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One of a series of studies based on data collected from 1,844 high school students in Canada, this study examined twelfth graders who indicated plans for some post high school training. The study focused on the educational plans of 541 rural and suburban students and the sociological factors relating to the realization of these plans the following year. Factors considered were area of residence, size of community, average high school marks, I.Q., socio-economic status, and religious and ethnic origin. A follow-up on the initial data collection was made a year later to determine if plans were fulfilled. Statistical analysis of data revealed that 4 major factors influenced whether or not a student fulfilled his educational plans. These factors were (1) the student's innate ability, (2) financing of an extended period of training, (3) student motivation, and (4) social acceptance of such training by elders and peers. Fourteen major findings are included in this report. Related documents are RC 003 186, RC 003 187, and RC 003 293. (SW)

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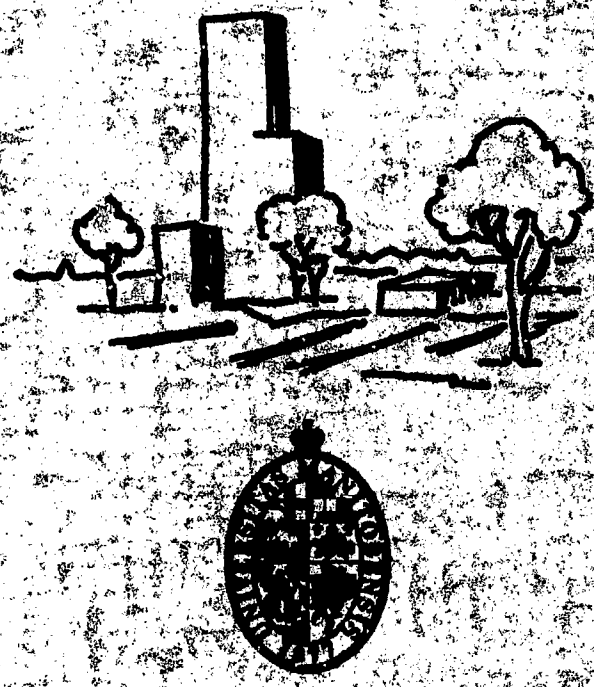

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EDUCATIONAL PLANS AND THEIR FULFILLMENT: A STUDY OF SELECTED HIGH SCHOOL STUDENTS IN MANITOBA

by

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The material reported in this study represents but a portion of a larger research project undertaken by the A.R.D.A. Research Committee, Manitoba Department of Agriculture and Conservation, and the Faculty of Agriculture and Home Economics, University of Manitoba.

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The Faculty of Agriculture and Home Economics
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FOREWORD

This is but one in a series of reports dealing with different aspects of educational attainment, or lack thereof, of a group of Manitoba High School Youth.

Current interest in high school students, particularly their educational and occupational aspirations, stems from a broader interest in social change. Clearly the underlying assumption is that the higher the level of education the better prepared our youth will be to cope with the technological and social changes taking place.

The authors of these reports clearly accept the "goodness" of higher education. Nevertheless, these studies do provide us with empirical facts about the educational and occupational aspirations of the youth studied.

These facts are being provided for the benefit of our "social engineers" who have the difficult job of designing action programs that equip our people to cope with the rapidly changing conditions of our society.

G. Albert Kristjanson,
Assistant Director,
Economics and Publications Branch,
Manitoba Department of Agriculture
and Conservation.

REPORTS IN THIS SERIES

Leonard B. Siemens

The Influence of Selected Family Factors on the Educational and Occupational Aspiration Levels of High School Boys and Girls. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number One, June 1965.

Leonard B. Siemens and J.E. Winston Jackson

Educational Plans and Their Fulfillment: A Study of Selected High School Students in Manitoba. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number Two, September, 1965.

Dennis P. Forcese and Leonard B. Siemens

School-Related Factors and the Aspiration Levels of Manitoba Senior High School Students. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number Three, September, 1965.

Leonard B. Siemens and Leo Driedger

Some Rural-Urban Differences Between Manitoba Youth (tentative title). Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, Number Four. (In preparation: anticipated October, 1965.)

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For their part in the conceptualization of the larger study of Manitoba High School Youth, of which this report constitutes but a small portion, the writers acknowledge: Dr. E.F. Sharp, Associate Professor of Sociology, University of Northern Illinois; Mr. G.A. Kristjanson, Manitoba Department of Agriculture; and Mr. D. Forcese, doctoral student in Sociology, Washington University, St. Louis, Missouri. The interest shown and the cooperation extended by Mr. R.W. Lightly, Assistant Deputy Minister of Education, was much appreciated, as was the cooperation of school principals, and indeed of the student respondents.

The writers also acknowledge with thanks the useful suggestions that emerged from the reading of earlier drafts of the manuscript by Mr. G.A. Kristjanson, and by Dr. Douglas Rennie, Professor of Sociology, University of Manitoba. The authors, however, assume full responsibility for any errors the script may contain.

For her consciencious typing of the final draft of the report, the authors wish to thank Miss Mary M. Putnam.

Finally, a special word of appreciation to the National Grain Company, Limited of Winnipeg, whose generous research grant to the

University of Manitoba made possible the undertaking of a large portion of this project and enabled the publication of this report.

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MAJOR FINDINGS

1. Of the 640 Grade 12 students studied, 22 per cent enrolled in university in September 1964, and 18 per cent enrolled in various non-university courses. Thus 40 per cent of the students took some training beyond high school.
2. Eighty-four per cent of the Grade 12 students indicated in the Spring of 1964 that they planned on taking a course beyond high school.
3. Of those who planned on going beyond high school, 48 per cent fulfilled their plans, as indicated by enrolling in an appropriate post high school course.
4. While 56 per cent of the girls fulfilled their educational plans, only 41 per cent of the boys fulfilled theirs.
5. The higher the level to which a student planned, the greater the probability that he would engage in some post high school course. Of those who planned on going to the university, 62 per cent enrolled in some post high school course; of those who planned on teachers' training or nursing, 58 per cent enrolled in some post high school course; and of those who planned on a business or a technical-vocational course, 35 per cent enrolled for post high school training.

6. Socio-economic status was not significantly related to post high school plan fulfillment.

7. The higher the average high school marks, the greater the probability that post high school plans would be fulfilled.

8. Except for those with very high I.Q.'s (140 plus), the higher the I.Q., the greater the probability that post high school plans would be fulfilled.

9. University plan fulfillment was significantly related to area of residence while non-university plan fulfillment was not. In the Interlake region, 40 per cent of those who planned on university enrolled; in the Central Plains area, 58 per cent enrolled; while in the Suburban schools, 60 per cent enrolled.

10. Size of community and university plan fulfillment were not significantly related. Those who planned on non-university courses who lived in small villages (under 500), had the lowest rate of fulfillment, followed by the farm youth, the larger town children, and, with the highest rate of fulfillment, came the city students. (See text, page 10 for cautionary note on the above findings.)

11. While 53 per cent of the Protestants fulfilled their educational plans, only 29 per cent of the Ukrainian Catholic and Roman Catholics did likewise.

12. Ethnic origin was significantly related to non-university plan fulfillment. Russian and Ukrainian youth had the lowest rate of fulfillment (34 per cent), followed by the Germans (35 per cent), the British (51 per cent), and the Icelandic students (67 per cent).

CHAPTER I

INTRODUCTION

As the occupational structure of Canadian society continues to shift in the direction of highly specialized skills, the role of formal education is becoming increasingly important. It is no longer possible to think of the high school diploma as the key to occupational success. Specialized training beyond high school has become the best insurance of employment opportunities.

Recognition of the importance of academic and vocational training has resulted in politicians, educators, and social scientists becoming aware of the problems of youth and has resulted, also, in a growing emphasis on educational research. Of the various kinds of research which have been undertaken, one type has been concerned with the analysis of the factors associated with the acquisition of academic and technical skills. The decided emphasis in these studies has been upon the factors associated with the educational aspirations of high school youth. Place of residence, size of community, the value which students attach to education, peer group influences, the socio-economic position of the student's family, the education of his parents, their encouragement for continuing education, and the religion and ethnic

origin of students all have been examined and found to be related to educational aspirations.[1]

No one would deny that motivation and aspiration have a profound influence on educational attainment. Indeed without motivation there would be no attainment whatsoever. There is, however, one aspect which has been largely ignored by social scientists in their research. This neglected dimension has to do with the relation between the educational plans of youth and their realization. It is one thing to aspire toward, or plan on, a university degree, quite another to get it. Given a positive attitude toward education, what influences whether or not an individual will, in fact, fulfill his plans? To date little is known about this subject.

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[1] Some of the important studies in this area are: Alvin L. Bertrand, "School Attendance and Attainment: Function and Dysfunction of School and Family Systems," Social Forces, Vol. 40, March,1962 ; Roy C. Buck and Bond L. Bible, "Educational Attainment Among Pennsylvania Rural Youth," The Pennsylvania State University, Agriculture Experiment Station, Bulletin 686, November, 1961; James S. Coleman, "The Adolescent Subculture and Academic Achievement," The American Journal of Sociology, Vol 65, January, 1960; Archie O. Haller and William H. Sewell, "Farm Residence and Levels of Educational and Occupational Aspiration," (mimeo.), n.d.; E.J. Moore, E.L. Baum, and R.B. Glasgow, "Economic Factors Influencing Educational Attainments and Aspirations of Farm Youth," U.S. Department of Agriculture, Economic Research Service, Resource Development Economic Division, Agricultural Economic Report No. 51, April, 1964; William H. Sewell, Archie O. Haller, Murray A. Straus, "Social Status and Educational and Occupational Aspiration," American Sociological Review, Vol. 22, 1957; Frank Uhlir and Helen Abell, "Rural Young People and their Future Plans," Canadian Department of Agriculture, Marketing Service, Economics Division, Farm Population and Rural Life Section, January, 1953; and E. Grant Youmans, "The Educational Attainment and Future Plans of Kentucky Rural Youths," University of Kentucky, Kentucky Agricultural Experiment Station, Bulletin 664, January, 1959.

