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SCHOOL EXPERIENCE, OCCUPATIONAL SUCCESS AND SATISFACTION

Abstract
A retrospective research into the relationship between school experience and work careers studied the 1932 graduating class of McGill University. The investigation focused on the role that informal skills, presumed to develop at school, play in the achievement of occupational success and satisfaction. Participation in extra-curricular activities at university, and winning awards at university, both show some relationship to occupational success. Ascribed status does not play a consistent role in the achievement of success, nor does high school experience have a marked influence. Satisfaction is more closely linked to the occupational setting in which it occurs, than to prior school experience. Where school and work settings are structurally congruent, the rates of satisfaction are higher than where such congruence is lacking.
SCHOOL EXPERIENCE, OCCUPATIONAL SUCCESS AND SATISFACTION

by

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I wish to express my thanks to the Graduates' Society of McGill University for its cooperation in providing the names and addresses of the McGill graduates of 1932, the subjects of this study.

Thesis Director: Professor William Westley
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INTRODUCTION

The aim of the research reported here has been to explore some structural and interactional variables found in school settings, and to determine their relationship to occupational careers. In general terms, the research has attempted to discover some of the ways in which certain aspects of the educational experience of college graduates are related to success and satisfaction in their occupational careers.

The basic premise which underlies this research is that school may serve as a source for the acquisition of both formal and informal skills. Formal skills are part of the intended effects of an educational institution - those due directly to the institution's policies and practices. Informal skills are part of the unintended effects - those due to the incidental features of the environment. The focus here has been on the latter - the ways in which school experience serves as a source for the acquisition of informal skills, and how these informal skills may be related to one's occupational career.

The dependent variables of prime concern are those of success in one's career, and satisfaction with that career. The research has tried to assess whether the range of social skills acquired at school is related to success and to satisfaction.

II - LITERATURE REVIEW

The literature to be reviewed below is divided into two main sections, the first descriptive, the second theoretical.

1. DESCRIPTIVE

To a great extent, the literature concerned with college graduates is primarily descriptive, dealing with variables presumed to be either antecedent to, or dependent upon, college attendance. The rates of incidence vary, depending on whether one is discussing males or females, or both together, and whether respondents attended undergraduate school only, or graduate school as well. The findings reported below are given in general terms.

A. Antecedent Variables.

The families of orientation of college graduates are generally small, often having only one child. They are middle-class urban dwellers, and one third to two thirds have at least one parent with college education. The home atmosphere is strongly positive with respect to higher education. The graduates have better than average intelligence and their motivation is such that some 70%

worked their way through college, in whole or in part\(^1\).

B. Dependent Variables.

a. Marriage and Family.

Male graduates marry as often as all males\(^2\) while female graduates show an inverse relationship between level of education and marriage rates - 70% of all female college graduates marry, while only 60% of alumnae of graduate schools do so\(^3\). The national average for all women is 87%\(^4\). Comparison with people of less education shows that for both men and women graduates marriage is later, divorce less frequent, families are smaller, and more marriages are childless\(^5\).

b. Achievement.

There is a relationship between grades and types of occupation. Havemann and West found that:

A students tend to wind up in the professions.

B students are also well represented in the professions, but more are in business.

C and D students have fewest professionals, and most in business\(^6\).

Relevant to these findings is the demonstrated correlation between intelligence test scores and field of

\(^1\)Ibid., p.14.


\(^3\)Ibid., p. 870.

\(^4\)Havemann and West, *College*, p. 54.


\(^6\)Havemann and West, *College*, p. 157.
study. The top level selects physical sciences, engineering and mathematics; the second level tends towards literature and the social sciences; while the third level chooses applied fields, agriculture, business, home economics, and education.¹

Not only does college-attendance show a relationship to level of achievement in one's occupation, but the particular college attended makes a difference. Thus, Havemann and West found that a graduate's income is related to the wealth and prestige of his college, as measured by endowment per student, even when family background is controlled.² Also, in Ginzberg and Herma's study of intellectually superior male alumni of Columbia University Graduate Schools, respondents rated as high achievers in their occupational careers were found to have graduated mostly from large state institutions, private institutions under religious sponsorship, or from institutions which specialized in technical curricula. Ivy League colleges, or other academically strong private colleges, were significantly overrepresented in the lower achievement levels.³

Other relevant findings show that each increment in schooling is associated with a decline of representation

²Havemann and West, College, p. 178.
Finally, male college graduates, when compared to male non-graduates, hold more top-level jobs, earn more job for job, and age for age, and earnings increase for a longer number of years.\(^2\)

c. Values and Attitudes.

Values and attitudes also are affected both by college attendance in general and by the particular college attended. College years are marked by a change in attitudes,\(^3\) and values, attitudes and opinions with which one leaves college tend to persist. Also, interest patterns of college seniors tend to persist well into adulthood.\(^5\) Differences in values and attitudes among alumnae groups (of Vassar) of different generations tend to correspond to differences in the climate of opinion that prevailed when these alumnae were in college.\(^6\)

The work of Pace and Stern, while not dealing directly with values and attitudes, has explored the influence of the different subcultures which distinguish

\(^2\)Havemann and West, College, p.30
\(^4\)Freedman, College Alumni, p.856
\(^5\)Ibid., p. 851.
\(^6\)Ibid., p. 808.
colleges from each other. Thistlethwaite supports their idea that colleges differ in environment, and these environments are related to the type of student which each attracts, as well as the productivity (i.e., number of graduates) of the various departments or disciplines. This assumes that "different student cultures have considerable effects upon student achievement by virtue of the kinds of behavior they sanction." Furthermore, "where characteristics of students and of subcultures are similar, or congruent, their combined mass influence on achievement is greater than the influence of either factor alone. When these factors are not congruent, achievement of relevant objectives is a little more frequently consistent with the press of the environment than with the personality of the students." 

While the studies reported above lend credence to the idea that people with a university education share certain characteristics before they get to university, and other characteristics presumably as a result of having gone to university, they shed little light on what aspects of the educational process have what effects.

---

1 Donald L. Thistlethwaite, "College Press and Student Achievement," *Journal of Educational Psychology*, (Oct., 1959), 188.  
2. THEORETICAL

The literature review which follows is more closely linked to the general theoretical approach adopted for this research project. Wilensky reported that, except for medical training at different levels (i.e., doctors, nurses, laboratory technicians, etc.) the type of training one takes at school is a poor predictor of later occupations\(^1\). Anderson noted that doctors feel that their training does not equip them for the work they have to do. He also found that social skills are increasingly important in job adjustment; and, in seeming contradiction to Havemann and West, observed that high academic achievement is not related to success in work\(^2\). Ginzberg and Herma found this latter to be true below the post-graduate level\(^3\), and Caplow, referring to school in general, found that the correlation between grades and occupational achievement seldom exceeds +.50\(^4\).

In spite of these negative types of findings, there is little doubt that the educational and occupational structures show an increasing interdependence.\(^5\) Eckland's finding that "college graduation is a more important factor than either class origin or academic ability, in obtaining high-ranking jobs" led him to assert that "regardless of his native ability or even his academic

\(^{1}\) Harold Wilensky Jr., McGill University seminar, April 1967.
\(^{2}\) Arnold C. Anderson, McGill University seminar, March 1967.
\(^{3}\) Ginzberg and Herma, Talent, p.106
learning, the graduate may be presumed to have developed social skills, work habits, loyalties or other attributes required for performance of many roles in modern industrial organizations."\(^1\) Dalton holds that the role of student at the college level is functional for development of managerial skills - "the total experience of going to college may be more important for the executive than the technical courses he takes".\(^2\) Finally, Brim and Wheeler, who speak of schools as one type of people-processing organization, find that two kinds of socialization occur:

- **role socialization** - training and preparation for performance of specific tasks.
- **status socialization** - prepares recruits to occupy a generalized status in life, with its associated life styles.\(^3\)

There is, in these latter three studies (Eckland, Dalton, and Brim and Wheeler) a common if unarticulated theme, namely that educational organizations have both manifest and latent functions affecting those who pass through them. The explicit training presumably gives the individual knowledge related to (future) job content - i.e., formal skills. The implicit training presumably gives the individual knowledge related to


actual behavior in a job - i.e., informal (or social) skills.

