SOCIAL CORRELATES OF ACADEMIC SUCCESS IN A FIRST YEAR SOCIOLOGY COURSE

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CHAPTER I

INTRODUCTION

It no longer seems possible to agree with the statement Conrad[1] made in 1952 deploring the lack of research in the sociology of education. Over the past sixteen years the volume of research has increased enormously to the extent that in one particular area, that of the use of television and films in the educational institutions of the U.S.A., it was possible for Reid and MacLennan[2] to collect over 400 reported research projects conducted between 1950 and 1964. Gross[3] has suggested that the reason education was a neglected topic for study by sociologists was that it was too closely allied with the applied field and consequently was of lower status. It may well be that with the increasing emphasis placed on the desirability and necessity of education in recent years, there has been increasing motivation to study the educational institutions themselves. Despite this increase in research, however, there are still areas almost completely unstudied by sociologists, e.g. the roles of the participants in the institutions, and the whole field tends to be deficient in theoretical guidelines.

Regardless of the level or type of educational institution, however, one of the major issues is always with the success of the students concerned, and to this extent this thesis attempts to look

at some of the non-intellective factors which may determine the success of the students.[4] The major part of this thesis is concerned with the characteristics of students who are successful in a first year introductory sociology course (McMaster University, 1966-67). This includes not only personal characteristics, e.g. age and sex, but also the socio-economic factors of their families and the students' functioning in and attitudes towards the university, with particular emphasis on the actual teaching situations. For purposes of this thesis success is defined as the attainment of 66% or above in the final sociology examination. This percentage was chosen as the cutting point, as it is the minimum requirement for entering into the honours programme and is, therefore, an indication of a successful sociology student.

No attempt has been made to look at the relationship between I.Q. test scores and academic performance, partly because of the difficulty of obtaining this information for the students studied and partly because of the complex issues surrounding the definition of I.Q. Controversy still surrounds the issue and the three main arguments may be summarized as follows: firstly, that the intelligence test score is an index of inherited ability; secondly, the view that it is largely a product of cultural factors; and thirdly, that it is largely a product of the interaction between hereditary and environmental factors. It is this last view that now has the support of most social scientists.[5] However, in view of the very complex and ill-defined nature of this issue it was decided to omit this

particular variable and concentrate on non-intellective factors, particularly as intelligence test scores still only explain about 40% of the variation in academic performance of students.[6]

There has been increasing concern over the prediction of academic success in recent years, which has had important practical consequences, as well as importance as a theoretical issue for sociologists, psychologists and educationalists. Lavin suggests three reasons for this increasing concern: firstly, the recent expansion of the student population which outruns expansion of the facilities of the present educational system and thereby necessitates that the students who are admitted should perform better than the ones who are excluded; secondly, the desire to identify and train students with outstanding ability to form part of the natural resources of a country, particularly perhaps in the sciences; and finally, the increased interest of the social sciences in education itself, which Lavin maintains has become more noticeable in recent years.[7] Such concern with academic performance leads, however, to one very big obstacle, - the definition of success. What is regarded as successful action is culturally determined and as such it becomes necessary to know how the groups involved in the educational process, for instance to administration, faculty, students, the Board of Governors, define success. The definition of success assumes that the goals of the organization are clearly articulated and understood, especially by those involved. This in itself raises many problems as the purpose of higher

educational institutions seems particularly ill-defined.[8] While it is possible to agree that universities have changed and are changing,[9] it is not nearly so simple to decide from what and to what they are moving. It would undoubtedly still be possible to find people who would agree with T. H. Huxley's statement on the purpose of a university:

> "the primary business of the universities is with with pure knowledge and pure art- independent of all application to practice; with progress in culture, not with increasing wealth."[10]

But most people are only too well aware of the very close link between the educational system and the economy and the important role universities play in occupational recruitment and training. Halsey maintains, for instance, that

> "the mark of the educational institutions of a technological society is that they are in a special sense crucial to its maintenance and through the institutionalisation of technological research, to its further development."[11]

Despite the ill-defined nature of the purpose of universities it would appear that the most usual method of assessing a student's success is by looking at the grades achieved in the courses, although this measure may be very little related to those factors that will decide whether a person is a success in the wider society. Although the grade achieved by the students in the Introductory Sociology course for the 1966-67 session is taken as an indication of success, it is fully realized that this raises many problems.

