

4-1938

Occupational Destination Of Rural High School Boys Of Minnesota

Victor E. Nylin
University of Minnesota

Follow this and additional works at: <https://digitalcommons.morris.umn.edu/jmas>

Recommended Citation

Nylin, V. E. (1938). Occupational Destination Of Rural High School Boys Of Minnesota. *Journal of the Minnesota Academy of Science, Vol. 6 No.1, 77-82.*

Retrieved from <https://digitalcommons.morris.umn.edu/jmas/vol6/iss1/17>

This Article is brought to you for free and open access by the Journals at University of Minnesota Morris Digital Well. It has been accepted for inclusion in Journal of the Minnesota Academy of Science by an authorized editor of University of Minnesota Morris Digital Well. For more information, please contact skulann@morris.umn.edu.

OCCUPATIONAL DESTINATION OF RURAL HIGH SCHOOL BOYS OF MINNESOTA

ABSTRACT

VICTOR E. NYLIN
University of Minnesota

In order to study the factors that influence the occupational outcomes of rural boys in Minnesota, this investigation specifically undertakes:

1. To study the school training and occupations engaged in by the pupils enrolled in courses in Agriculture in the school year of 1925-26.
2. To examine the relation of the individual's choice of occupation in the secondary school period to the occupations engaged in later by the individuals.
3. To trace for a ten-year period the occupations engaged in by the pupils who were enrolled in high school Agriculture in 1925-26.

The information used in this study pertained to the boys who were taking courses in Agriculture in those high schools of Minnesota in which Agriculture was taught in the school year of 1925-26. Certain phases of the study were limited to those boys who were classified as ninth-grade pupils in 1925-26 and who were enrolled in the ninth-grade courses in Agriculture. This group, called Group A in the study, was selected for an annual survey of the occupation of each individual, because it could include all the group who started as ninth-grade students and would show in the study those individuals who dropped out of school each year.

The second group, considered as Group B in the study, was composed of those pupils who were enrolled in the classes in high school Agriculture in 1925-26, but who were classified above the ninth grade. This group was somewhat less representative than Group A because information relative to those who had discontinued school was not available.

The collection of data for the study was started in the school year of 1925-26. The information was gathered from 1,390 pupils in sixty-one Minnesota high schools where courses in Agriculture were taught. Schools were located in each of the types of farming areas of the state.

Those schools in which Departments of Agriculture were later discontinued or which did not cooperate in the follow-up of the education and occupations of the pupils were discarded.

At the close of the study, ten years later, thirty-eight schools of the original sixty-one, or 62.3 per cent, contributed the data on 633 cases, or 47.9 per cent, of the original 1,390 individuals on whom data were collected in the school year of 1925-26.

Education

The eighth grade was the median grade reached by both mothers and fathers, while the median for the boys was between the eleventh and twelfth grades. Forty-eight per cent graduated from high school. Eleven and one-tenth per cent entered college, but 6.2 per cent graduated.

In 1935, ten years after the individuals had been asked to indicate their choices of occupations, 83.3 per cent of the college group that had chosen agricultural vocations were in Agriculture.

Fifty per cent of those who dropped out of school in the ninth grade were farming ten years later.

Forty-six and six-tenths per cent of the group took only one course in high school Agriculture, 38.2 per cent took two years of work in high school Agriculture, 11.1 per cent took three years, and 4 per cent took four years of Agriculture.

Forty-four and seven-tenths per cent who took one year of Agriculture were farming in 1935, while 8.5 per cent were in related occupations. Fifty per cent of those that had two years of Agriculture were farming in 1935 and 4.6 per cent were in occupations related to Agriculture. Of those that had three years of Agriculture, 52 per cent were farming and 24 per cent were in related occupations.

Choices of Occupations

In the study of the choices of occupations made by the boys enrolled in Agriculture classes, it was learned that 39.3 per cent of the individuals chose agricultural occupations. Sixteen and five-tenths per cent chose the professional service group. Twenty-four and four-tenths per cent indicated no choice of occupation had been made in 1925. Eight and eight-tenths per cent chose manufacturing and mechanical industries.