It is the findings of what has been included above as "theoretical" studies that generated the ideas for this research into the school-work relationship. Since there is a good deal of evidence which indicates that one's school experience has some bearing on one's occupational career, and since the explicit school training is not a reliable indicator either of choice of occupation, or of level of performance in a chosen occupation, this suggests that there may be implicit training which occurs at school and which bears on one's work career. However, the source of this implicit training has remained unexplored and this research has attempted to chart the effects of variables, not already dealt with in previous work, on the relationship between education and occupation.
The group selected for study is the 1932 graduating class of McGill University. The main reason such a group was chosen is that its members are now close to the end of their active working lives and therefore offer an opportunity to study their entire careers - both at school and at work.

Because no statistically acceptable method of sampling was used in the selection of respondents, the data cannot be submitted to statistical procedures mathematically allied to sampling, and the results therefore permit no estimation of, or applicability to, the general population of college graduates. There are, however, a number of reasons which justify the somewhat arbitrary choice of this study sample (recognizing that the term "sample" is here used in its loosest sense), most of which can be subsumed under the heading of "practicality". The nature of the research project as partial fulfillment of the requirements of a masters degree meant that resources were somewhat limited. Neither funds, personnel, or even time were available for a more scientifically-based selection procedure. Furthermore, the classification of the study as "exploratory" permitted an informal sample selection. Finally, and by no means an insignificant consideration, was the availability of the sample. The McGill Graduate Society provided a list of 518 names and addresses, constituting all the members of the class

of '32 whose whereabouts are still known.

Since these members are very widely scattered geographically, the data were collected by a mailed questionnaire. The first mailing was in June 1967, and a second mailing in November of the same year.

518 questionnaires were sent out, 243 were returned, of which 223 were answered. The twenty respondents who returned unanswered questionnaires gave reasons of illness, lack of time, or lack of interest. The 223 responses included 155 males and 67 females. Since a majority (82%) of the women had not worked continuously from the time of graduation, many of the questions were inappropriate for them and the questionnaires of female respondents were excluded from the final tabulations and analysis. Thus, the findings to be discussed below refer to the 155 male respondents who answered the questionnaires. This number represents:

- 70% of the total replies;
- 41% of the questionnaires sent to males;
- and 30% of the whole class.

The class of McGill '32 was largely Canadian. 79% was born in Canada; 10% in the United States; 8% in the British Isles; and the remaining 4% in continental Europe or "other".

As might be expected, respondents differed from
their fathers in their level of education\textsuperscript{1}, the sons showing a considerably higher level, as follows\textsuperscript{2}:

<table>
<thead>
<tr>
<th>Educational Scale</th>
<th>Fathers</th>
<th></th>
<th>Sons</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1. Graduate Training</td>
<td>21</td>
<td>14</td>
<td>101</td>
<td>65</td>
</tr>
<tr>
<td>2. College or university</td>
<td>15</td>
<td>9</td>
<td>54</td>
<td>35</td>
</tr>
<tr>
<td>3. Partial college</td>
<td>12</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. High school graduation</td>
<td>23</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Partial high school</td>
<td>15</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Junior high school</td>
<td>32</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Less than 7 years</td>
<td>37</td>
<td>24</td>
<td>155</td>
<td>100</td>
</tr>
</tbody>
</table>

The respondents fall into the top two categories, while only 23\% of the fathers reached these educational levels. Thus, a minimum of 77\% of the fathers (categories 3 to 7 inclusive) and a maximum of 86\% (categories 2 to 7) have sons who have been upwardly mobile as far as education is concerned.

Among the respondents with graduate degrees, 36\% of the sample holds 2 academic degrees, 20\% holds 3 degrees, 4 members hold 4, and 1 member holds 5. This compares favorably with Porter's description of the economic and

\textsuperscript{1}All calculations of educational status, occupational status, socioeconomic status, and mobility are based on the classificatory scheme set out in August B. Hollingshead and Fredrick C. Redlich, \textit{Social Class and Mental Illness} (New York: John Wiley & Sons, Inc., 1958).

\textsuperscript{2}All presentations of data include only the numbers of respondents who answered any particular item, and proportions are based on those totals, rather than on the complete sample.
political elites in Canada. Two-thirds of the sample attended McGill University only, while the remaining third attended other universities before and/or after McGill.

The comparison of the occupation status of the respondents with that of their fathers, shown below, also reveals a difference that favors the respondents.

<table>
<thead>
<tr>
<th>Occupational Scale</th>
<th>Fathers</th>
<th>Sons</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. %</td>
<td>No. %</td>
<td></td>
</tr>
<tr>
<td>1. Executives and proprietors of large concerns, and major professionals</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>2. Managers and proprietors of medium-sized businesses, and lesser professionals</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>3. Administrative personnel of large concerns, owners of small independent businesses, and semiprofessionals</td>
<td>51</td>
<td>33</td>
</tr>
<tr>
<td>4. Owners of little businesses, clerical and sales workers, and technicians</td>
<td>37</td>
<td>24</td>
</tr>
<tr>
<td>5. Skilled workers</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>6. Semiskilled workers</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>7. Unskilled workers</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

The majority of the respondents is on the top occupational level as well as on the top educational level. The largest proportion of the fathers is on the third occupational level, and on the educational scale, the largest proportion is seventh. These results show that a minimum of 35% (categories 4 to 7) and a maximum of 84% (categories 2 to 7) of the fathers have sons who were upwardly mobile, in occupational terms.

Occupational status of the fathers is considered as an indicator of socioeconomic status, and is used throughout much of the research as a control variable. Those fathers falling into categories 1 to 3 are considered as high status, while those in categories 4 to 7 combine into low status.

The class of '32 graduated during the Great Depression which followed the stock market crash of 1929, and the respondents report varied effects on both their careers and personalities. The vast majority (90%) was able to secure employment during the year following graduation, but only 30% did so by their own efforts. Others were helped by family, friends and faculty members. Still others became self-employed, or worked for their fathers. Working was not synonymous with supporting oneself. Only about 50%
of the respondents earned what they recall as "adequate" for their needs. The others borrowed money, lived at home, did odd jobs nights and weekends, etc.

In retrospect, only one-quarter of the respondents consider the depression to have had negative career and/or personality effects. Those who report deprivation expressed the idea of a seemingly ineradicable cautiousness with regard to money. They became, and still are, low risk-takers, very conservative in business and other decisions, often with permanent insecurity about money.

The depression, others feel, was a beneficial experience. They acquired "new values and attitudes", revised their "conception of essentials", and in the long run were "better equipped to face life's realities". Many seem grateful that they learned to work hard, and to save for a rainy day.

Most members of the class of '32 fit into Hughes' "middle class career pattern". Their occupational careers show a more or less regular improvement of position, income and presumably skill and status. In view of the large proportion that holds graduate degrees (and the implication of this for a chosen occupation) it is not surprising that almost 90% has had only 1 major career,

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and 37% has worked at the same jobs since first employment. The term "same job", however, connotes different things for different types of occupations. For the self-employed doctor, or lawyer, etc. its meaning is quite straightforward. For the salaried employee of a large corporation, the "same job" implies continuity - of employer, of basic type of work - though the level of skill and responsibility may change, as may the type of activities. Those who changed jobs once or twice numbered about 16% each. All job changers tended to stress positive reasons for moving to new positions - better pay, improvement in working conditions, more desirable type of industry, etc. There were relatively few negative reasons, such as being fired, disagreement with company policy, or health.