Of the sparse literature in this area, one study is of special note. It deals with some of the factors related to college attendance of 1.8 million high school graduates in the United States.[2] Among the findings were that:

(a) Some 12.3 per cent of the high school seniors failed to graduate from high school.

(b) The greatest proportion of those who failed high school came from urban centers (14.1 per cent), while the lowest came from the rural non-farm residents (8.9 per cent).

(c) The lower the occupational status of the student's father, the less likely was the student to attend college.

(d) The lower the student's marks and I.Q., the less likely he was to attend university.

(e) Of the 1.8 million high school graduates in the sample, 52.7 per cent planned on college attendance; however, only 41.6 per cent of them attended.

(f) The greatest disparity between plans for college and the fulfillment of these plans was for the rural, non-farm residents.

(g) Of the college planners, 71.7 per cent of the boys and 64.8 per cent of the girls enrolled in college within one year of the initial survey.

We need to know more about the factors associated with the fulfillment of educational plans and, particularly, we need to know more about this phenomenon in Canada. Without extending our knowledge we may be ignoring crucial influences. The question to be asked, then, is: "What are the factors associated with the fulfillment of educational plans?" Is fulfillment simply a question of economics? Are there other factors which influence a

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[2] Charles B. Nam and James D. Cowhig, "Factors Related to College Attendance of Farm and Non-Farm High School Graduates", U.S. Bureau of Census Series ERS (P-27), No. 32, 1962.

student to pursue post high school training?

If more could be learned about the influences associated with educational plans more reliable predictions could be made about the number of students who will enroll in post high school educational institutions. And finally, with a broader understanding of the factors which lie behind the realization of educational plans, it should be possible to make specific recommendations which may lead to a greater utilization of our human resources.

Background to the Study

In the spring of 1964 a research project was carried out in which 1844 Grade 11 and 12 students in three areas of Manitoba completed questionnaires dealing with, among other items, the level of their educational aspirations and plans.[3] This study revealed that those students who exhibited high (i.e., university) educational aspirations were not randomly distributed throughout the investigated population. Rather, the study indicated that students with certain social characteristics were more likely to display higher educational aspirations than were other students. Among the findings were that:

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[3]For the first of a series of reports based on this study see Leonard B. Siemens, The Influence of Selected Family Factors on the Educational and Occupational Aspiration Levels of High School Boys and Girls, The Faculty of Agriculture and Home Economics, The University of Manitoba, Number One, 1965.

(a) Boys of British, German, and Icelandic ethnic backgrounds tended to display higher educational aspirations than those students of other ethnic affiliations; no significant relation was found in the case of girls.

(b) Boys of Anglican, Lutheran, and United Church backgrounds tended to display high educational aspirations; United Church background was associated with high levels of aspirations among the girls.

(c) A high socio-economic position of the family was associated with high educational aspirations for both boys and girls.

(d) The higher the educational achievement of a student's parents the higher the student's educational aspirations.

(e) Strong educational encouragement by the parents was related to high levels of aspiration for both boys and girls.

(f) Generally, the larger the community of residence, the higher a student's educational aspirations will be. While 51.4 per cent of the farm boys aspired to the university, 71.3 per cent of the boys from areas of over 2,500 had such aspirations. A similar relationship was found in the case of girls where the figures were 26.8 and 53.8 per cent respectively.

From the above, and from the literature cited earlier, one sees that a moderate amount is known about the factors associated with educational aspirations. The next step must surely be to find out what relationship, if any, exists between educational aspirations and their fulfillment. By means of a follow-up survey on the Grade 12 students in the 1964 sample, we hope to shed light on this relationship for the Manitoba youth studied.

Methodology

The students selected for study were from three regions in Manitoba. These three were selected according to socio-economic considerations. The first of them, the Interlake, is situated between lakes Manitoba and Winnipeg. (See Map, p. 7). Because of its generally depressed economic condition, it has been the focus of various A.R.D.A.[4] research projects. The second area, the Central Plains, lies to the west of Winnipeg and generally ranks above the rural Manitoba average when socio-economic criteria are applied. While the Interlake was a fishing and marginal farming area, the Central Plains might best be described as a reasonably prosperous farming district. Indicative of the variations between the two areas is the fact that while some 34.7 per cent of the families in the Interlake had incomes under $2,000 in 1961, oniy 25.8 per cent of the families in the Central Plains area fell into the same category.[5]

The Grade 12 students from 14 high schools in the Interlake[6] and 12 from the Central Plains[7] were studied in the follow-up survey. The third

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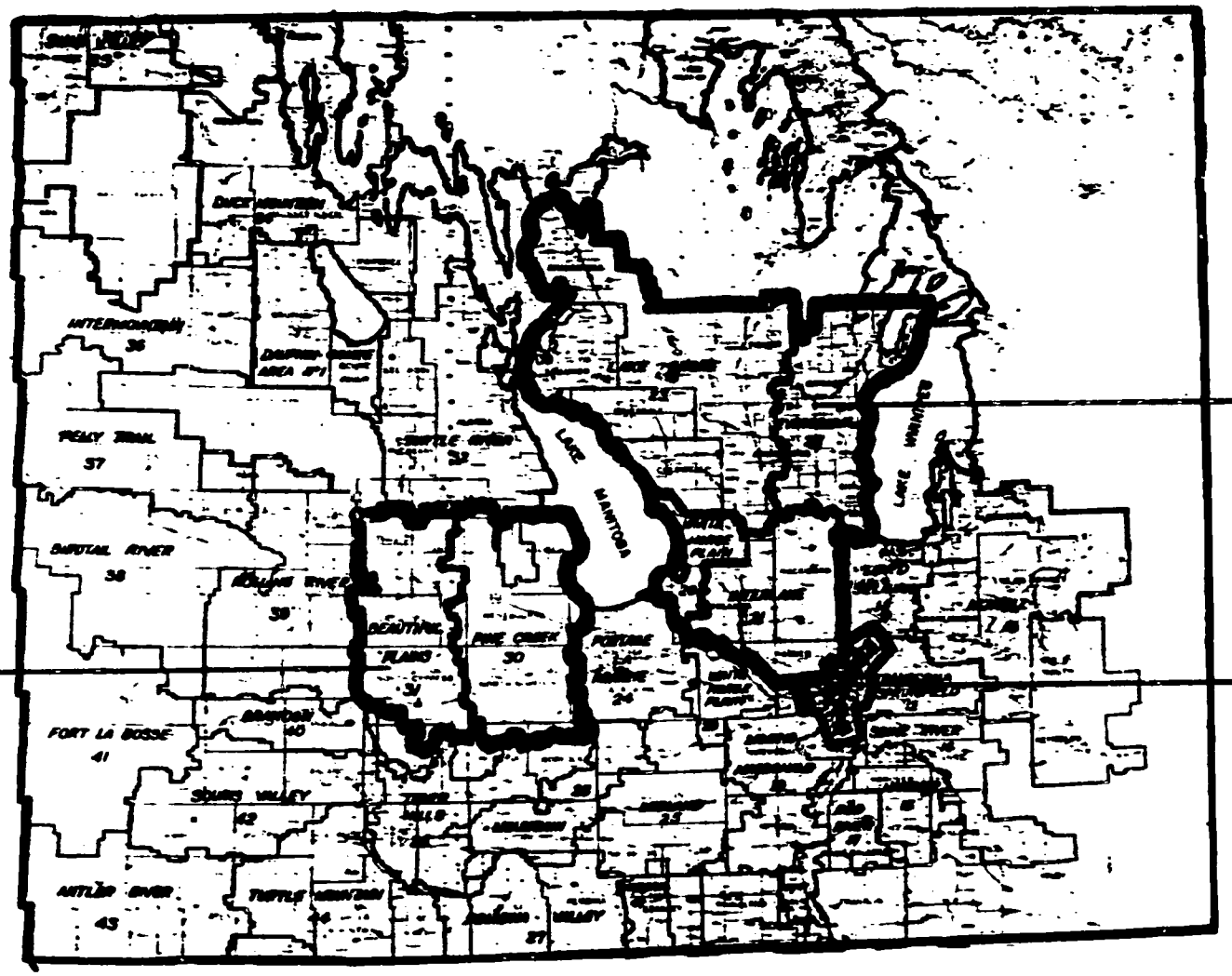
[4]The Federal Agricultural Rehabilitation and Development Act (A.R.D.A.) provides for joint Federal-Provincial participation in promoting economic and social development in designated rural areas of Canada.

[5]See Lowry Nelson, Area Development in the Interlake: Problems and Proposals, Winnipeg, Queen's Printer for Manitoba, 1964, p. 20.

[6]These schools were located at Arborg, Ashern, Eriksdale, Fisher Branch, Gimli, Inwood, Lundar, Moosehorn, Poplarfield, Riverton, St. Laurent, Stonewall, Teulon, and Warren.

[7]These schools were located at Arden, Austin, Brookdale, Carberry, Eden, Edrans, Gladstone, Langruth, MacGregor, Neepawa, Plumas, and Westbourne.



Southern Portion of Manitoba Outlining (Heavy Lines) the Three Survey Areas

group of students studied were drawn from two suburban Winnipeg schools.[8]

The cohort (youth studied) includes those Grade 12 students who, in the spring of 1964, indicated plans for some post high school training.[9] Although information was gathered on both 'plans' and 'aspirations'[10] of the high school students, this study focuses on the educational plans of students and the sociological factors relating to the realization of these plans the following year.

In the spring of 1965 the writers revisited each of the twenty-eight schools in the three sample areas and inquired of the principal or of a teacher the current activity of the 541 Grade 12 students who had planned on some post high school education.

The students were then classified according to fulfillment or non-fulfillment of their post high school plans. The criteria used to determine whether or not a student's plans had been fulfilled were based on the following considerations: first we conceived a three-level hierarchy of post high school courses: the highest level was university, the intermediate level was teachers' training or nursing, which was followed by the various

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[8]These schools were the Vincent Massey Collegiate in Fort Garry and the River East Collegiate in North Kildonan.

[9]See Leonard B. Siemens, op. cit., pp. 45-56, for a detailed discussion of the methodology used in the original study.