Thirty-two and four-tenths per cent of the group, who lived on farms of 120 acres or less, chose Agriculture for an occupation compared to 50.8 per cent of those who lived on farms larger than 120 acres.

Thirty-six per cent of those who chose occupations in the professional service group were urban boys. Of the individuals who lived on farms of less than 120 acres, 18.5 per cent chose occupations in the professional service group. In the group that came from farms of more than 120 acres, there were 9.8 per cent who chose work in the professional group.

The individuals in the intelligence quotient interval of 120-129 were on the larger farms and were divided almost equally in the agricultural, non-agricultural, or no-choice groups in selecting occupations. In the group with intelligence quotients in the interval 110-119, the proportion that made choices of agricultural occupa-

tions was larger for those from farms of more than 120 acres than for those from farms of less than 120 acres.

Eighty-one and eight-tenths per cent of the fathers received eight grades or less of school training. Forty-two and three-tenths per cent of the sons of this group chose agricultural occupations.

The sons of fathers who had received a secondary education had a smaller proportion who chose agriculture for an occupation. Forty per cent chose agriculture in this group compared to 42.3 per cent whose fathers had received common school education only. Sons of those fathers, who had had college training and were on farms, had 50 per cent of their number choosing Agriculture for an occupation.

The number of modern farm and home conveniences found on the farms did not appear to have any significant influence on the choices of occupations made by the individuals.

Sixty-seven per cent of those boys who chose agricultural occupations, the occupations of their fathers, were in agricultural occupations ten years later.

Sons of farmers who chose other occupations than those in which their fathers were engaged had 40.2 per cent in the farming occupations ten years later. Seventy-nine per cent did not reach their choices of occupations.

Of the 101 individuals whose fathers were in occupations other than Agriculture, only three reached their choice and 73 per cent were in occupations other than those of their fathers.

It was not known whether the individuals who did not indicate a choice of occupations preferred the occupations of their fathers or other occupations. In the case of the farm boys, 53.8 per cent were in farming, while over 60 per cent of those whose parents were not farming were in different occupations than their fathers.

For those sons of farmers who chose the agricultural occupations, the proportion that were farming ten years later was similar for all the sizes of family groups—from one child to twelve children. Seventy-one and nine-tenths per cent were in occupations similar to their fathers.

Of those individuals who chose other than their father's occupation, farming, an extremely small number reached their choice. Thirty-nine and five-tenths per cent were in occupations different from their father's occupations and 40.3 per cent were in similar occupations.

The group that did not indicate a choice of occupation in 1925 was found ten years later, 1935, to have 50.4 per cent in occupations similar to their fathers.

Individuals in families of six or more children, who chose occupations other than their father's occupation, were found to be in different occupations than those of their fathers ten years later in

larger proportion than those in families with a smaller number of children.

Changes of Occupations

One hundred eighteen individuals, or 52.4 per cent, continued in the same occupation during the ten-year period. Ninety-six, or 81.3 per cent, of the members of this group were engaged in Agriculture. This is significant of the occupations in agriculture which showed more stability or regularity of employment than the non-agricultural occupations.

The period when the greater number of changes of occupations took place was from seventeen to twenty-three years of age.

For those who did not graduate from high school, the age at which the greater number of changes in occupations occurred was different for those who were in Agriculture than for those in non-agricultural occupations. The individuals who entered agricultural occupations made the greater number of changes from fifteen to twenty years of age, while those who entered the non-agricultural occupations made the greater number of changes in occupations from twenty to twenty-three years of age.

The ages at which changes were made by the graduates of high school occurred at an age three or four years later than for those who did not graduate and fewer changes of occupation were made.

The changes of occupations closely paralleled the amount of school training received by the individuals. Those who left school after the ninth grade made a greater number of changes of occupations than those who continued in school for a longer period. This relationship continued for each additional year of school training received, not only for secondary school training but also for those attending college one, two, three, or more years.

The brighter individuals made fewer changes of occupations than those of less ability.

The economic conditions of the ten-year period from 1925 to 1935 directly affected the employment of 7.1 per cent of the group. Periods of unemployment occurred and government financed projects furnished needed employment to some members of the group.