It may be suggested that there are several reasons why grades are used as an index of success. The university administration itself accepts this as the criteria for matters such as issuing

scholarships, presumably because it is assumed to indicate scholarship and commitment to intellectual ideas, factors crucial in the university setting, and there also appears to be the implicit assumption that obtaining high grades at university will lead to success in occupations outside the university environs.

A major problem does arise from the assumption that grades can be compared. One of the obvious advantages of using grades as an indication of success lies in the fact that they are a measurable phenomenon but it is questionable whether one can convert the letter grades given as marks into a number scale as the difference between an A and a B may be very different from a C and a B, a factor which is not obvious say in the numbers of a grade point average.[12] In looking at success one must be concerned both with the ability of the student and the difficulty of the situation, as perceived not only in an objective manner[13] e.g. whether a test assumes a certain amount of knowledge, but also as subjectively experienced by the student himself. This latter aspect may involve such diverse factors as financial problems and the ability to buy the necessary textbooks to concerns of an overloaded timetable and the allotment of time to various tasks. It would appear, therefore, that the same grade received by different students is not necessarily a reflection of equal ability or success. It is this issue which is discussed in the problem of over achievement and under achievement, since a B grade for one student may indicate that he is performing above his predicted level, whereas for another

student it indicates that he is not attaining the level expected of him.[14] Such a concept assumes, however, that intelligence is clearly defined and measured accurately, and that university examinations measure the same phenomena. While this problem may apply to students taking the same programme and courses, problems of comparison are greatly increased when looking at diverse courses and students with different majors who come together for common courses. One is then faced with the problem of whether equal grades in different courses reflect equal success on the part of the student. Students themselves often refer to a certain course as 'mickey mouse', reflecting a commonly held view that it is very easy. It then becomes questionable as to how far one can compare the grades obtained in different courses.

Along with this problem the question is raised of how the course is organized in terms of the number of papers required, degree of emphasis placed on exams and other such questions, since it cannot be assumed that students will perform equally well in all aspects. A problem that might also occur with regard to taking the sociology grade as an index of success is that of different tutors assigning the grades. As there was little standardization in the marking scheme, it is possible that marks were assigned on the basis of different criteria by the tutors, although it probably can be assumed that there would be agreement on the basic important issues. This, however, is not such a serious problem when one looks at the research on student-teacher relationships. Even if all the grades had been

assigned by one person, bias on the part of the teacher would still be in evidence. Kelley[15] in looking at the discrepancy between grades assigned by the teacher and those achieved in a common examination suggests that behavioral characteristics of students interact with the teachers expectations and may result in grades being given by the teacher which are not always closely related to the achievement of the students as measured by objective tests.[16] While the presence of several people to assign marks may well lead to greater difficulties in comparing grades it is obvious that if marks were assigned by just one person this would only lessen the problem and not remove it.

Despite the problems of using grades as an indication of success it would appear that they are still a useful index. Although one is still not sure what in fact grades measure, in so far as they are taken by the administration, faculty, and students as a sign of success within the institutional setting, then one is justified in using them as a measure for this purpose. There are also obvious advantages on the part of the researcher in that grades are usually relatively easy to obtain both with and without student co-operation and are a highly measurable phenomenon.

It should be stressed that this thesis is only a preliminary attempt to look at the very complex question of academic success. Accordingly, only a small proportion of all the information collected has been analysed, and even the analysis of this small part cannot be said to be exhaustive. Rather, an attempt has been made to indicate

areas which may be of importance for further research as well as to give some explanation of why some students were more successful than others in this one particular class.