[10] The distinction between educational 'plans' and educational 'aspirations' is between what the student said he would do if he were free to choose (aspiration) and what he said he was going to do (plan). See Leonard B. Siemens, op. cit., pp. 46-47, for details on this distinction.

technical-vocational courses. Those students who did what they planned on doing or, alternatively, moved up in the hierarchy were considered to have fulfilled their plans. On the other hand, if they did not take any post high school course, or if they took one at a 'lower' level than that on which they had planned, they were considered to have not fulfilled their plans. Thus, if an individual planned on taking teachers' training but instead took a welding course this would constitute non-fulfillment of plans. However, if this same individual enrolled in a university or teachers' training course, he would be considered to have fulfilled his plans.

It should be noted as well that enrollment in a course (at the appropriate level) was considered the criterion of fulfillment. Hence if a student enrolled in the university and later withdrew he would, for the purposes of this study, be considered to have fulfilled his plans. Needless to say, our research would be far more meaningful if it were possible to extend the study over a longer period of time in order to distinguish between those who completely fulfill their plans as against those who do not.

The relationships between plan fulfillment and seven variables were tested in this study. These included: socio-economic status, average high school marks, I.Q., area of residence, size of community, religion, and ethnic origin.

The socio-economic status (S.E.S.) scale employed in this study was a modification of William H. Sewell's "Farm Family Socio-economic

Status Scale."[11] On the basis of a modification of Sewell's S.E.S. scale it was possible to group the students into three categories according to their levels of living: High, Medium, or Low S.E.S. groups.[12]

Students' average high school marks were computed from Department of Education records. For the Grade 12 students, compulsory course marks from Grades 9, 10, and 11 were considered. All final marks, including failures and supplementals were included.

As with marks, the students' I.Q.'s were taken from Department of Education records. These I.Q.'s, which are taken by students in Grade 9, are based on the "Quick-scoring Group Test of Learning Capacity, Advanced - Grade 10 to Adult."

The area of residence factor refers to which of the three regions the students resided: the Interlake, the Central Plains, or Suburban. In interpreting variations related to this factor one must exercise caution since any variations may only reflect differences in the ethnic, religious, or various school and home factors which might be of crucial importance. Similarly with size of community. Here we have no way of telling whether it is, in fact the size of community which is important, or whether some other factor is important.

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[11] William H. Sewell, "A Short Form of the Farm Family Socio-Economic Status Scale," Rural Sociology, Vol. 8, 1943, pp. 161-170.

[12] For a detailed explanation of the scale employed in this study see Leonard B. Siemens, op. cit., pp. 49-52.

The ethnic and religious affiliation of students was based upon the students' responses to the questionnaire administered in 1964.

From the above note on the variables treated in this report the reader will recognize that the variables could not be held constant. The findings of the study, therefore, must be regarded as tentative. Larger sample sizes would have been required if more rigorous analysis of the data were to be performed. Even with the few variables treated in the study, occasionally the number in a few of the categories became too small for safe statistical inferences to be made. The reader, then, ought to retain at least a moderately cautious attitude throughout his reading of this report.

For the relationship between each of the variables treated a test of significance was applied (the Chi-square Test). In each case, the test was applied (1) to those students who had planned on taking university courses, then (2) to those who had planned on various non-university courses, and finally (3) it was applied to these two groups combined. The dependent variable in all cases was whether the student had or had not fulfilled his plans. In addition, observed variations were sometimes the basis on which inferences were drawn from the data.

CHAPTER II

RESULTS OF THE STUDY

Of 640 Grade 12 students studied, 541 (84 per cent) indicated plans for some post high school training. Judging from the number of students who planned to continue their education, there is little doubt that the Grade 12 students studied appreciate the importance of further education. Information on what 539 (99.6 per cent) of these students in fact did was obtained.

Table I indicates the distribution of students grouped according to their plans for the future and by the geographical location in which they lived. In the Interlake region, an economically depressed farming-fishing area between Lake Manitoba and Lake Winnipeg, 84 per cent of the Grade 12 students indicated that they planned on taking some training beyond the high school level. In the Central Plains area, a reasonably prosperous farming district to the west of Winnipeg, 81 per cent of the students planned on some form of post high school training. And finally in the two, large suburban schools in metropolitan Winnipeg, 87 per cent of the Grade 12 students planned to continue their education beyond high school. While the variations between the areas were not great, it should be noted that the type of plan varied considerably between the three areas. For

TABLE I

FUTURE PLANS (1964) OF GRADE 12 STUDENTS IN THE THREE AREAS STUDIED

PLAN	INTERLAKE		CENTRAL PLAINS		SUBURBAN		TOTAL	
	No.	%	No.	%	No.	%	No.	%
University	92	34.8	59	36.9	119	55.1	270	42.2
Teachers' Training or Nursing	62	23.5	39	24.4	23	10.6	124	19.4
Business or Technical-Vocational	69	26.1	31	19.4	45	20.8	145	22.7
Finish High School	21	8.0	22	13.7	13	6.0	56	8.7
No Further Education	-	-	-	-	5	2.3	5	0.8
Other	17	6.4	3	1.9	4	1.9	24	3.7
N/A	3	1.1	6	3.7	7	3.2	16	2.5
TOTAL	264	99.9	160	100.0	216	99.9	640	100.0

example, in the two rural regions combined, 36 per cent of the students planned on attending university while in the suburban schools 55 per cent had such intentions. There was a greater tendency for the rural students to think in terms of post high school training in non-university fields.

Another point ought to be made concerning the variations between the three areas. It would seem that there may well be some 'selective' process occurring whereby a smaller proportion of the Interlake students get to Grade 12. Indications from the research conducted in 1964 were that the drop-out rate between grades 9 and 12 in the Interlake was about 26 per cent; the rate for the Central Plains was about 23 per cent; and in the Suburban cohort the rate was about 17 per cent.[13] Do these figures indicate that there is a filtering process whereby only the best rural students remain in school, while in the city less able students are more likely to remain in school? Do they mean, alternatively, that students in the rural schools are less capable students and therefore drop out? Another possibility would be that the rural students are not as motivated as are their urban counterparts. Perhaps all three explanations, as well as others, are partially tenable.

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[13] See "Manitoba's High School Students and Drop-outs - Their Occupational and Educational Aspirations," (tentative title) to be published by the Manitoba Department of Agriculture and Conservation.

Having seen that the proportion of Grade 12 students planning on taking some post high school training is high (84 per cent), what is the relationship between these plans and their subsequent fulfillment?

Our findings revealed that 54 per cent of the students sampled who planned on some post high school course actually enrolled in one.[14] (See Figure 1). A surprisingly high proportion (19 per cent) of the students were repeating all or part of Grade 12. Also to be noted from Figure 1 is that 24 per cent of those who planned on taking courses beyond high school had joined the labour force without achieving their educational plans. Of the boys in Grade 12 in 1964, 38 per cent took training beyond high school and 55 per cent of the girls enrolled in some post high school course. When considering only university enrollment we found that 25 per cent of the students registered for a university course. This figure was made up of 28 per cent of the boys and 20 per cent of the girls. When considering only those who planned on attending university, we find that 53 per cent of them fulfilled their plans. In the previously cited American Study, it was noted that 72 per cent of the boys and 65 per cent of the girls who planned on college attendance actually enrolled.[15]

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[14]According to the fulfillment/non-fulfillment criterion discussed earlier, 48 per cent of the sample fulfilled their educational plans. The figure of 54 per cent refers to those who enrolled in some post high school training but some of these, as the discrepancy between the two figures indicates, enrolled in courses which were not considered to constitute the fulfillment of educational plans.

[15]See p. 3 (g) of the present report.

A. Per Cent Who Planned on (1964):

University (50.1%)	Teachers' Training or Nursing (23.0%)	Business or Technical-Vocational (26.9%)

B. Per Cent Engaged in (1965):

University (28.9%)	Teachers' Training or Nursing (14.5%)	Business or Technical-Vocational (10.4%)	Repeating Grade 12 or Portion of it (19.3%)	Employed (24.7%)	Other (2.2%)

Figure 1

The Relation Between The Post High School Training Plans (1964) of 539 Selected High School Students and What These Students Did (1965)

One point which must be kept in mind is that it is quite likely that a few of those repeating Grade 12 this year will go on to some post high school training at a later date, just as will some of those who are presently employed.

Plan Fulfillment and Sex

When we examine plans and plan fulfillment as related to sex we find that 86 per cent of the girls planned on some post high school training and, of those who had such plans, 56 per cent realized them. Eighty-three per cent of the boys planned on post high school training and of these 41 per cent fulfilled their goal. This difference may be misleading, however, since a higher proportion of the boys were repeating Grade 12 (22 per cent) than was the case for the girls (16 per cent). Possibly a higher proportion of the boys will fulfill their plans at a later date.

Plan Fulfillment and Level of Plan

The level to which a student planned was also related to plan fulfillment. Of those who planned on going to the university, 62 per cent actually ended up enrolling in some post high school course. Of those who planned on teachers' training or nursing, 58 per cent actually enrolled in some post high school course. However, only 35 per cent of those who planned on a business or technical-vocational course enrolled

in a course beyond the high school level. The generalization to emerge from this finding is that the higher the level to which an individual plans, the greater the likelihood that he will take some training beyond high school, even though it may not be of the specific type on which he had planned.

Plan Fulfillment and Socio-Economic Status (S.E.S.)

Of the Grade 12 students in the cohort, 28 per cent fell into the High S.E.S. group, 43 per cent into the Medium one, and 29 per cent into the Low S.E.S. category.

The present study would seem to indicate that while S.E.S. is crucial in influencing educational plans,[16] no significant relationship between S.E.S. and the fulfillment of educational plans appeared.[17]

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[16] Leonard B. Siemens, op. cit., pp. 61-62. Among the Grade 12 students who responded to the questionnaire in 1964, 88 per cent of the High S.E.S. students indicated plans for post high school training; for the Medium and Low S.E.S. groups the percentages were 84 and 81 respectively.

[17] We have selected the Chi-square .05 level as the minimum one suggesting that a significant relation exists between two variables. In the case above, of the relationship between plan fulfillment and S.E.S., we have said that the relationship between the two is not significant because more than 5 per cent of the time the relationship found could be the product of chance.