Ten percent of the class is presently retired, while another 5% has returned to work after a brief retirement. Half the class expects to retire between the ages of 60 and 65, while 10% expects never to retire, most through choice, while a few are without adequate financial reserves.
IV - RESEARCH DESIGN

1. THEORETICAL FRAMEWORK

There are three main assumptions on which the inquiry into the relationship between school and work is based:

A. The structure of an organization determines the interaction available to its members.

   The more complex the structure the greater is the potential for interaction.

B. The interaction in which a member engages is a determinant of the informal skills which he acquires.

   The more complex the structure, and the higher the level of interaction of any individual, the greater becomes his range-of-skills.

   The informal skills which may be acquired at school and have relevance for one's occupation include such things as: allocation of time; dealing with people differing in personality, ability, authority, etc.; coping with conflicting demands; assuming or accepting authority; working autonomously or with supervision; working alone or in a group; etc. However, it is the range-of-skills, rather than any one skill, which is presumed to develop from the pattern of interaction in which an individual engages. This implies that the more complex the environment in which interaction occurs, and/or the more complex the pattern of interaction, the larger is the repertoire of informal skills which is acquired. By
studying the interaction in which an individual participated, and the structure of the school in which it occurred, one can infer the range-of-social-skills which he possesses.

C. The greater is the range-of-informal-skills, the greater is the probability of achieving success and satisfaction in one's occupation.

Range-of-social-skills is a theoretical construct presumed to link one's school experience with work experience. Structural and interactional variables, pertaining to high school and university, are considered as indicators of range-of-social-skills. They are, moreover, the main independent variables, and it is their relationship to the indicators of the main dependent variables, success in, and satisfaction with, one's occupational career, that constitutes the body of the research.

It is perhaps advisable at this point to interject a brief note concerning the use of the word "theory" in this paper. Theory, in its formal sense, is a set of "systematically organized, lawlike propositions (about society) that can be supported by evidence."¹ When data is gathered to test the hypotheses that are deduced from these propositions, this constitutes a verificational study. The present study, as already mentioned, is

exploratory, or descriptive. It is not based on a set of propositions, but on a set of assumptions. Both assumptions and propositions are statements concerning phenomena presumed to exist or occur, but differ in that assumptions do not have empirical support. (One might almost say that there can be no assumption that is supported by empirical data, for as soon as data exists, the assumption becomes a proposition.) The present study is based on a small set of related assumptions, and the ideas, rather than formal hypotheses, generated by these assumptions. A descriptive study is thus more speculative than is a verificational study. The term "theory", though a misnomer, will be used throughout the body of this paper, and refers to the theoretical framework which informs the investigation into the school-work relationship - i.e., the set of interlocking assumptions, and the ideas which follow from them.

All data have been subjected to chi square tests, and 5% is the minimum level of significance considered acceptable.

2. INDEPENDENT VARIABLES

The data are comprised of three sets of variables, those dealing with high school, with university, and with work careers.
A. High School Variables.

There are three variables which pertain to high school—high school size; high school homogeneity—heterogeneity; and high school activities.

a. High School Size.

High school size is conceived as a characteristic which effects the amount and type of interaction available to its members. The larger the high school, the greater is the potential for interaction, in terms of the number and type of people, and the number and type of activities. To the extent that many people do engage in many activities, they weave a pattern of interaction that is highly intricate, and to the extent that this occurs in large school more frequently than in a small school, then school size is an indicator of the complexity of its social structure.

High school size, as measured by the number of students attending a school, has been classified into five main sizes. The distribution of respondents by school size is as follows:

<table>
<thead>
<tr>
<th>SIZE OF SCHOOLS</th>
<th>RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Up to 199</td>
<td>18</td>
</tr>
<tr>
<td>200 - 499</td>
<td>49</td>
</tr>
<tr>
<td>500 - 749</td>
<td>26</td>
</tr>
<tr>
<td>750 - 999</td>
<td>9</td>
</tr>
<tr>
<td>1000 plus</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>139</strong></td>
</tr>
</tbody>
</table>
Not all respondents answered all the questionnaire items. To compensate for the low response rate and small sample, the procedure adopted for all cross-tabulations has been to collapse the variables into two or three categories. Otherwise, when the data is divided into too many cells, the small sample size makes the finding of an association—either positive or negative—highly unlikely, if not impossible. In each case the selection of cut-off points which establish the categories is based on the belief that the differences within a category is smaller than those between categories.

The original categories of school size are collapsed into Small and Large, with 500 as the cut-off point between them. Thus, 48% of the sample attended small high schools, and 52% attended large ones.


A second indicator of high school structure rests on a combination of the sociocultural characteristics of the student body and school size. A complexity continuum, ranging from heterogeneous to homogeneous was constructed, based on social class, religion, and ethnicity. Three types of schools emerged from these items:

Homogeneous—students of the same social class, ethnicity, and religion.

Heterogeneous—students of different social class, ethnicity, and religion.

Intermediate—students differ on only 1 or 2 of these characteristics.

Each of these types of schools is subdivided into three sizes - small, medium and large - yielding a typology of 9 kinds of schools.

1. Heterogeneous - large
2. Heterogeneous - medium
3. Heterogeneous - small
4. Intermediate - large
5. Intermediate - medium
6. Intermediate - small
7. Homogeneous - large
8. Homogeneous - medium
9. Homogeneous - small

Categories 1 to 5 are considered as Heterogeneous, and 6 to 9 are homogeneous. Among the 139 respondents who replied, 58% attended heterogeneous schools, and 42% attended homogeneous ones.

c. High School Activity

High school activity is a measure of the amount and type of participation in school-sponsored athletic and non-athletic extracurricular activities. High school activity (and university activity below) are scales of participation, derived from scores on three items:

i) number of activities - 1 point each.

ii) number of years of participation in each - 1 point for each year in each activity

iii) the nature of participation

   leadership position - 5 points
   team membership - 3 points
   personal recreation - 1 point
The scores obtained ranged from 0 to 90, and these were divided into Low, Medium and High. The number of respondents in each category of high school activity is:

<table>
<thead>
<tr>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>49</td>
</tr>
<tr>
<td>Medium</td>
<td>49</td>
</tr>
<tr>
<td>High</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>120</td>
</tr>
</tbody>
</table>

B. University Variables.

The university variables which have been measured in the search for links between school and work experience differ somewhat from those measured for high school, for a number of reasons. First, since all respondents attended McGill University, they are all the products of a structurally complex institution. While it is true that McGill schools and faculties differ, among other things, in size, student-teacher ratio, and probably in the sociocultural characteristics of the students, the study has concentrated on the over-all environment rather than on the subgroups within it. Secondly, many respondents (39%) attended universities in addition to McGill, but no information was obtained about these other schools. Structure, therefore, is controlled, so university data deals only with interaction variables.

a. University Activity.

The concept of University activities parallels that of high school activity. The number of respondents in
each category is:

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>57</td>
<td>52</td>
</tr>
<tr>
<td>Medium</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>High</td>
<td>19</td>
<td>18</td>
</tr>
</tbody>
</table>

109 100

Table 1 shows the relationship between high school and university activity for N = 78.