FOOTNOTES FOR CHAPTER I

1. Richard Conrad, "A Systematic Analysis of Current Research in the Sociology of Education", American Sociological Review, 17 (1952), pp. 350-55.
2. Donald W. MacLennan and J. Christopher Reid, Abstracts of Research on Instructional Television and Film: An Annotated Bibliography, Publication prepared for the Institute for Communications Research, Stanford University, vol. 1 and 11, 1964.
3. Neil Gross, "The Sociology of Education", in Sociology Today, R. K. Merton (ed.), New York, N.Y., Basic Books, 1959, pp. 128-52.
4. Non-intellective factors refers, in this thesis, to factors other than intelligence or ability.
5. David E. Lavin, The Prediction of Academic Performance, New York, N.Y., Science Editions John Wiley and Sons, 1967, p.47.
6. Ibid., p. 59.
7. Ibid., pp. 11-12.
8. See A. W. Griswold, "Yale Inaugural Address October 6th 1950" in Essays on Education, by A. W. Griswold, New Haven, Yale University Press, 1954, pp. 1-10 and Alfred North Whitehead, "Universities and Their Function" in The Aims of Education by A. N. Whitehead, New York, N.Y. Mentor Books, 1949, pp. 95-106.

Both Griswold and Whitehead attempt to define what they consider to be the function of a university.

9. See the article by Robert H. Knapp, "The Changing Functions of the College Professor" in American College edited by Nevitt Sanford, New York, N.Y., John Wiley & Sons, Inc., 1962, pp. 290-311 for a consideration of how just one aspect of universities has changed and for a more general discussion see A. H. Halsey, "The Changing Functions of Universities in Advanced Industrial Societies", Harvard Educational Review, vol. 30, 1960, pp. 118-27.

10. Statement by T. H. Huxley to the Cooper Commission of 1892 and quoted by A. H. Halsey, op. cit. p. 122.

11. A. H. Halsey, op. cit. p. 127.

12. J. H. Fishman, "Unsolved Criterion Problems in the Selection of College Students", Harvard Educational Review, vol. 28, 1958, pp. 340-9. This article contains a general discussion on the problems of using grades as a criterion of success.

13. Ibid., p. 341.

14. See D. E. Lavin, op. cit., pp. 24-31, for a discussion of the concepts over-achievement and under-achievement.

15. Eldon G. Kelley, "A Study of Consistent Discrepancies Between Instructor Grades and Term-end Examination Grades", Journal of Educational Psychology, vol. 49, 1958, pp. 328-34.

16. The problem still remains as to what objective intelligence tests measure and how the scores will differ according to the people being tested.

CHAPTER II

FACTORS AFFECTING THE STUDENT AT UNIVERSITY

PART I: SOCIO-ECONOMIC STATUS AND UNIVERSITY EDUCATION

Despite the increasing interest in the sociology of education, the subdiscipline suffers considerably from a lack of theoretical guidelines. The many reported studies and research projects frequently ignore this aspect and the lack of conceptual frameworks or theoretical orientations makes it difficult to utilize and compare published studies. In so far as this study is only a preliminary attempt to look at the problem of academic success, the theoretical issues are likewise in an elementary stage, and serve more as a framework within which to attempt to analyse the data than as a highly developed series of hypotheses and tests.

It appears that a fruitful line of research may be developed along the lines which Turner[1] suggests for characterising educational systems. He maintains that it is possible to describe two ideal types of educational systems, which differ with respect to the predominant mode of social mobility which can be found in various nations; this, he suggests, is the crucial factor which shapes the educational system. He labels the two modes of mobility as contest mobility and sponsored mobility, the former characteristic of U.S.A. and the latter of Britain. Briefly, the two systems can be described as

follows,

> "Contest mobility is a system in which the elite status is the prize in an open contest and is taken by the aspirant's own efforts. While the contest is governed by some rules of fair play, the contestants have wide latitude in the strategies they may employ. Since the 'prize' of successful upward mobility is not in the hands of the established elite to give out, the latter are not in a position to determine who shall attain it and who shall not. Under sponsored mobility, elite recruits are chosen by the established elites or their agents, and elite status is given on the basis of some criterion of supposed merit and cannot be taken by any amount of effort or strategy. Upward mobility is like entry into a private club, where each candidate must be 'sponsored' by one or more of the members. Ultimately, the members grant or deny upward mobility on the basis of whether they judge the candidate to have the qualities that they wish to see in fellow members"[2]

The organizing folk norm defining the accepted means of social mobility in Canada seems most closely allied to the contest system, and in so far as there

> "will be a constant strain to shape the educational system into conformity with that norm"[3]

then there will be certain characteristic results on this system. Within the school system Turner maintains that there will be no sharp social separation between the superior and inferior students, schooling is presented as an opportunity which it is up to the individual student to make use of. Education is valued as a means of getting ahead in life. A further feature of the contest system is that there is an attempt to keep all students in the 'race' for as long as possible,[4]

a factor which is supported by the special schemes for allowing students with poor high school grades to go to university, or by allowing students to have a second chance at getting to university through the community colleges.