The fact that no significant relationship[18] was found between S.E.S. and plan fulfillment does not indicate, however, that there is no relationship between taking post high school training and S.E.S. In fact, S.E.S. greatly influences the kind of post high school plans a student held. For example, while 61 per cent of the High S.E.S. students planned on attending university, 54 per cent of the Medium and 33 per cent of the Low S.E.S. students had such plans. What is suggested, then, is that although Low S.E.S. students were not as likely to plan on going beyond high school in their education (particularly university training), if they did have such plans they would appear to be almost as likely to fulfill them as students from higher S.E.S. backgrounds. In effect, S.E.S. was found to be related to the kind of plans a student held but not to the fulfillment of these plans. (See Figure 2.)

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[18] When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and S.E.S. was not significant ($X^2 = 3.80$, D/F = 2).

(b) The relation between fulfillment/non-fulfillment of non-university plans and S.E.S. was not significant - ($X^2 = 4.63$, D/F = 2).

(c) The relation between fulfillment/non-fulfillment of university and non-university plans and S.E.S. was not significant - ($X^2 = 5.90$, D/F = 2).

The mean fulfillment for Low S.E.S. students was 40.9 per cent; for Medium S.E.S. students it was 48.7 per cent; and for High S.E.S. students it was 54.2 per cent. Of the Grade 12 students in the original cohort 81.5 per cent of the Low S.E.S. students planned on taking some post high school training as did 84.1 per cent of the Medium S.E.S. students, and 87.9 per cent of the High S.E.S. students.

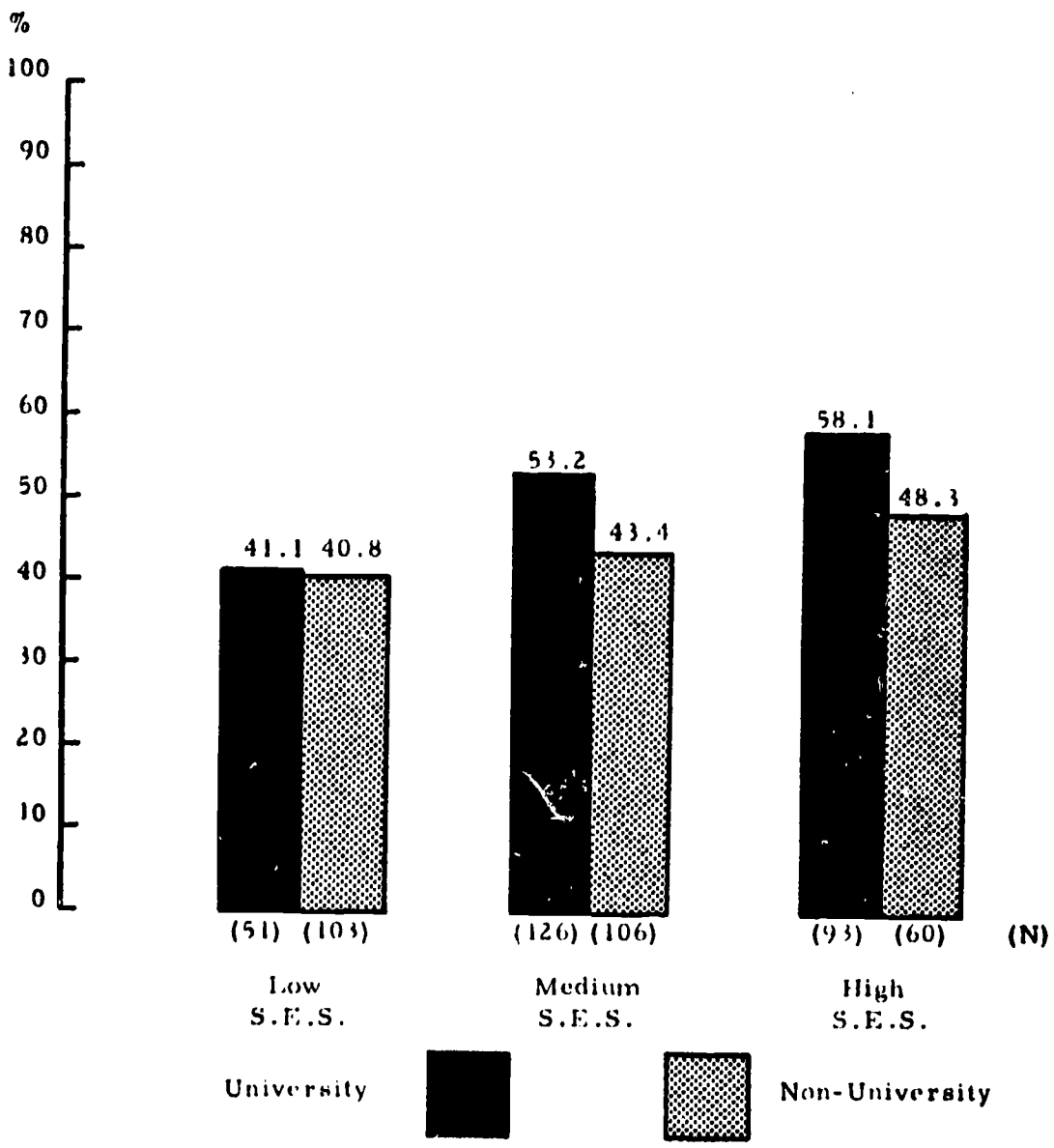

Figure 2

Per Cent Who Fulfilled University and Non-University Plans, By Socio-Economic Status

At the risk of over-simplification, it might be suggested that the reason why we find no significant relation between S.E.S. and plan fulfillment is that the student with a Low S.E.S. background is not as likely as the High S.E.S. student to plan on taking post high school training. The Low S.E.S. student may not receive the encouragements of his parents. He may lack motivation, in short. Generally, he does not aspire beyond his economic or academic capabilities. If he does not fulfill his educational plan it is probably because of economic considerations. If the High S.E.S. student does not fulfill his plans it may well be because he is planning, or being pushed, beyond his capabilities, not because of economic considerations.

Plan Fulfillment and Average High School Marks

Capability and performance of students were measured in this study by their average high school marks and their I.Q.'s.

Of the variables considered in this report, average high school marks, not surprisingly, showed the most consistent relation with post high school plan fulfillment. (See Figure 3.) While 18 per cent of those students with average marks under 50 per cent realized their educational plans, 32 per cent with marks in the "C" range,[19] 64 per cent in the "B" range,[20] and 84 per cent of the students with average

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[19] The "C" range would include marks between 50 and 66%.

[20] The "B" range would include marks between 67 and 79%.

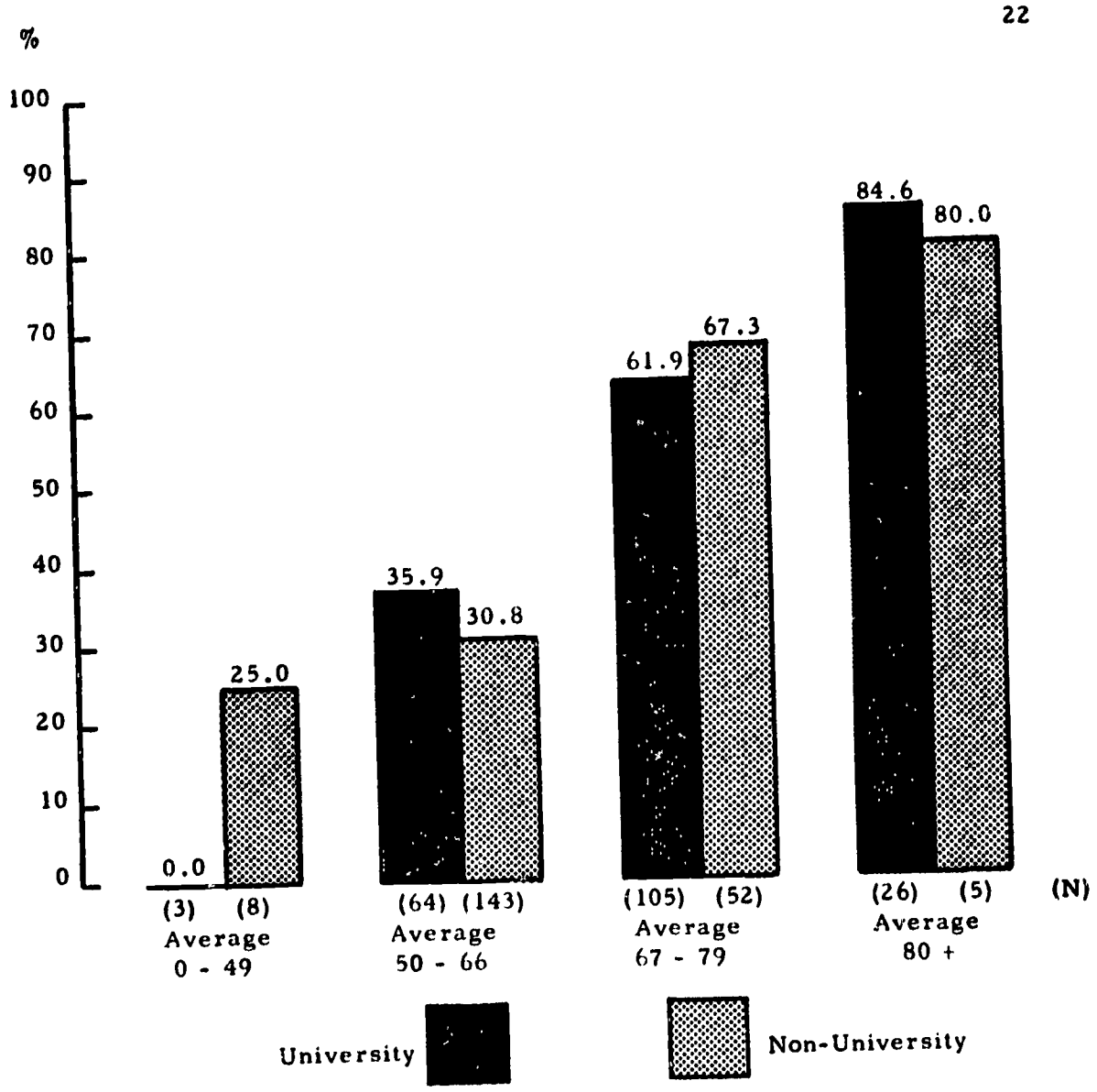

Figure 3

Per Cent Who Fulfilled University and Non-University Plans, by Average High School Marks

marks over 80% fulfilled their educational plans.