Table 1
Relation of High School Activity to University Activity.
N = 78

<table>
<thead>
<tr>
<th>Univ. Act'y</th>
<th>Low No.</th>
<th>Low %</th>
<th>Medium No.</th>
<th>Medium %</th>
<th>High No.</th>
<th>High %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>13</td>
<td>62</td>
<td>21</td>
<td>46</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Med.</td>
<td>5</td>
<td>24</td>
<td>17</td>
<td>37</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>High</td>
<td>3</td>
<td>14</td>
<td>8</td>
<td>17</td>
<td>5</td>
<td>45</td>
</tr>
</tbody>
</table>

Total 21 100 46 100 11 99

\[ x^2 = 9.6. \] This is significant at better than 5%.

As high school activity increases, the proportion showing:

Low university activity decreases: 62, 46; 9.

Med. " " increases: 24, 37; 45.

High " " increases: 14; 17; 45.

b. University Awards.

University awards, as the name suggests, refers to the respondents who won awards of various kinds at university. These awards fall into three categories - academic, athletic, and "other". The number of each type
of award winner is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>42</td>
<td>27</td>
</tr>
<tr>
<td>Athletic</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Other/Combination</td>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>None</td>
<td>66</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>100</td>
</tr>
</tbody>
</table>

In tabulations with this variable all categories of winners are combined, and comparisons are in terms of winners and non-winners. 57% of the sample has won awards; 43% has not.

c. Social Class.

Social class is here defined in financial terms, and refers to the respondents during their years at university. Job holding and earning money, though not strictly speaking participation in university activities, do form an essential part of school experience and one which would seem logically related to post-school occupational experience. Two measures used to indicate the financial condition of the respondents are labelled Amount of Work, and Proportion Financed. For discussion purposes, the categories Low Financers, and Low Workers will be considered as upper class, and their counterparts as lower class.

i) Proportion Financed.

This variable measures the proportion of university expenses which the respondents financed. Of the 148
respondents who answered the question:

33% did NOT finance themselves.

40% financed up to, and not more than, one-half.

27% financed more than one-half, often all, and in some cases, living expenses also.

The last group is considered High Financers, the first two are combined as Low Financers.

ii) Amount of Work.

This variable, as its name suggests, is a measure of the amount of paid work which a respondent reported having done during his years at university. 142 respondents answered this question. Of these:

11% did not work at all.

42% held summer jobs only.

47% held summer jobs as well as some jobs during the school term.

The last group is rated as High Workers and the first two groups combined are Low Workers.

3. DEPENDENT VARIABLES

The two main aspects of occupational career which are of concern in this project are those of success and satisfaction. The measures of success are objective, and indicated by a number of achievement criteria. Satisfaction, on the other hand, is a subjective concept, indicated by the reported perceptions of the respondents.

A. Success Variables.

a. Income.

The level of income which one attains is here considered the prime indicator of success. In reply to the question
asking to report on the highest income earned during the last ten years, 118 respondents showed an income range with a low of under $5,000 to a high of over $150,000. Below is a detailed account of the income of these respondents.

<table>
<thead>
<tr>
<th>Income Range</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>To $5,000</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5,001 - 10,000</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>10,001 - 15,000</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>15,001 - 20,000</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>20,001 - 25,000</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>25,001 - 35,000</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>35,001 - 50,000</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Over 50,000</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

| Total              | 118 | 100 |

Income has been divided into two groups - Low Income, which includes everyone earning up to $25,000, and High Income which includes those over $25,000. Thus, 66% is low earners, and 34% is high.

A number of incidental points of interest associated with income may be noted. When faculties from which the respondents graduated are placed in rank order according to their proportion of high earners, the medical faculty constitutes the largest block, with 28% of the high earners, followed by 25% in the School of Commerce. Alternatively, the faculties having the greatest proportion of high earners are also medicine and commerce, each with 48% of their graduates earning high incomes. Not inconsistent with these findings is the fact that high income earners tend
to be self-employed, rather than salaried, and to occupy top authority positions rather than positions on a hierarchical level below the top. Also, a larger proportion works in organizations which are structurally non-complex (i.e., relatively few levels of supervision) rather than in those which are structurally complex, which differs from the sample as a whole where the ratio of those working in non-complex organizations to those in complex organizations is about 1:2 - 32% of the sample is in non-complex organizations, and 68% is in complex.

b. Mobility.

Mobility is the vertical social distance which the respondent has travelled relative to his father. It is a composite measure based on a statistical weighting of education and occupation, which yields a status score. Each respondent and his father is positioned according to his score on a status scale, and the distance between these positions indicates the mobility of the respondent. 153 respondents provided the required information and grouped themselves in the following manner:

<table>
<thead>
<tr>
<th>Category</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High upward mobility</td>
<td>37</td>
<td>24</td>
</tr>
<tr>
<td>Moderate upward mobility</td>
<td>54</td>
<td>35</td>
</tr>
<tr>
<td>Low upward mobility</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>No mobility</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Low downward mobility</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
<td>100</td>
</tr>
</tbody>
</table>
Mobility results are divided into two groups with the cut-off point between moderate and low upward mobility. 60% of the sample shows High (Upward) Mobility, and 40% shows Low Mobility.

c. Public Recognition.

A group of three variables, labelled here as "Public Recognition" includes Government Service, Directorships, and Work Awards. The selection of these variables as measures of success resides in the fact that they are considered as highly prized rewards which the institutions of western society can bestow. They are, furthermore, available to the incumbents of a wide spectrum of occupations and seem, therefore, to constitute an acceptable cross-section of the honors available to those who have distinguished themselves in some way. These are similar to each other in the sense that they are attained on the basis of other achievement, probably in one's subsequent career. They are neither necessarily related to each other, nor mutually exclusive. While they may, and often do, carry with them important monetary gain, they are also attractive because of the prestige which attaches to them.

i) Government Service.

Government Service refers to the respondents who have been selected one or more times by a government to sit on advisory committees, consulting boards, royal commissions, etc. It excludes working for the government on a more or less permanent basis. The total number of
respondents that has achieved success of this kind is 38-25% of the sample - though they differ in the number of times they have been called on to serve in such capacities.

ii) Directorships.

To be a director refers to those types of appointments generally thought of as honorary, be it in a business, civic and/or philanthropic organization. Many of these positions pay substantial salaries and demand substantial effort. In other cases the exchange is verbal and nominal. However, regardless of the amount of work or salary involved, such appointments are generally in the nature of a prestige exchange - the appointee is often selected on the basis of his already existent prestige, and acceptance supposedly reinforces his prestige position. This type of reward was received by 1/3 of the class.

iii) Work Awards.

Recipients of work awards are individuals who have been honored, for what is considered as outstanding accomplishment(s), by institutions and organizations of various kinds which have awards to bestow. Honorary titles and degrees, prizes given by different types of institutions, citations or trophies presented by social service clubs, etc., are typical examples. Here again 1/3 of the sample is represented.

B. Satisfaction Variables.

To determine whether the respondents are satisfied with their jobs, they were asked to rate their jobs on a 4-point scale devised for the purpose. Parts (i) and (ii) are considered negative ratings, and (iii) and (iv) as positive. The scale and the results obtained are as follows:

No. | %
---|---
i) I don't really like it and would rather be doing other kinds of work | 1 | 1
ii) It's all right but there are other kinds of work I like better | 6 | 4
iii) I like it very much but there are other kinds of work I like just as much | 33 | 24
iv) It's exactly the kind of work I like the best | 99 | 71

When collapsed into two groups, only 5% of the sample rated its jobs negatively, while the remaining 95% is positive. Due to this lack of variation in the replies, this question was deleted from the analysis.

b) Job Satisfaction.

Ginzberg and Herma have shown that a major factor affecting job satisfaction is the extent to which a job coincides with level of aspiration. Based on this idea, a 3-part question used to determine job satisfaction asked:

i) Do you feel that, in terms of your earlier expectations, your present
work provides the satisfaction and rewards which you had expected by this time?

ii) If no, do some aspects of your work fall short of expectations?

iii) Or, do some aspects of your work exceed expectations?