With particular reference to universities, it is possible to summarize from Turner's suggestions that those in the contest system will be characterized by an open admissions policy, with facilities for more than one attempt, by a regular testing of the student to assess whether he may continue in the university, by comparatively high drop out rates, compared to the sponsored system, and by an emphasis on the practical consequences and contents of education, rather than education being good in itself. The sponsored system will generally exhibit the opposite characteristics.

Because Turner is writing in terms of an ideal type,[5] it is to be expected that actual educational systems will not always conform to his ideas or to the degree to which he suggests they should and that there are factors which he does not consider. In Canada, for instance, it can be seen that there are aspects of both contest and sponsored mobility, in that the private school system, which most closely approximates Turner's sponsored mobility type, is important as a source for Canada's elite.[6] Whether a predominant factor in shaping an educational system is the mode of social mobility, is open to question, but that the obvious differences do exist between the education in Britain and Canada cannot be denied and need to be explained. Of

equal importance, however, and a phenomenon which Turner does not consider, is the similarities between the systems. In both systems, some students fail before they graduate, and it remains to be shown whether or not there are similarities and differences between students who fail and those who are successful, both within the two systems as well as between them. This thesis is an attempt to study some students who are defined as successful both by themselves, by the faculty, and by the administration in an attempt to discover some of the characteristics of this particular type of student in a contest system.

In looking at the literature on university students it becomes clear that one is studying a very selected group of people and despite the claims and myth that the door to university education is open to any student who has the ability to gain entrance, there appears to be a great homogeneity amongst students, particularly with respect to socio-economic variables. As Lavin maintains,

> "of all the ecological and demographic factors, the major variable in terms of the sheer quantity of research is socio-economic status,"[7]

and this has led to many different measures of social class being used, thereby making comparisons between various studies more difficult. Generally, objective measures of social class have been used but this does not eliminate all the variation in defining social class, although there seems to be a general agreement to combine such factors as parental educational level, occupation and income in some form or another to give a measure of socio-economic status. Just how one

defines social class, however, and which aspects are most influential in determining the educational opportunities remains open to question, but as the figures quoted by Porter indicate, students do not attend university in numbers proportionate to the size of the social class from which they originate as would be expected if ability and educational opportunity were distributed evenly throughout the Canadian population. (see Table 2.1)

(Table 2.1)

OCCUPATIONAL LEVEL	STUDENTS' PARENTS	TOTAL LABOUR FORCE
Proprietors & Managers	25.7	8.3
Professionals	24.9	7.1
Clerical and Sales	12.3	16.5
Skilled & Semi-skilled	21.1	30.6
Agriculture	10.9	15.7
Labour	5.1	20.5
TOTAL	100	100

PERCENTAGE DISTRIBUTION OF UNIVERSITY STUDENTS' PARENTS, BY OCCUPATIONAL LEVEL, 1956.[8]

In so far as only 8% of the age category 20-24 years was in school in 1961[9] and in so far as there is general agreement on the shortage of trained persons within Canada, then there appears to be very real barriers operating against students who are eligible for higher education.

Looking specifically at Ontario students (Table 2.2), a similar trend to over representation of the higher social classes is also

seen. Although the occupational categories used in the McMaster Sociology survey are not strictly comparable to those cited by Porter, a rough comparison is possible. Assuming that nearly all the students in the sociology course come from Ontario, a comparison of the two top categories in Table 2.2, and the three top categories in Table 2.3, indicates that these groups only make up 23% of the labour force in Ontario for males over thirty-five years and yet are the source of over half the students in the sociology class.