This close relation between high school marks and plan fulfillment held for both those who planned on university and non-university courses. In all cases, the higher the average marks, the greater the likelihood that a student would fulfill his educational plans.[21] The range for those who planned on university courses was from none (only 3 cases however) for those with average marks under 50% to 85 per cent for those with "A" averages. For the non-university planners the range was from 25 per cent to 80 per cent.

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[21] When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and average high school marks was significant at the .001 level (X^2 = 26.71, D/F = 3).

(b) The relation between fulfillment/non-fulfillment of non-university plans and average high school marks was significant at the .001 level (X^2 = 27.23, D/F = 3).

(c) The relation between fulfillment/non-fulfillment of university and non-university plans and average high school marks was significant at the .001 level (X^2 = 55.65, D/F = 3).

The mean fulfillment for students with average marks under 50 was 18.2 per cent; for students with average marks 50 to 66 the mean fulfillment was 32.4 per cent; for students with average marks 67 to 79 the mean fulfillment was 63.7 per cent; and for those with average marks of 80 or over the mean fulfillment was 83.9 per cent. Of the Grade 12 students in the original cohort 68.7 per cent of those with average marks under 50 planned on taking some post high school training, as did 80.5 per cent of those in the 50 to 66 range, 90.2 per cent in the 67 to 79 range, and 96.9 per cent of these students with average marks of over 80. The analysis did not include a consideration of 133 students for whom no information on average high school marks was available.

Plan Fulfillment and I.Q.

Having noted that average marks and plan fulfillment are closely related, it is no surprise that I.Q. and plan fulfillment are also related. However, with I.Q. the level of significance between plan fulfillment and I.Q. drops to the .05 level for the non-university planners.[22]

Figure 4 indicates that the higher the I.Q., the greater the probability that educational plans will be fulfilled. Thus we see that 30 per cent of those with I.Q.'s below 90 fulfilled their plans, 41 per cent of those in the 90 to 110 range fulfilled theirs, 45 per cent in the 111 to 120 range fulfilled theirs, and 67 per cent of those with

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[22] When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and I.Q. was significant at the .01 level (X^2 = 13.71, D/F = 3).

(b) The relation between fulfillment/non-fulfillment of non-university plans and I.Q. was significant at the .05 level (X^2 = 6.39, D/F = 3).

(c) The relation between fulfillment/non-fulfillment of university and non-university plans and I.Q. was significant at the .001 level (X^2 = 20.47, D/F = 3).

The mean fulfillment of post high school plans for students in the various I.Q. categories were: I.Q.'s below 90 = 30.4 per cent; I.Q.'s 90 to 110 = 40.9 per cent; I.Q.'s 111 to 120 = 45.4 per cent; I.Q.'s over 120 = 67.3 per cent. The proportion of the Grade 12 students in the original cohort who had plans for post high school training according to I.Q. categories were: I.Q.'s below 90 = 82.1 per cent; I.Q.'s 90 to 110 = 82.6 per cent; I.Q.'s 111 to 120 = 82.2 per cent; I.Q.'s over 120 = 93.7 per cent. The analysis did not include a consideration of 139 students for whom no information on I.Q. was available.

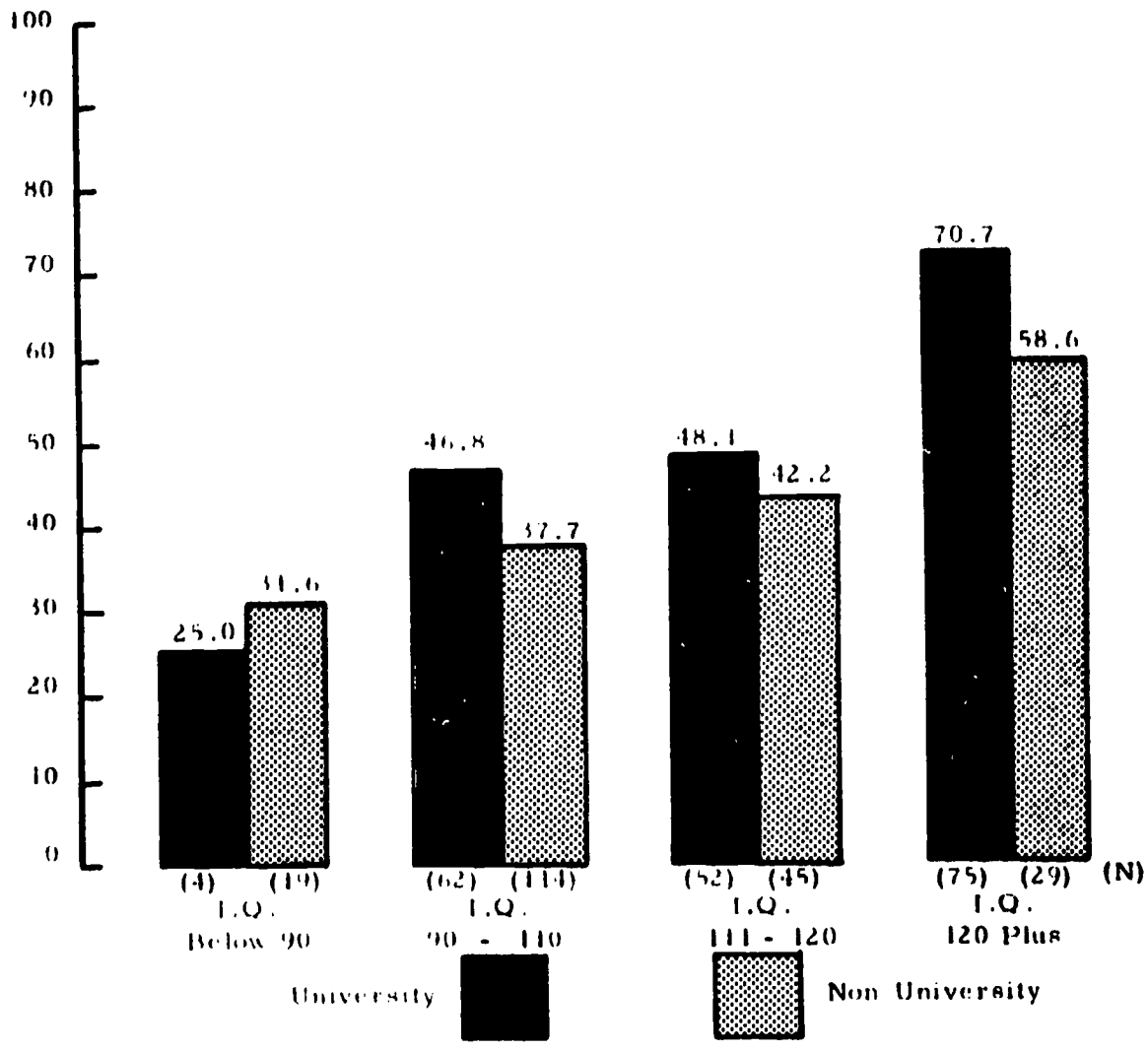

Figure 4

Per Cent Who Fulfilled University and Non-University Plans, By I.Q.

I.Q.'s of over 120 fulfilled their educational plans. Among the university planners, there was one exception to the generalization that the higher the I.Q. the greater the probability that educational plans will be realized. This exception comes with those students with I.Q.'s over 140. Among t[illegible]s group (seven cases only) only 57 per cent fulfilled their plans, while for those between 130 and 140, 83 per cent fulfilled their educational plans.

While the relation between university plans and plan fulfillment and I.Q. was significant at the .01 level, the relation between I.Q. and non-university plan fulfillment was significant at the .05 level. Here the range in fulfillment varied from 32 per cent for those who scored under 90 in the I.Q. test, to 59 per cent for those with I.Q.'s over 120.

One of the interesting findings with regard to I.Q. and plans for post high school training was that in all the I.Q. ranges below 110, the studenta in the original Grade 12 cohort planned for training in the same proportions in the various I.Q. categories (between 82 and 83 per cent). The proportion planning on post high school training jumps only with those students with I.Q.'s over 120 where 94 per cent plan on taking some course beyond the high school level. This finding would indicate that those with I.Q.'s of under 90 were perhaps unrealistic in planning their educational future.

Plan Fulfillment and Area of Residence

When we examine plan fulfillment as related to the three regions in the cohort, we find that there are significant variations between them. The lowest rate of fulfillment occurred in the Interlake with a figure of 40 per cent; 50 per cent of those from the Central Plains realized their educational plans; and in the Suburban schools 56 per cent of the students enrolled in courses indicating that their plans had been fulfilled. (See Figure 5).

Although the three areas were originally selected because of their socio-economic differences, it would seem that since S.E.S. is not significantly related to plan fulfillment, that these three areas might best be considered 'culture areas. That is, the reason we find significant differences in plan fulfillment in these areas may not be for economic reasons alone but may also be related to the differential value ascribed to education in the three areas. However, further research would be required to establish the tenability of this proposition. Another interesting point is that the proportion of students planning post high school training in the three regions was not markedly different: 84 per cent in the Interlake had such plans, while 81 and 87 per cent respectively had such plans in the Central Plains and Suburban schools.