Results of (i):

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissatisfied</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Satisfied</td>
<td>126</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>148</td>
<td>100</td>
</tr>
</tbody>
</table>

Answers to (ii) and (iii) were so meager that the sources of satisfaction and dissatisfaction could not be evaluated, and these parts of the question were dropped from the analysis.

The attempt both to measure job satisfaction and determine the factors which contribute to, or detract from, it actually involved a number of questions other than those reported above. They tried to probe the features which have contributed to, and interfered with, careers; the aspects of career found to be most and least gratifying; the skills required for high job performance; and lastly the adequacy or inadequacy of school training in relation to job requirements. The responses to all of these was so sparse as to be useless - few people
answered, and fewer answered in full. It is possible that the questions probed too deeply to allow for relatively simple answers, and that respondents were unable or unwilling to take the time which suitable answers would have required. It is also possible that job satisfaction is a very complicated kind of assessment for an individual to make and that the questions were not equal to the challenge.

Another possibility is that satisfaction is a function of age. In the testing of what Tausky and Dubin call a "Career Orientation Anchorage Scale" they found no subjects beyond age sixty who were oriented upward. Such persons, they found, fit the "limited success model", marked by "... subjective satisfaction". These findings may be relevant to the McGill class of '32, whose average age would be between 55 and 60.

---

It is assumed that school experience is a source of informal skills which are useful at work. Such informal skills are believed to originate, at least in part, from the pattern of interaction which characterizes an individual, while the structure of the school determines the interaction which is available. To the extent that schools differ in structure, and patterns of interaction also differ, this infers the acquisition of social skills which differ; and since there is a presumption that social skills affect occupational careers, the differences in the indicators of school structure, and patterns of interaction, should relate differently to the indicators of occupational success and satisfaction.

More specifically, persons who attended large schools, heterogeneous schools, and/or were high participators are believed to have developed a range-of-skills that is broader than persons who went to small schools, homogeneous schools, and/or were low participators. The former group, therefore, should be better equipped for their occupational careers, and have a greater potential for success and satisfaction. The latter group, while certainly not precluded from success and satisfaction in their careers, should be less likely to achieve them.

Because of the exploratory nature of this research project, the volume of data that was gathered is quite large, and two steps have been adopted to aid the reader. First, for the most part only significant findings have
been included in the body of the text. While the interests of social science would seem best served by the inclusion of the non-significant findings along with the significant ones, what might be gained in information might be lost in confusion.

Secondly, a chart has been provided which summarizes all the data, both significant and non-significant, which is discussed in the text. This appears on page 37.

A note concerning the data may help to explain the procedure which was adopted. A small sample mitigates against the finding of significant relationships between two variables, and this problem becomes even more acute when a third variable is introduced. The data, for the most part, consists of the cross-tabulation of two variables. However, the nature of the variables seemed to suggest, in varying degrees, the possible influence of ascribed socioeconomic status. More specifically, participation in extracurricular activities, in both, or either of, high school and university, may depend in part on the status of a student's father, in such a way that high status respondents are more inclined to be high participators than are low status respondents, and vice versa. Similarly, the success variables — income and public recognition — could conceivably be biased in favor of upper status respondents. Because of these considerations, in many cases the tabulations
have been controlled for the socioeconomic status of the respondents' fathers, using occupational status as the indicator. In each case where this was done, it is noted and discussed in the text.
Chart A.

Summary of Research Findings

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent</th>
<th>Income</th>
<th>Mobility</th>
<th>Gov't Serv.</th>
<th>Directorship</th>
<th>Work Awards</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Sch. Homog.-Heterog.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H 3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Univ. Activity</td>
<td></td>
<td>P-1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>H-5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Univ. Awards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P 2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L 5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H 5%</td>
<td></td>
</tr>
<tr>
<td>Amount of Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prop'n Financed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Org'l. Comp-lexity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S 2%</td>
</tr>
</tbody>
</table>

**KEY:**
- Non-significant relationship.
- Significant relationship between 2 variables.
- Significant relationship within high status group, where status is a control.
- Significant relationship within low status group, where status is a control.
- Significant relationship for small schools, where school size is a control.
- Significant relationship for homogeneous schools, where school complexity is a control.
- Significance level of chi square test.
- Blank Cell—No testing for this relationship.
1. **HIGH SCHOOL EXPERIENCE AND OCCUPATIONAL SUCCESS AND SATISFACTION**

High school experience is assumed to provide a student with informal skills which bear on the achievement of success and satisfaction. The indicators of this school experience are high school size, high school homogeneity-heterogeneity, and participation in activities. The higher proportions of success and satisfaction should be found among students who attended large schools, heterogeneous schools, and/or were high-level participators.

A. **High School Structure and Success.**

High school size was cross-tabulated with income and mobility. School homogeneity-heterogeneity was cross-tabulated with income only. In none of these cases is there a statistically significant relationship, nor does a control for socioeconomic status change the basic findings. In other words, school complexity is not related to occupational success.

B. **High School Structure and Satisfaction.**

The expectation that respondents who attended complex schools would show higher rates of satisfaction than would respondents who attended non-complex schools was not fulfilled. When both school size and school homogeneity-heterogeneity were cross-tabulated with satisfaction,
neither showed a relationship that was statistically significant.

However, it was recognized that the kind of organization in which a person works might affect satisfaction. Furthermore, since organizations differ in the demands they make on an individual, the skills which an individual has acquired should influence the degree to which he is suited to work in organizations of different kinds. One would expect that, if a person attended a large and/or heterogeneous school (i.e., a school of high complexity), he would have skills which best equip him to work in an organization of high complexity. Similarly, if his early experience took place in a small and/or homogeneous school (i.e., a school of low complexity) his skills should be best suited for a work organization of low complexity. This is the concept of structural congruence.

While the structural complexity of schools has been measured in terms of size and homogeneity-heterogeneity, the complexity of work settings is measured by the number of supervision levels. Four supervision levels or less is classified as low complexity, and more than four as high. Thirty percent of the respondents works in low-complex organizations; seventy percent works in high-complex ones.

To explore the relationship between satisfaction, complexity of high schools, and complexity of work
organizations, two steps were taken. Complexity of
work organizations was cross-tabulated with satisfaction;
and these results were then controlled separately for
both indicators of high school complexity, namely
high school size, and high school homogeneity-hetero-
genety.

Table 2 shows the relationship between organizational
complexity and satisfaction, controlled for high school
size.
Table 2.

Relation of Complexity of Work Organizations to
Satisfaction, Controlled for High School Size

<table>
<thead>
<tr>
<th>Small High Schools</th>
<th>Large High Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Complexity</td>
<td>Organizational Complexity</td>
</tr>
<tr>
<td>N = 42</td>
<td>N = 45</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>No. %</td>
</tr>
<tr>
<td>No</td>
<td>0 0 8 30</td>
</tr>
<tr>
<td>Yes</td>
<td>15 100 19 70</td>
</tr>
<tr>
<td>15 100 27 100</td>
<td>13 100 32 100</td>
</tr>
</tbody>
</table>

$X^2 = 3.7$ (corrected for continuity according to Yates).
Significance is 5%.

Among respondents who attended small high schools,
100% of those who work in organizations of low complexity
is satisfied, while 70% of those who work in organizations
of high complexity is satisfied. This is statistically
significant at 5%.
Among respondents who attended large high schools, 85% of those who work in organizations of low complexity is satisfied, while 78% of those who work in organizations of high complexity is satisfied. These frequencies do not show any statistical significance.