Table 2.2

FATHERS OCCUPATIONAL LEVEL	STUDENTS			ONTARIO MALES 35 years and over	
	No.	%	Cumulative	%	Cumulative
Professional, Managerial Executive, Sub. Prof., Minor Supervisory	3506	39	39	16	16
Proprietors	970	11	50	7	23
Skilled Manual	2429	28	78	29	52
Semi-Skilled Manual	869	10	88	19	71
Unskilled	321	4	92	12	83
Unknown, Disabled, Etc.	720	8	100	17	100
	8815	100		100	
Dead	589				
TOTAL	9404				

OCCUPATIONAL LEVEL OF FATHERS OF ONTARIO GRADE 13 STUDENTS.[10]

Table 2.3

FATHERS OCCUPATIONAL LEVEL	STUDENTS %	CUMULATIVE
Professional - income from fees	4	4
Professional - income from salary	18	22
Proprietor/Manager	30	52
Sales	6	58
Clerical	4	62
Skilled Worker	20	82
Semi-Skilled Worker	9	91
Service Worker	4	95
Unskilled Worker	5	100
TOTAL	100	

OCCUPATIONAL LEVEL OF FATHERS OF SOCIOLOGY 1a6 STUDENTS - SPRING 1967.

The influence of social class and educational opportunity has generally been looked at in two parts, one relating to intelligence and the second to an achievement syndrome, which is a direct consequence of the social and cultural milieu of the home and school of the students. Havighurst[11] for instance, suggests there are four factors which will determine whether or not a student will go to university. These are: mental ability, financial ability, propinquity to college and individual motivation, the latter three in particular are likely to affect students differently according to their socio-economic status. That the influence of social class on the opportunities of high school students to proceed into higher education has very important practical consequences, is obvious in so far as the most talented students may not be the ones who receive the higher education.

It would appear from this evidence that although higher education is a goal to which all students are supposed to aspire in the contest system, there is in fact a very definite tendancy for the majority of the students to come from the middle and upper classes, implying that there is a very definite selection process within the educational system. Thus, very serious doubts can be raised over whether Canada does in fact most closely approximate Turner's contest system. It is possible, of course, that students from the lower social classes lack the intelligence to continue for higher education and that the contest system works efficiently to get rid of the least able students. The available research does not, however, warrant such a conclusion.[12] Articles by Sewell et al.,[13] and Knief and Stroud[14] on the relationship of intelligence and social class conclude that

> "social status makes an independent contribution to education and occupational aspirations when intelligence and sex are controlled".

Obviously then, the small numbers of students coming from the lower social classes is not a result of lower intelligence levels. It is then necessary to look for other factors that might explain the link between social class and educational achievement and it is this that has encouraged sociologists to look at the particular cultural and value systems of the different social classes and at what has come to be termed the achievement syndrome.

Rosen[15] maintains that social classes are characterized by unlike concerns with achievement and in particular with striving for

status through social mobility. Two interdependent factors are likely to be found more frequently in the middle classes, which might help to explain the discrepancy between classes in terms of educational achievement. A psychological factor of achievement need or motivation is linked with the cultural factor of value orientations, and Rosen reports that motivation scores are related to academic performance and a value score to educational aspiration. It would appear that middle class parents are more likely to bring their children up in a cultural and value setting which is more conducive to developing achievement motivation and values that will facilitate social mobility. Hyman demonstrates, for instance,that there is a differential emphasis placed by the various social classes on the need for a college education,[16] and Kahl's[17] study also demonstrates how the family can influence the desire for educational achievement. Studying boys in high school with equal I.Q.s and of the same social class but different levels of aspiration, Kahl concluded that the desire of some of the boys to go to college was a result of their internalization of the values of their parents, who were dissatisfied with their "common man" status. Boys who did not aspire to middle class positions tended to come from homes where the parents were satisfied with their position and thus did not particularly encourage their sons to seek higher education.

That the wider cultural factors, particularly ethnic and religious values, can cut across class lines and also influence

educational aspirations is illustrated by Strodtbeck's[18] study. He indicates that the encouragement a student receives to pursue higher education may be related to his ethnic origin.