In the Interlake there was no difference in fulfillment rates between those who planned on university and non-university courses:

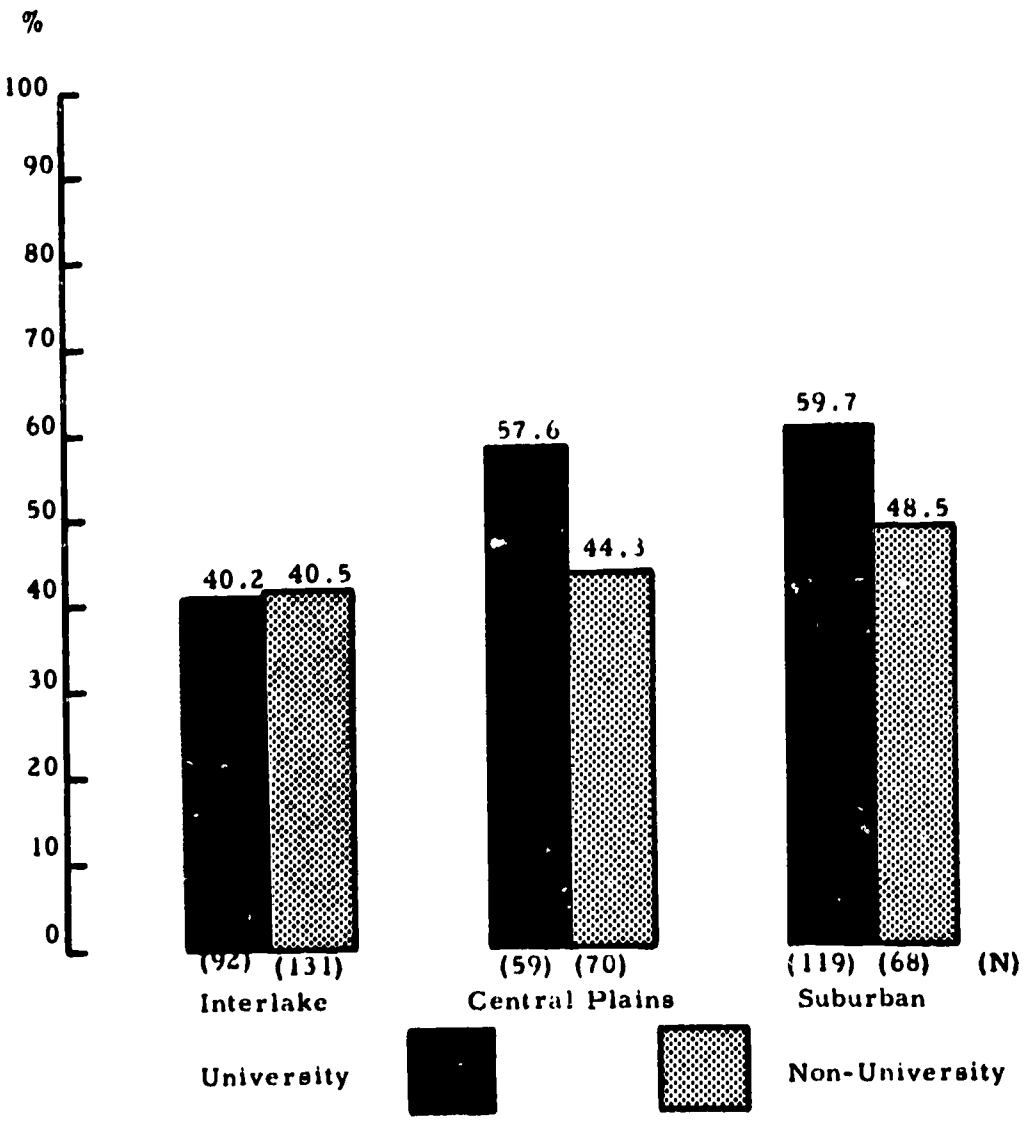

Figure 5

Per Cent Who Fulfilled University
and Non-University Plans, by Area of Residence

just over 40 per cent in both categories fulfilled their plans. In the other two areas, however, we find that the university planners were more likely to fulfill their plans than were the non-university ones.

The range for university plan fulfillment varied from 40 per cent in the Interlake to 60 per cent in the Suburban area. (This relationship was found to be significant at the .02 level).[23] The relationship between non-university plan fulfillment and area of residence was found to be not significant. The range here was from 40 per cent in the Interlake to 48 per cent in the Suburban schools.

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[23] When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and area of residence was significant at the .02 level ($X^2 = 8.63$, D/F = 2).
(b) The relation between fulfillment/non-fulfillment of non-university plans and area of residence was not significant ($X^2 = 1.21$, D/F = 2).
(c) The relation between fulfillment/non-fulfillment of university and non-university plans and area of residence was significant at the .01 level ($X^2 = 9.85$, D/F = 2).

The mean fulfillment of post high school plans for students living in the various areas were: Interlake = 40.4 per cent; Central Plains = 50.4 per cent; Suburban = 55.6 per cent. The proportion of Grade 12 students in the original cohort who had plans for post high school training according to the three areas were: Interlake = 84.5 per cent; Central Plains = 80.6 per cent; Suburban = 86.6 per cent.

Plan Fulfillment and Size of Community

The relation between post high school plan fulfillment and size of community was found to be a significant one.[24] The highest rate of fulfillment (56 per cent) came from those students who lived in suburban Winnipeg. This group was followed by the farm youth of whom some 45 per cent fulfilled their plans. The lowest rate of fulfillment came among the students from villages of under 500 (34 per cent fulfilled plans). The small town (500 to 2,500) students had a fulfillment rate of 41 per cent.

When those who planned on university are considered separately, there is no significant relation between plan fulfillment and community size. (Non-university plan fulfillment and community size was found to be significant at the .02 level). For the university planners, fulfillment

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[24] When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and size of community was not significant ($X^2 = 5.71$, $D/F = 3$).

(b) The relation between fulfillment/non-fulfillment of non-university plans and size of community was significant at the .02 level ($X^2 = 10.08$, $D/F = 3$).

(c) The relation between fulfillment/non-fulfillment of university and non-university plans and size of community was significant at the .02 level ($X^2 = 10.14$, $D/F = 3$).

The mean fulfillment of post high school plans for students from the various sizes of community were: open country and farm = 44.9 per cent; village under 500 = 33.9 per cent; town 500 to 2,500 = 41.1 per cent; town and city over 2,500 = 56.3 per cent. The proportion of Grade 12 students in the original cohort who had plans for post high school training according to the various sizes of community were: open country and farm = 84.0 per cent; village under 500 = 84.8 per cent; town 500 to 2,500 = 83.0 per cent; town and city over 2,500 = 84.9 per cent. The analysis did not include a consideration of one student from whom no information on size of community was available.

varied from 40 per cent in the towns between 500 and 2,500 to 60 per cent in the Suburban areas (2,500 plus). For the non-university planners fulfillment varied from 19 per cent in the villages under 500 to 59 per cent in the areas with a population of over 2,500. (See Figure 6).

How do we account for the variations found between community size and plan fulfillment? First, it might be noted that there are fairly marked variations between size of community and drop-out rates. While 22 per cent of the farm students drop out of school between Grades 9 and 12, 13 per cent of the students from villages under 500 drop out in these years, and only 9 per cent of the students from areas of over 2,500 withdraw from school between grades 9 and 12.[25] Could we account for the relatively high level of plan fulfillment among the farm students as the result of a selective process whereby only the best of the farm students get to Grade 12? Alternatively, does the high drop-out rate among farm youth indicate that they have less ability than their urban cousins? Can we explain both the high retention rates of the city and its high rates of plan fulfillment by saying that these students are better prepared academically, and motivationally, for continuing their education? Whatever the reasons for the disparities

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[25] See "Manitoba's High School Students and Drop-outs - Their Occupational and Educational Aspirations," (tentative title) to be published by the Manitoba Department of Agriculture and Conservation.

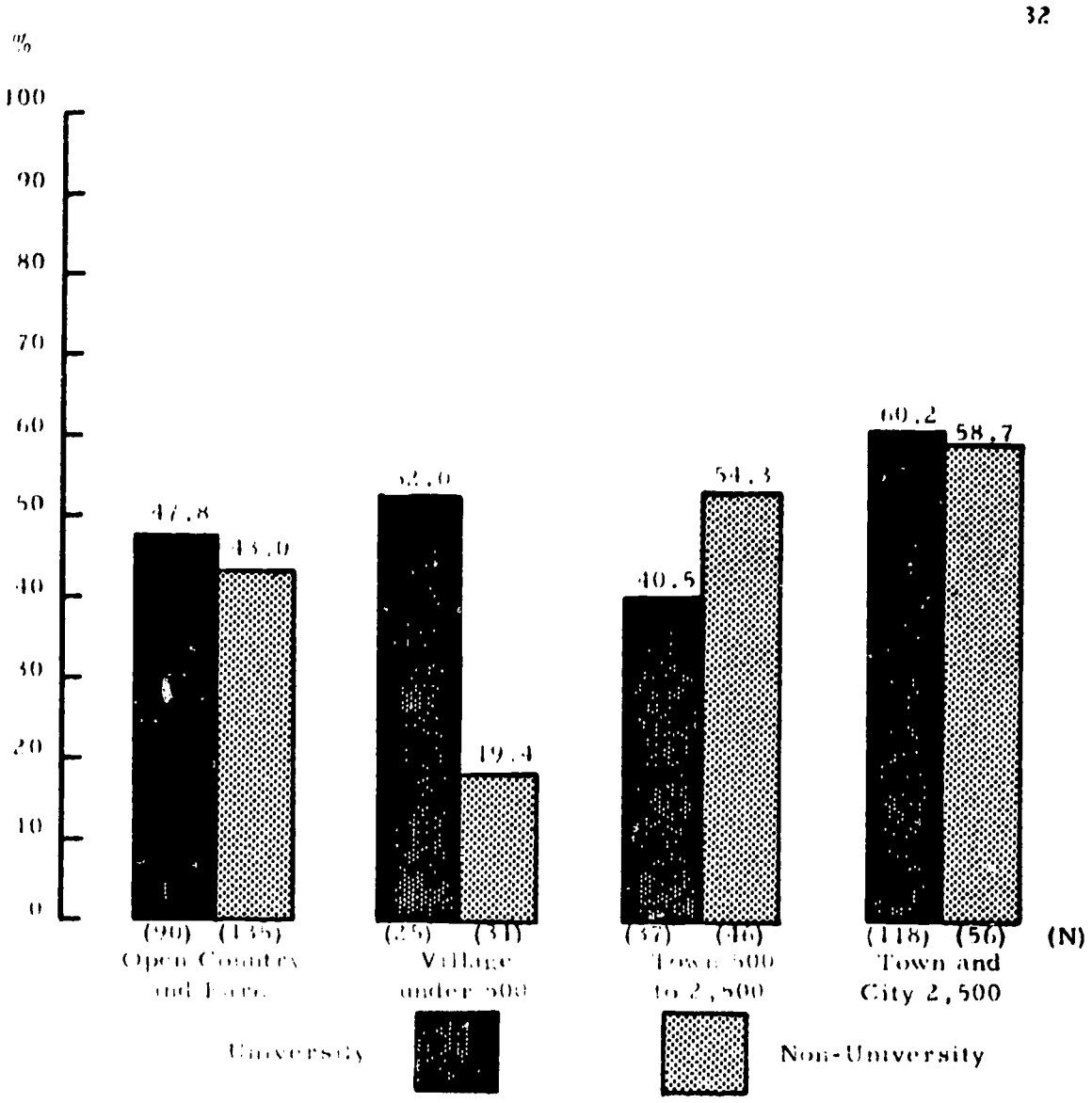

Figure 6

Per Cent Who Fulfilled University and Non-University Plans, by Size of Community

between the rural and the urban areas, it is clear that the urban student has a clear advantage over his rural counterpart.