These findings suggest that satisfaction is greater among persons working in organizations of low complexity than among persons working in organizations of high complexity, regardless of the size of high school attended. They suggest also, that within each type of work organization, satisfaction occurs more frequently in a situation of structural congruence than where such congruence is absent. Thus, respondents who work in organizations of low complexity and attended small high schools are in a situation of structural congruence, and 100% is satisfied. Respondents in work organizations of low complexity and who attended large high schools are in a situation of structural incongruence, and only 85% is satisfied.

Similarly, for respondents in a structurally congruent situation of work organizations of high complexity and large high schools, satisfaction is reported by 78%, whereas the incongruence of a high-complexity work organization and small high school shows a satisfaction rate of 70%.

These results are essentially replicated when high school homogeneity-heterogeneity is used as a
control for the relationship between complexity of work organizations and satisfaction. Table 3 shows these findings.

Table 3.
Relation of Complexity of Work Organization to Satisfaction, Controlled for High School Homogeneity-Heterogeneity

<table>
<thead>
<tr>
<th>Homog. High Schools</th>
<th>Heterog. High Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational Complexity</strong></td>
<td><strong>Organizational Complexity</strong></td>
</tr>
<tr>
<td>N = 40</td>
<td>N = 47</td>
</tr>
<tr>
<td><strong>Satisfaction</strong></td>
<td><strong>LOW</strong></td>
</tr>
<tr>
<td>No</td>
<td>16</td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

\[ X^2 = 3.8 \text{ (corrected for continuity according to Yates.)} \]
Significance is 5%.

Table 3 shows that for the 40 respondents who attended homogeneous schools, 94% of those who work in low-complex organizations is satisfied, as compared to 64% who work in high-complex organizations and are satisfied, and this is significant at 5%.

Among the 47 respondents who attended heterogeneous schools, 90% of those who work in low-complex organizations is satisfied in contrast to the 81% that works in high-complex organizations, but this relationship is not significant.
The conclusions which are suggested by these findings are similar to those reported above, where high school size was controlled. Again satisfaction is greater among persons working in organizations of low complexity than among those in organizations of high complexity, regardless of the homogeneity-heterogeneity of the high school attended. Also, satisfaction is reported more frequently in a situation of structural congruence than where such congruence is absent. Thus in work organizations of low complexity, the rate of satisfaction is 94% for respondents showing structural congruence, and 90% for those lacking such congruence. In work organizations of high complexity, 81% of respondents in a congruent situation is satisfied, whereas only 64% is satisfied where there is structural incongruence.

To summarize briefly these findings, it would seem that the most important factor affecting work satisfaction is the complexity of the organization in which a person works. Those working in organizations of low complexity are more satisfied than those working in organizations of high complexity. Within organizations of both low and high complexity, the proportion of those reporting satisfaction is higher where there is structural congruence than where there is not. Satisfaction occurs most frequently where these factors combine—i.e., there is both an organization of low complexity and structural congruence.
C. High School Activity and Success and Satisfaction.

The focus now shifts from reporting the effects of the complexity of high school to the effects of participation in extra-curricular activities. It examines the assumption that the higher is the level of participation, the greater will be the social skills, and therefore the greater the probability of success and satisfaction.

High school activity was cross-tabulated with income, mobility, government service, directorships, work awards and satisfaction. The results of these tabulations were then controlled for socioeconomic status. With only one exception—that between high school activity and directorships—none of the findings showed any statistically significant relationship.

When high school activity and directorships are cross-tabulated, the high activity respondents are the ones most likely to earn directorships. As participation in activities increases, the proportions earning directorships increase. When this relationship is controlled for status, it is among the respondents with high status fathers that the relationship is statistically significant. This is shown in Table 4.
Table 4.

Relation Between Participation in High School Activity and Receiving Directorships, Among High Status Respondents.

<table>
<thead>
<tr>
<th>Directors</th>
<th>LOW</th>
<th>MED</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>14</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>67%</td>
<td>57%</td>
<td>13%</td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>33%</td>
<td>43%</td>
<td>87%</td>
</tr>
</tbody>
</table>

X² = 7.0. Significance is 3%.

The table clearly shows that the people who were most active in high school tend to be appointed as directors.

D. Summary of High School Variables.

The overall effort to determine the relationships between high school experience and occupational success and satisfaction has not substantiated the theoretical propositions. The one exception is the case of high school activity and directorships, among high status respondents.

2. UNIVERSITY EXPERIENCE AND OCCUPATIONAL SUCCESS AND SATISFACTION.

A. University Activity and Income.

The investigation of university activity is based on the same assumption as that of high school activity—the higher the level of participation, the greater
the likelihood of earning a high income. A cross-tabulation of university activity and income shows no such relationship.

B. University Activity and Mobility.

When university activity is cross-tabulated with mobility, the results show a negative association. The details of this relationship are shown in Table 5.

Table 5.
Relation Between Participation in University Activity and Mobility

<table>
<thead>
<tr>
<th>Mobility</th>
<th>LOW</th>
<th>MED.</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>14</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>High</td>
<td>43</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>31</td>
<td>19</td>
</tr>
</tbody>
</table>

N = 107

X² = 15.51. Significance is greater than -.1%

As the level of university activity increases, the proportion of respondents who are upwardly mobile decreases. When controlled for socioeconomic status, the negative relationship persists. Among high status respondents, the relationship remains statistically significant; for low status respondents it does not. The finding of this negative relationship between university activity and mobility is frankly puzzling and cannot be explained.

C. University Activity and Government Service.

The relationship between university activity and government service is not statistically significant,
although the data do fall in the expected manner—as activity level increases, the proportion of respondents who receive government appointments increases. When these findings are controlled for socioeconomic status, the results still do not achieve statistical significance.

D. University Activity and Directorships.

The relationship between university activity and directorships differs from above in several ways, and the results are shown in Table 6.

Table 6.
Relation between Participation in University Activity and Receiving Directorships

<table>
<thead>
<tr>
<th>Directors</th>
<th>LOW</th>
<th>MED.</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>44</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>18</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>57</td>
<td>100</td>
<td>33</td>
<td>100</td>
<td>19</td>
<td>100</td>
</tr>
</tbody>
</table>

$X^2 = 11.2$. Significance is 1%.

As university activity increases, there is a curvilinear relationship with directorships. 23% of low activity, 55% of medium activity, and 53% of high activity receive these rewards. Significance is 1%. However, this does not strictly accord with the theory, which predicted that it would be high activity respondents who earn directorships with the greatest frequency. There is, however, only a 2% difference which separates the medium and high levels, so that these findings may be considered as offering partial
theoretical support.

When the control for socioeconomic status is applied, the results for both high and low status respondents remain significant, though at a reduced confidence level of 5%. Among high status respondents, the results are straightforward — as university activity increases, the proportion of respondents who receive directorships increases. Among low status respondents the curvilinear relationship reappears, and in this case, there are only 2 high activity respondents, 1 of whom is a director, and 1 of whom is not, so that again the results will be considered as supporting the theory, if somewhat imperfectly.

E. University Activity and Work Awards.

Curvilinearity reappears in the relationship between university range and work awards, but this time it cannot be dismissed. Table 7 shows the relationship between university activity and work awards.

Table 7
Relation Between Participation in University Activity and Winning Work Awards.

