet their vocational permanence is no better than that of men.

Final decisions are made later in life by skilled craftsmen, being made at the age of 24.1 years. That of professional workers at 23.8 years and of business vocations at 23.6 years.

Interest in, or liking for the vocation was given five hundred and sixty-nine times as the reason for choosing a vocation. The second ranking reason given was remuneration, which was mentioned three hundred and thirty-four times. Accident came third and was given two hundred and forty-five times and family tradition was given two hundred and forty-one times.

It might also be worthy to note the fact that the subjects used in this study were reared in a very favorable world, vocationally speaking.

Competition for vocational success is far more diversified at the present time than it was when these subjects entered their vocations. There are more available vocations at present than there were twenty years ago but the aptitudes needed to become successful are far greater today than in the past.

With these facts in mind it is probable that the results from this study will be of little value at the present time because of the changing vocational world. Forecasting the future by the results of the past is a very questionable procedure, especially the future of the vocational world.

D. Conclusions Drawn from This Study

From this study of one thousand nine hundred and twenty-seven successfully engaged men and women who were interviewed, numerous conclusions can be drawn from the data.

Our major concern is: At what age does a person actually make a vocational choice? Is the junior high school age the age to expect a boy or girl to make a vocational choice?

Statistics derived from this study prove that successful men and women make their vocational choice at the age of 21.4 years, some eight years later than the average junior high school age. The median age of the first decision was 17.7 years. The reason for this low figure, no doubt, is the fact that one hundred and ninety-six subjects gave the age of the first decision as under twelve years. Selections made this early in life are in most cases decisions made by the parents. It is highly improbable that a child under the age of eighteen has had sufficient experience in the world

of vocations to make a sane and feasible vocational choice. More vocations are chosen late in life, according to this study, than in general is suspected.

Results of this study and all other studies along similiar lines, including Thorndike's study of two thousand boys and girls, tend to destroy all the evidence that counselors and guidance directors have in predicting vocational success or failure in a given vocation. Thorndike found that the prediction of vocational success or failure has a low correlation. If a man with the knowledge of Thorndike failed in predicting vocational success, then how can the so-called counselor expect to predict with any degree of accuracy the success of a certain boy in a particular vocation? If our predictions of vocational success are not reliable and if pupils of junior high school age have not had enough experience in the world of vocations to warrant a suitable vocational success, then the guidance program of our junior high schools is "skating on thin ice," unless it remains primarily an educational guidance program.

At the present time there seems only one possible solution to this ever important phase of education, and that is to discover the native aptitudes of the children as far as can be done with present measuring facilities. After the abilities are thereby sighted in part, interest in vocations that lean toward these aptitudes might be stimulated.

Aptitude tests at present have failed to aid materially in the search for inborn aptitudes. These tests are purely an informational list and not a test of native aptitudes.

Even if aptitudes tests were developed to a high degree

of efficiency, the task of developing this aptitude would be very difficult. Many times an ability is so covered with dislike for vocations of that nature that it is impossible to bring the aptitude to the surface. Interest in vocations far removed from our natural aptitudes are very difficult to destroy after the interest has grown for a few years.

Results of this study prove that the junior high school age is not the age to expect an individual to make a vocational choice, although it is found that they lend great support to a course in vocational information. The fact that two hundred and ninety-nine of the subjects were over thirty years of age before they made a final vocational choice should give aid to a course in vocational information being taught in the junior and senior high schools. It is almost a certainty that the shifting and drifting from one vocation to another is due to the lack of information concerning the true nature of the work, the salaries received, etc.

No doubt the try-out method is a good way to gain information concerning vocations, but it is also the most expensive.

Reasons given for choosing the various vocations should also give evidence that the little information we have in the field of vocations should be given to our pupils. Two hundred and forty-five gave as the reason for choosing their vocation pure accident. Everyone is aware of the great number who choose a vocation accidentally and then fail.

E. Practical Application

Results of this study should be of practical value to the counselor, guidance director, and the curriculum maker.

Using these model men and women as subjects should add weight to the results obtained. The fact that so many of the subjects choose their vocations late in life and become very successful after they have worked at several other vocations would indicate that people are flexible, vocationally speaking, and that an early vocational choice is not necessary for success.

The preposterous reasons given for having chosen a particular vocation should stimulate guidance teachers to urge pupils to have sound reasons for choosing a vocation. The lack of sound reasoning and thought in choosing a vocation leads to unhappiness and discontent.

Skilled craftsmen choose their vocations later in life than do professional people. This particular finding should help to do away with our old method of forcing the slow thinking pupil into trades and encouraging the faster pupil to continue on in school and choose his vocation later in life.

IV. APPENDIX

A. Bibliography

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