Plan Fulfillment and Religion

The last two sections of this report deal with what might be termed cultural aspects, or correlates, of post high school plan fulfillment. These are religion and ethnic origin.

Of these two, religion was related to plan fulfillment at the .001 level.[26] While 53 per cent of the Protestants fulfilled their educational plans, only 29 per cent of the Roman and Ukrainian

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[26]When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and religion was significant at the .001 level ($X^2 = 14.41$, D/F = 1).

(b) The relation between fulfillment/non-fulfillment of non-university plans and religion was significant at the .05 level ($X^2 = 4.03$, D/F = 1).

(c) The relation between fulfillment/non-fulfillment of university and non-university plans and religion was significant at the .001 level ($X^2 = 17.38$, D/F = 1).

The mean fulfillment of post high school plans for students from the two religious groups were: Protestant = 52.7 per cent; Ukrainian and Roman Catholic 29.4 per cent. The proportion of Grade 12 students in the original cohort who had plans for post high school training according to the two religious categories were: Protestant = 83.9 per cent; Ukrainian and Roman Catholic = 87.2 per cent. The analysis did not include a consideration of the following: 16 Greek Orthodox, 6 Unitarians, 35 'others,' 8 'nones', and 2 who gave no answer to the question on religion.

Catholics fulfilled theirs.[27] (See Figure 7). While it would be convenient to explain the differences in fulfillment between these groups in terms of social class composition, such an explanation cannot be seriously posited because of the failure to find any significant relation between post high school plan fulfillment and S.E.S. Perhaps one line of reasoning to be followed in attempting to account for the variation between the two groups would be to suggest that among the Roman and Ukrainian Catholics less emphasis is placed on formal education and occupational success than is the case for the Protestants. Or possibly do Roman and Ukrainian Catholic parents perceive higher education as a threat to the religious life of their children and therefore discourage it? One further point might be added as well: to the reader it might seem that possibly the Roman and Ukrainian Catholics demonstrated higher rates of post high school planning (and possibly, therefore, unrealistic) than did the Protestant students. On checking this possibility, we found that while 87 per cent of the Grade 12 Roman and Ukrainian Catholic students had plans for some training beyond high school, 84 per cent of the Protestant students held such ambitions. It might be

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[27] Included among the Protestant students were 74 Anglicans, 62 Lutherans, 21 Mennonites, and 213 United Church affiliates; the Catholics included 37 Ukrainian Catholics and 65 Roman Catholics.

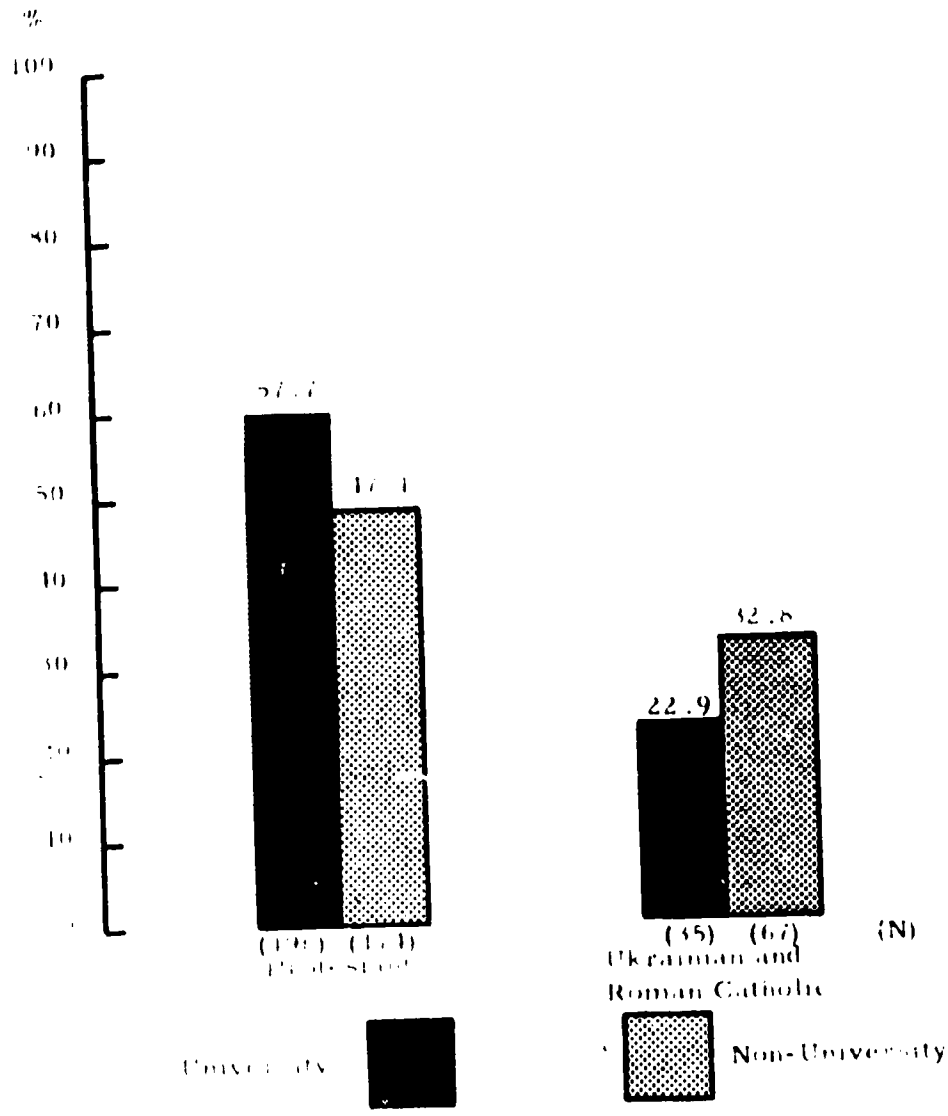

Figure 7

Per Cent Who Fulfilled University and
Non-University Plans, by Religion

said, then, that perhaps compared to Protestant students the Roman and Ukrainian Catholics were aspiring slightly above a realistic level. This difference might account for at least a small proportion of the non-fulfilling Catholics.

Examined in terms of fulfillment of university and non-university plans, we find that the greatest disparity between the Protestants and the Roman and Ukrainian Catholics came among those who planned on taking university courses: while 58 per cent of the Protestants fulfilled their plan to attend university only 23 per cent of the Catholics did likewise. Once again, does this gap suggest a suspicion, either in the church or in Catholic homes, of higher education? Among the non-university planners, the disparity was not so great. While 47 per cent of the Protestants enrolled in non-university courses which were considered to constitute the fulfillment of plans, 33 per cent of the Catholics enrolled in such courses.

Plan Fulfillment and Ethnic Origin

As with religion, analysis by ethnic origin indicated variations between groups in terms of plan fulfiliment. The highest rate of fulfillment was among the Icelanders of whom 58 per cent enrolled in courses indicating that fulfillment had occured. They were followed by the British (55 per cent), the Russian and Ukrainians (36 per cent), and finally by the Germans (34 per cent).

A Chi-square Test of significance, however, indicated that no significant relation between university plan fulfillment and ethnic origin existed. Here the rate varied from 58 per cent for the British to 33 per cent for the Germans.[28]

Non-university plan fulfillment was related to ethnic origin at the .05 level. Here the variation was from 67 per cent among the Icelandic students to 34 per cent for the Russian and Ukrainian students. (See Figure 8).

The variations in plan fulfillment perhaps are best explained in terms of the dominant value orientations of the various ethnic groups.

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[28] When the Chi-square Test of significance was applied to the distributions, the following results were obtained:

(a) The relation between fulfillment/non-fulfillment of university plans and ethnic origin was not significant ($X^2 = 6.30$, D/F = 3).

(b) The relation between fulfillment/non-fulfillment of non-university plans and ethnic origin was significant at the .05 level ($X^2 = 8.80$, D/F = 3).

(c) The relation between fulfillment/non-fulfillment of university and non-university plans and ethnic origin was significant at the .01 level ($X^2 = 13.97$, D/F = 3).

The mean fulfillment of post high school plans for students in the various ethnic categories were: German = 34.1 per cent; Russian and Ukrainian = 36.3 per cent; British = 54.9 per cent; Icelandic = 57.9 per cent. The proportion of Grade 12 students in the original cohort who had plans for post high school training according to ethnic categories were: German = 87.2 per cent; Russian and Ukrainian = 88.3 per cent; British = 81.7 per cent; Icelandic = 77.6 per cent. The analysis did not include a consideration of 120 'others' and 12 who did not respond to the question on ethnic affiliation.