<table>
<thead>
<tr>
<th>N = 109</th>
<th>University Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Awards</td>
<td>LOW</td>
</tr>
<tr>
<td>NO</td>
<td>No.</td>
</tr>
<tr>
<td>NO</td>
<td>44</td>
</tr>
<tr>
<td>YES</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
</tr>
</tbody>
</table>

\[ x^2 = 11.2. \text{ Significance is } 1\%. \]
Medium activity respondents tend to earn work awards with
greater frequency than do high activity respondents, and
high activity respondents earn such awards more frequently
than do those of low activity. These rates are 58, 42, and
23 percent respectively, a curvilinear relationship which
does not provide full support for the theory. Since these
rates are separated by what may be considered substantial
amounts, they must be accepted as they stand. However, it
may be worth noting that Tables 6 and 7 both have 109
cases which are highly similar in their distribution.
Only 3 respondents have moved between these 2 tables, 1
in the medium range column from no directorships to winning
work awards; and 2 in the high range column from
directorships to no work awards. The former 2% difference
between the medium and high activity columns of Table 6 now
becomes a 16% difference in Table 7. This illustration seems
to reveal the very sensitive nature of a small sample size
and would seem to encourage a somewhat flexible attitude in
the judging of the results. When the relationship between
university activity and work awards is controlled for status,
the original finding remains essentially unchanged among high
status respondents. Again there is a curvilinear relationship,
and the confidence level is 2%. Among low status respondents
the relationship is not statistically significant.
F. University Activity and Satisfaction.

Examining the relationship between university activity and
satisfaction is the final attempt to determine an antecedent
of satisfaction. It does not show any statistical significance, nor does the data fall in the anticipated direction, but is curvilinear, with medium range respondents showing the highest satisfaction rate.

G. University Awards and Success.

The university awards variable includes persons who have won any type of award granted at, and sanctioned by, the university. Its inclusion as an independent variable adds a qualitative dimension to the concept of interaction since it deals with high achievers, whereas the concern of university activity (and high school activity) has a larger quantitative component, differentiating among respondents on the basis of how much participation, as well as the nature of the participation.

University awards has been related to income, government service, directorships, and work awards. To accord with the theory, award winners should show a positive relationship with each of these types of success more frequently than do non-winners, and the results in each case do show this trend. However, neither income nor directorships is related to university awards in a significant way. The details of the relationship between university awards and government service, and university awards and work awards, are both shown in Table 8.
Table 8.

Relation of University Awards to Serving in Government, and to Winning Work Awards.

<table>
<thead>
<tr>
<th></th>
<th>University Awards</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Winners No.</td>
<td>%</td>
<td>Non-Winners No.</td>
</tr>
<tr>
<td>Government Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>59</td>
<td>67</td>
<td>57</td>
</tr>
<tr>
<td>YES</td>
<td>29</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
<td>66</td>
</tr>
</tbody>
</table>

$X^2 = 7.57$. Significance is better than 1%.

<table>
<thead>
<tr>
<th></th>
<th>Work Awards</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Winners No.</td>
<td>%</td>
<td>Non-Winners No.</td>
</tr>
<tr>
<td>NO</td>
<td>51</td>
<td>58</td>
<td>51</td>
</tr>
<tr>
<td>YES</td>
<td>37</td>
<td>42</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
<td>66</td>
</tr>
</tbody>
</table>

$X^2 = 6.29$. Significance is 2%.

The relationship between university awards and government service shows that 33% of the winners of university awards are likely to earn government appointments, while only 14% of non-winners are likely to do so. This is significant at better than 1%.

The rate at which winners of university awards win work awards is 42%, while the non-winners of university awards tend to win work awards 23% of the time. This relationship is statistically significant at 2%.

The university awards variable, because it includes, among others, academic achievement, may contain an indirect measure of formal skill acquisition. The fact that indicators of formal skills were not included in the research was deliberate. As already noted in the literature review, the issue of predicting occupational success on the basis of
academic achievement is still unsettled. However, occupations do differ in their requirements of formal skills, and it may be that a scaling of occupations on the basis of such differences, and using such a scale as a control, may have illuminated the matter at hand.

H. Social Class Variables and Success.

Amount of Work, and Proportion Financed are two variables assumed to be indicators of the social class of the respondents while at university. The respondents who had to work a lot are considered to be lower class; those who worked a little are upper class. Similarly, respondents who financed the larger share of their university tuition are classified as lower class, and those who did little financing are upper class.

Amount of work and proportion financed, like university awards, add a qualitative dimension to the theory, but in the present case they do derive from it, though indirectly. The theory infers that there may be a stronger link between upper class origins and success, than between lower class origins and success, for if one is in financial need, and spends most of his out-of-class time earning a living, he will not have the time to participate in extra-curricular activities. He is thus a non- or low-participator and the theory suggests that such respondents will be less successful than will high participators. However, when amount of work, as the independent variable, and university activity, as the
dependent variable, are cross-tabulated, they show no
significant relationship. On the strength of this
evidence, social class is neither a deterrent nor a
contributor to success.

Amount of work and proportion financed were each
cross-tabulated with income, mobility, government service,
directorships, and work awards, and in no instance was there
a significant relationship. The trend of the data indicates
that:

Upper class respondents earn high incomes and are named
directors more often than occurs among lower class respondents.
They are upwardly mobile, receive government appointments
and win work awards less often than the lower class respondents.
Thus, not only is there no significance to these relationships,
but there is no consistency in the direction of the data.

One possible reason that these social class variables
do not relate to occupational success of any kind may reside
in the fact that they do not reflect the true financial position
of the respondents. One generally assumes that when a college
student works at a paying job the year round, that he does
so out of necessity rather than desire. The same assumption
is generally made about students who pay their own way through
college. But these assumptions need not be correct. Perhaps
these hard-working, self-help students do so, or did so,
voluntarily - and particularly during the depression years,
this may have been "the thing" to do. If this is so, it may
provide a reason for the failure to find any significant
relationships. Another possible reason is that there really is no relationship between these variables, and that the status variable presents a truer image of the social position of the respondents. However, while the use of the status variable as a control did produce some results of statistical significance, the effects are not consistent - in some instances high status favors success, in others low status does so.
VI - SUCCESS VARIABLES AND THEIR ANTECEDENTS

This chapter will not present new data, but will summarize briefly the findings which pertain to success.

The theoretical orientation which guided this research project suggested that school is a source of informal skills; that the greater the range-of-informal-skills which one acquires, the greater is the likelihood of occupational success.

The acquisition of informal skills is presumed to depend, in part, on the social structure of a school, and on the pattern of interaction which characterized the incumbents of that school. It has been assumed that schools which are complexly structured permit the acquisition of a wider range-of-informal-skills than do schools marked by a non-complex structure. It has also been assumed that a high level of participation within and during school will also contribute to the development of a broader range-of-social-skills than will a relatively low level of participation.

The final assumption, which follows on the two foregoing ones, is that the greater the range-of-social-skills which an individual has acquired, the greater the probability of success and satisfaction.

To some extent, the findings pertaining to success provide support for the theory which guided the research. The following is a brief listing of the findings which have statistical significance.
Government service is positively related to:

- winners of university awards.

Directorships are positively related to:

- high high school activity, among high status respondents.
- medium university activity.

Work awards are positively related to:

- medium university activity.
- winners of university awards.

Mobility is negatively related to:

- high university activity.

University activity appears to be influential in the prediction of occupational success, though the results accord only partially with the theory. The other antecedent with some importance in predicting success is university awards, although it deals with a more select university population than does university activity. Any further investigation of university activities and university awards would have to control for personality variables, a doubtlessly important factor, and one which the present study was not equipped to measure.

The overall findings lend some credence to the proposition that interaction at university is a source of social skills that have relevance for occupational success.
Satisfaction, in the present context, is a verbal response of "yes" or "no" indicating whether a respondent feels that his present work provides satisfaction or not. It is probably an overly simple representative of what appears to be a very intricate property to measure. In the research design the investigation of satisfaction included efforts not only to discover satisfaction and dissatisfaction among respondents, but also to assess some of the possible sources of these subjective states. The responses, rather than illuminating the facets of satisfaction and dissatisfaction, attested rather to the difficulty of such an assessment. Since most questions were answered incompletely or inappropriately, they defied quantification. Only one indicator of satisfaction was retained, and even with this one, most efforts to analyze its relationship to other variables were fruitless.