The sizes of farms on which the individuals lived did not affect the proportion who made changes or the number of changes of occupations to a marked degree. Twenty-five and three-tenths per cent of the farm reared boys made changes of occupations during the ten-year period compared to 47.3 per cent of the urban boys included in this study.

The individuals whose fathers were working on the higher levels of occupational intelligence made fewer changes in occupations than those individuals whose fathers were working on the lower categories of occupational intelligence.

The foregoing seem to indicate the general conclusion that a

hierarchy of occupational intelligence exists in the farming occupations and that there is a definite relation between the individual's progress and the occupational level on which the parents were working.

Occupational Outcomes Ten Years Later

In 1935, 45 per cent of the 633 boys in the study were engaged in Agriculture, 9.3 per cent were in Trade occupations, 9.1 per cent were in Transportation and Communication, 6.9 per cent were in the Professional group, and 6.4 per cent were employed in the Manufacturing and Mechanical industries.

The proportion of boys in the agricultural occupations was not influenced to any great extent by the sizes of families from which the boys came nor by whether a boy was the youngest or the oldest child in the family.

The boys who entered non-agricultural occupations placed more emphasis on school training than those who expected to farm. Fifty-five and five-tenths per cent of the high school graduates were in non-agricultural occupations. Forty-nine and three-tenths per cent of the boys in agricultural occupations graduated and 66.2 per cent of the boys in non-agricultural occupations completed high school.

Many Minnesota farm boys, unlike urban boys reported in other studies, entered the occupations in which their fathers were engaged. Forty-nine and eight-tenths per cent were in the same occupations as their fathers. The size of the family had little influence on whether the boy followed his father's vocation.

The amount of education received by the boys was closely related to the occupational intelligence levels of their fathers. Sixty-two and five-tenths per cent of the boys whose fathers were in Category II¹ graduated from high school. Forty-eight and five-tenths per cent of the boys whose fathers were in Category III graduated from high school and in Category IV there were also 48.5 per cent who graduated. Forty and nine-tenths per cent of those whose fathers were in Category V graduated. As the occupational levels of the fathers became lower, the boys dropped out of school in increasing numbers.

All the boys in this study had at least one course in Agriculture. From the large number of boys who went into farming, one may assume that the pupils were preparing for their future occupations. There was a decided drop in the number of courses in Agriculture taken by boys who went into non-agricultural occupations.

The individuals, who made definite choices of occupations, were more uniform in their outcomes than the boys who made no choices.

¹ Occupational Intelligence Scale for Agricultural Occupations was developed for the purpose of determining occupational levels.

Cycles of economic conditions had some influence on the number of boys who were farming. As farming conditions improved, more boys went into farming; as economic conditions on the farm became less favorable, the individuals went into other kinds of work.

Many boys, who chose occupations that were different than their fathers, managed to find employment in these other occupations but generally they were in levels of occupational intelligence corresponding to those of their fathers.

Many boys chose occupations in categories higher than those which they were able to reach. A few were working on levels above their choices. The individuals tended to seek their occupational intelligence levels before becoming stabilized. Those in the high intelligence group reached their levels more quickly than those who were in the lower categories.

The individuals in some cases had not reached their levels at the close of the study and might continue to make changes for several years before actually finding satisfactory occupations.

One hundred eighty-seven, or 39.4 per cent of the entire group, were working on the levels of the choices which they made ten years earlier; forty-three, or 9 per cent, were working on levels above their choices; and 161, or 33.9 per cent, were employed on levels below their choices.

• • •

THE RELATION OF STATISTICS TO THE DESIGN OF EDUCATIONAL AND PSYCHOLOGICAL INVESTIGATIONS

ABSTRACT

PALMER O. JOHNSON
University of Minnesota

The object of statistical methods is to make available all the information furnished by a body of data in its logical bearing upon whatever theories are under consideration. In the present, as well as in the past, especially in the field of educational research, the usual procedure is to collect the data and then decide what statistical treatment will be accorded them in order to elicit their meaning. All too frequently, this policy results in the failure to arrive at unqualified answers to the questions raised. In a field such as ours, where we have drawn largely upon older disciplines for method and treatment the task is an exceedingly difficult one. Very much labor must be consumed in discovering the limitations, both qualitative and quantitative, of such methods when new types of observational data are under consideration or when new