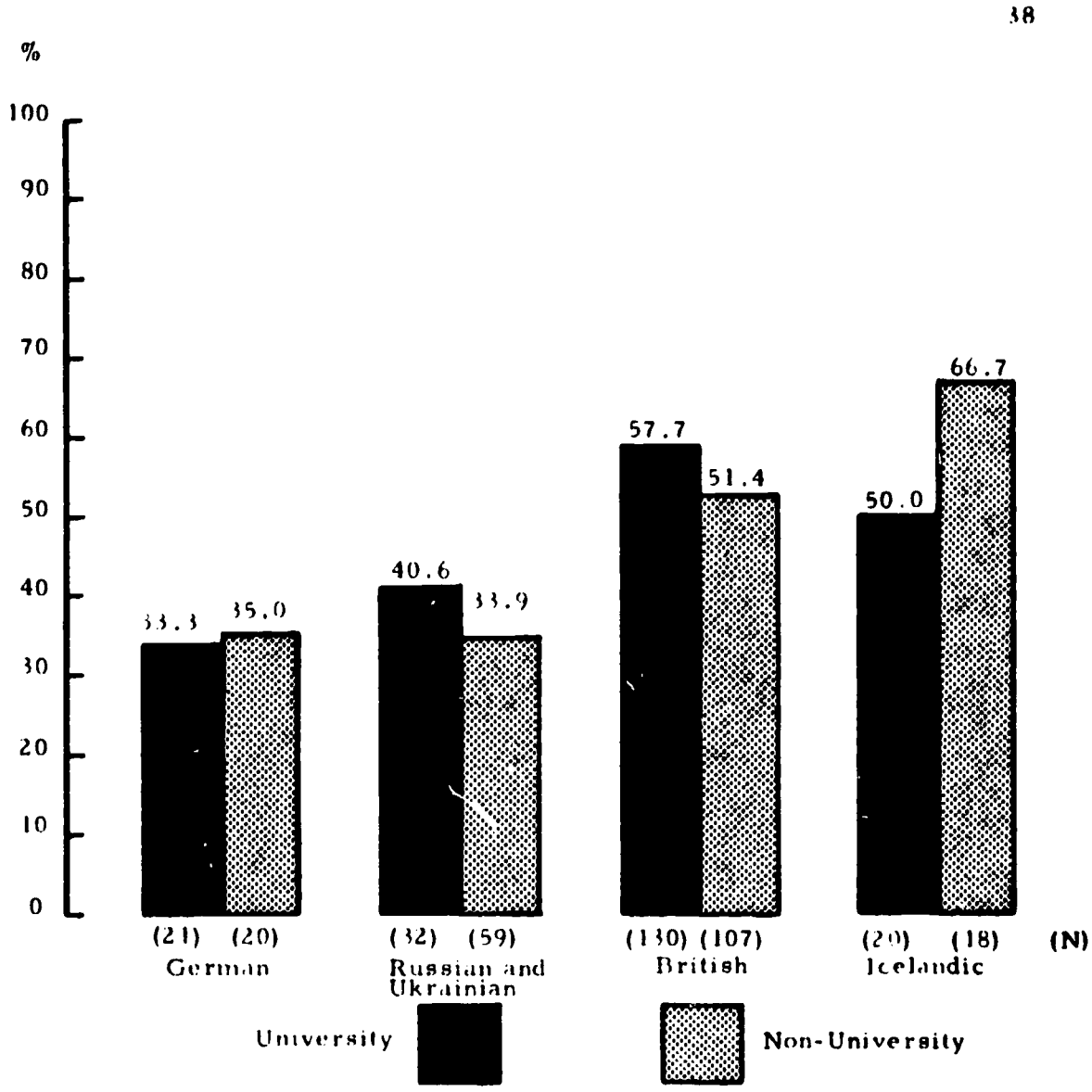

Figure 8

Per Cent Who Fulfilled University and Non-University Plans by Ethnic Origin

Some encourage education, others do not.[29]

But since the proportion of students who plan on post high school training does not vary strikingly between ethnic groups, religion, size of community, area of residence, or even socio-economic background, it would seem that we must look more intensively into the home situation of individual students to find out why we find these surprising variations between these various categories in the fulfillment of educational plans. Perhaps an analysis of the 'cultural milieu', would prove the most fruitful in explaining the considerable variations between the students of different social backgrounds in the realization of their educational goals.

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[29]See Merton W. Stancliff, A Comparative Study of the Value Orientations Among Three Ethnic Groups Living in the Province of Manitoba, University of Manitoba, An A.R.D.A. Basic Research Project, March, 1965, pp. 87 - 89; and Dennis P. Forcese, "Leadership in a Depressed Primary Industry: A Social Description of the Fishermen of Lake Winnipeg," Unpublished M.A. thesis, University of Manitoba, 1964, pp. 126 - 127.

CHAPTER III

SOME FINAL COMMENTS

Given a group of Grade 12 students, all of whom indicated plans for post high school training, how can we account for the remarkable variations in the realization of these plans? While one may easily understand why there was a direct relation between enrollment in post high school courses and such variables as average high school marks or I.Q., how would we account for some of the other variations which our research indicated? How is it, for example, that while 34 per cent of the students from villages of under 500 fulfilled their educational plans, 56 per cent of those from areas of over 2,500 fulfilled theirs? Or how does one account for the fact that 53 per cent of the Protestants and only 29 per cent of the Roman and Ukrainian Catholics realized their educational goals? Or why was it that an Icelandic student was more than twice as likely to fulfill his plans for a non-university course than was a Russian or Ukrainian student with similar plans?

Having seen that such variations do exist, and taking for granted that continued education is a positive good for both the student and for the nation, what can we do to increase the proportion of students pursuing post high school training? Perhaps the best place to start

in attempting to understand why variations between groups exist, and to recommend steps for their diminution, would be with an examination of why students did not fulfill their educational plans.

We cannot concern ourselves in this report with the 16 per cent of the Grade 12 students who did not plan on further education. We can only assume that they lacked the interest, motivation, or academic ability to pursue further studies. But what about the 84 per cent who planned on some post high school training? Why did only slightly over one-half of this group pursue training beyond high school? There would appear to be two major groups of students who failed to fulfill their educational plans. The first, which includes about four out of every ten students who did not realize their plans, were repeating some portion of Grade 12. And the second group, which accounted for just over one-half of those who failed to fulfill their plans, was composed of those who had accepted employment.

It is to be hoped that a good proportion of those students repeating Grade 12, and an equally good proportion of those who accepted employment, will continue their education at some later date. But what are the major reasons for students not fulfilling their educational plans? Why did some choose employment over formal training and why did so many fail to complete their Grade 12?

At the risk of grossly over-simplifying a complex problem, it might be suggested that there are four major factors which influence

whether or not a student will fulfill his educational plans. These factors might include: (1) the student's innate ability, (2) the financing of an extended period of training, (3) the motivation of the student, and (4) the social acceptance of such training on the part of the student's elders and peers. Let us examine each of these four factors noting how each relates to our data, and, in the light of our findings, what recommendations could be made to increase the proportion of high school students pursuing training beyond high school.

(1) The student's ability. It will be recalled that average high school marks and I.Q. were used to measure a student's ability in our research. Essentially we found that the higher the marks or I.Q., the greater the probability that plans for post high school training would be fulfilled. Our data indicated, too, that some student's held unrealistic plans in terms of their 'ability'. (For example, the students with average marks of less than 50% or I.Q.'s under 90 were perhaps unrealistic in their plans).

There is a need it would appear for more emphasis upon occupational counselling in our schools so that students without great academic ability can be encouraged to plan on technical, rather than academic, training. Similarly, students' parents ought to be informed as to the abilities of their children so that they can encourage them in the most appropriate directions. The expansion of counselling services might

also increase the proportion of high-ability rural students enrolling in university courses. As it is now, the rural students, if they plan on post high school training, tend to gravitate toward non-university courses where perhaps their full potential is not exploited. In addition, possibly greater emphasis ought to be placed upon alternative training courses in the high schools which would more closely parallel the abilities of students. In the present situation, the student shy on academic ability may become frustrated, lose interest in his courses, and either fail his year or withdraw from school entirely.

(2) The financing of training. Perhaps the single, most interesting finding of the research was that no significant relation was found between the socio-economic position of a student's family and the fulfillment of his educational plans. This finding suggests that possibly our efforts to encourage youth to continue their education through programs of financial assistance have been a necessary, though clearly not sufficient, approach to the problem of keeping youth in school. The recommendation which might be made is that while such programs of assistance ought to be continued, indeed increased, we must look to other areas as well if increases in the proportion of students fulfilling educational plans are to be achieved.

(3) The Problem of motivation. The Grade 12 students in our survey appeared to be highly motivated toward the acquisition of higher education. As was noted, some 84 per cent of the students in the total cohort were motivated to the point where they planned on taking some post high school training. Indeed it would seem that present programs stressing the importance of training has been successful in winning the support of students. However, this approach alone is not sufficient since although many students indicated plans for further education only about one-half of them realized these plans. Once again, while such programs ought to be continued, other areas must also be explored.

(4) Social acceptance of higher education. Judging from the striking variations in educational plan fulfillment according to area of residence, size of community, religion, and ethnic origin it would appear that possibly sufficient efforts have not been made in combatting the cultural barriers to higher education. While the range in the total cohort planning training beyond high school (excluding average marks and I.Q.) varied from 78 to 88 per cent, the proportion fulfilling such plans varied from 29 to 57 per cent. Thus while efforts to encourage youth to continue their formal training through the provision of courses appropriate to their abilities, through financial assistance, and through encouragements of teachers and counsellors, we need also to educate parents, teachers, clergymen, and other elders in the various

communities of the importance of formal training in our age of automation. With the direct support from home, school, and church, and the diminution of any of the suspicions of higher education from these sources, we might expect some increase in the proportion of students enrolling in post high school courses. Our data suggest that the cultural barriers to education are greater than either the financial or motivational ones.

Other steps which are currently being taken, such as the improvement of teacher qualifications in the rural areas, the introduction of less rigorous academic courses, and the provision of more technical training in our schools ought to be continued. But, in addition to these steps, some attack on the cultural problem of attitudes to higher education by parents and other community groups needs to be made if we want to fully exploit our most precious resource - the potential of our youth.