The only variable to which satisfaction relates in a significant way is the complexity of work organizations. People who work in organizations of low complexity tend to be satisfied more often than do members of high-complex organizations, if they attended small and/or homogeneous high schools.

Perhaps a more important finding is the fact that structural congruence—that is, where the degree
of complexity of school and work environment are similar—contributes to work satisfaction. This would seem to indicate that the kinds of skills which a person acquires in a simple school are different from those he acquires in a complex school, and he is more satisfied when he is able to use at work the skills he acquired at school.
VIII - CONCLUSION

This report of the research into some relationships between school and work showed that the facts which were gathered did, to a considerable extent, correspond to the ideas and assumptions of the theoretical conceptualization. The findings provide empirical support for the idea that school is a source of informal skills that have relevance for occupational success and satisfaction, and would seem to suggest that a similar investigation using a larger sample might be warranted.
APPENDIX:

QUESTIONNAIRE FOR THE MCGILL CLASS OF 1932

1. Birthplace:
   a. Yourself
   b. Your mother
   c. Your father
   d. Your spouse

2. Total number of years of formal education
   (beginning with first year of primary school):
   a. Yourself
   b. Your mother
   c. Your father
   d. Your spouse

3. Major life-time occupation:
   a. Yourself
   b. Your mother
   c. Your father
   d. Your spouse

4. What is your marital status?
5. For each high school which you attended, please state:
   a. Name of school.
   b. Location of school:
      In a farming community
      In a village or small town
      In a large town or small city
      In a large city (including its suburbs)
   c. Approximate no. of pupils in the school
   d. Approximate no. of pupils in each class

6. If you did not attend high school or secondary school, how were you educated?

7. We would like to know:
   a. What activities were available in the high schools you attended.
   b. The amount of your participation.
   c. The nature of your participation (i.e., officer, team member, etc.)

Please fill in the appropriate answers below.
7. (cont'd).

<table>
<thead>
<tr>
<th>Activities</th>
<th>Amount of Participation</th>
<th>Nature of Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of years</td>
<td>hrs. per week</td>
</tr>
</tbody>
</table>

**Athletics**
- Hockey
- Baseball
- Football
- Basketball
- Tennis
- Wrestling
- Boxing
- Track
- Skiing
- Swimming
- Other (specify)

**School Publications**
- Newspaper
- Yearbook
- Other

**Student govt.**
- School govt.
- Class officer
- Other

**Special Interest**
- Debating
- Current events
- Ski Club
- Photography
- Dance
  - committees
- Other

**Arts**
- Theater
- Band
- Orchestra
- Glee club
  - or choir
- Painting - fine arts
- Other
7. (cont'd).

<table>
<thead>
<tr>
<th>Activities</th>
<th>Amount of Participation</th>
<th>Nature of Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of years</td>
<td>No. of hrs. per week</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proctoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working in Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending school dances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending school athletic events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other activities not mentioned</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. In thinking about the students in your high school would you say that they were mostly:
   a. Upper class?
   b. Upper middle class?
   c. Middle class?
   d. Working class?
   e. A combination of the above?

9. Were the students in your high school mostly:
   a. From similar ethnic and religious backgrounds?
   b. From a variety of ethnic and religious backgrounds?
10. What academic degrees do you hold? Where was each earned? In what year?

11. Do you feel that your formal education was adequate in preparing you for your work? 
   Yes____  No____
   If no, please explain.

12. In what kinds of sports, if any, did you participate? Please indicate the degree to which you participated, and whether your participation was as part of a college team or purely for personal recreation.

<table>
<thead>
<tr>
<th>Name of Sport</th>
<th>A great deal</th>
<th>A fair amount</th>
<th>A little</th>
<th>On a university team</th>
<th>For personal recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. Please indicate all the university activities, other than athletics, in which you participated.

<table>
<thead>
<tr>
<th>A great deal</th>
<th>A fair amount</th>
<th>Only a little</th>
<th>Not at all</th>
<th>I was an officer</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

School Publications:

Which ones?

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

Student govt.:

Please specify.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
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<th></th>
</tr>
</thead>
</table>

Clubs

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

Theater

Debating

Honorary society.

Choir

Band

Special events or projects

Others: please specify

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
14. Did you earn any awards at university?
   Yes____  No____
   If yes, please tell the nature of, and reason for, each.
   a. Academic awards.
   b. Athletic awards.
   c. Other.

15. Did you have a job, or jobs, while attending university?
   Yes____  No____
   If yes, what jobs did you hold; in what kinds of organizations; and in what period (i.e., during school year and/or during summer).

16. Did you have to work to finance your education?
   Yes____  No____
   Please indicate what proportion of your expenses you financed.

17. The class of '32 graduated when the depression was at its depth. How did you get your first job, or if self-employed, how did you get started?

18. Did you have any choice in the jobs or opportunities available to you at the time?
   Yes____  No____
   If yes, please state what the choices were and what factors influenced your decision.

19. Were you able to earn a salary adequate to your needs at the time?
   Yes____  No____
   If not, how did you make ends meet?
20. What do you feel were the most important effects of the depression on your career and/or personal life?

21. We are interested in a brief résumé of the various jobs you may have held up to the present time (including military service), or if you are not now working, up to your last job.

For each job which you have held, please complete a section below (eight such sections were provided in the original questionnaire).

If the firms or organizations for which you have worked are subdivided into branches, offices, etc. in different locations, please note that:

"no. of employees - total" refers to the firm or organization as a whole.

"no. of employees - branch" refers to the actual location where you work(ed).

Dates:

From____To____

Self-employed

Type of Firm:

Salaried

Job title and major
duty

Location:

1st annual income.

No. of employees-total

Last annual income.

No. of employees-branch
22. In the place where you work, how many levels of supervision are there:
   above you?
   below you?

23. If you had to rate your present job as to how much you like it, which of the descriptions below would you choose? Please check 1.
   a. I don't really like it, and would rather be doing other kind of work.
   b. It's all right but there are other kinds of work I like better.
   c. I like it very much but there are other kinds of work I like just as much.
   d. It's exactly the kind of work I like the best.
   e. Other. (Please specify).

24. As you have reviewed your career, what strikes you as the major factors that have, on the one hand, contributed to, and on the other, definitely interfered with, your currently working at the level you believe to be commensurate with your abilities and interests? Please list below in order of importance.
25. a. On balance, do you feel that in terms of your earlier expectations your present work provides the satisfaction and rewards which you had expected by this time?
   Yes______ No______
   
   b. If not, do some aspects of your work fall short of expectations?
   Yes______ No______
   If so, which?
   
   c. Or, do some aspects of your work exceed expectations?
   Yes______ No______
   If so, which?

26. a. What do you consider to be the most gratifying aspects of your present work?
   
   b. The least gratifying?

27. a. According to your present plans, when do you expect to retire?
   
   b. What do you expect to do during your retirement?

28. Will you please elaborate or clarify any of your above answers if you feel that it would be helpful to us and, in addition, comment upon any other points that you consider important in connection with your life and work at McGill or in the years that have followed?
29. Have you been in government service, such as consulting work, advisory committees, reserve duty, royal commissions, etc. (but not including the diplomatic corps or civil service employment)? If so, please describe briefly, giving dates.

30. If you are, or have been, a director of a business, civic and/or philanthropic organization, please list the names of each below.

31. Do you hold any military awards, honorary awards, degrees and/or titles? Please list, with dates, the names of bestowing organization or institution, and brief indication of why it was bestowed.
SELECTED BIBLIOGRAPHY


Thistlethwaite, Donald L. "College Press and Student Achievement." *Journal of Educational Psychology*, L (October, 1959), 183-91.