All the articles mentioned in this chapter seem to indicate that although entrance to university is ostensibly on the grounds of ability, in fact there is a very definite selection process being carried out throughout the school system, primarily to the advantage of the middle class student. In this way it is possible that the differences Turner postulates between the sponsored and contest systems are not as great as he indicates, as there are elements of selection in the contest system similar to those found in the sponsored system.[19]

Once the student is at university, information on his scholastic performance is not well documented. Some research has been concerned with the differences in achivement of the students from private as opposed to public schools[20] and it can be tentatively suggested that social class factors even effect the level of achievement when dealing with students at Ivy League colleges. McArthur[21] and Davis[22] attempt to explain the differences in terms of differing value orientations, in that those from private schools, who are likely to be of a higher social class, are less achievement oriented. Davis[23] suggests that for public school students, university is a means of enhancing their social status, whereas for the private school group it is a question of maintaining their status. Such evidence indicates that differences between middle and upper social classes may be as important

as the differences between middle and lower social classes, in terms of achievement at university.

These studies indicate that achievement values and their relationship to social class is a complex issue. Mulligan[24] suggests that students who attend university may have social characteristics more nearly aligned with the middle and upper social classes than with the lower social class, even though this is their class of origin. Mulligan further proposes that the absence of students from white collar and skilled occupational groups, who might be supposed to have value orientations similar to the middle class, is due to the economic factors. Absence of students from farming, semi-skilled and unskilled groups, on the other hand, is closely linked to a cultural factor besides the purely economic.[25] Although it is no longer assumed that a system of free university education will automatically solve the social class discrepancy in education, undoubtedly some people are deterred because of economic factors.[26]

It seems obvious that socio-economic variables are important in determining who goes to university, but in terms of explaining the differential success of students once they are there their importance has yet to be demonstrated. Although some authors have attempted to show how social class effects educational aspirations one could still agree with Lavin when he writes that socio-economic status is a summarizing variable. He suggests that:

> "Persons of different socio-economic status face different kinds of life situations, and in adapting

> to them, they may develop different sets of values and life styles. In short, socio-economic status symbolizes a variety of values, attitudes and motivations related to academic performance."[27]

There is still much research to be done in this particular field as some aspects seem to be still untouched. For example, no consideration has been given to whether or not the value system of the motivation for achievement is passed on in the same degree to both male and female children in the family. Given that there is still some support for the idea that it is more important for boys to receive a 'good' education than for girls, then it can be assumed that there is not one uniform value system within the family which is passed on undifferentially to both sons and daughters. The attitudes of the family to education and the reinforcement these may or may not receive in the school and outside the home may affect the chances of the girls of ever attaining higher education. Because of this, the girls who do go to university may be quite different from their male counterparts in terms of their social origin, commitment to education and their academic performance when at university.

PART II: THE TEACHING SITUATIONS AT UNIVERSITY

The success of a student at university is unlikely to be dependent simply on the attributes which the student has when he arrives. Rather, it is more likely to be dependent on an interplay between such characteristics and these situations in which the student finds himself at university. In these terms it is obvious that the formal learning

situations - lectures and tutorials - may be of great importance for academic success.

In discussing student attitudes towards the teaching techniques used in the course it again becomes obvious that a review of the literature does not give a particularly well-defined picture of how various teaching methods are related to a student's performance - whether it be academic achievement, a change in value system, or any other end deemed desirable. Not only does the situation of the student at university desire an adequate understanding of the principles of learning, but it also places demands on the practical issue of how the theoretical understanding of learning can be related to the specific conditions of teaching certain students a certain subject by use of designated means.

It is, perhaps, adequate for the purposes of this thesis to outline the fundamental factors of learning as suggested by Miller. These are

"a) drive or motivation
b) stimulus
c) response or participation
d) reward or reinforcement."[28]

It might well be argued, therefore, that according to the teaching situation to which the student is exposed, all four of the above factors may work in a different way and with differing degrees of success for a particular type of student. It is to this problem that much of the

research on student learning seems to be implicitly oriented.

In view of the different learning situations which the students experienced within the course it seems expedient to discuss the information in two parts: a) tutorials and b) the lectures.

Tutorials

The tutorials in this particular sociology class were conducted by graduate students, there being twelve to fifteen undergraduates per tutorial. Tutorials usually revolved around a discussion of a prescribed text and lasted approximately 45 minutes. How effective group discussions are as a learning situation for students is somewhat debatable. Much research into small group dynamics has not been specifically concerned with the teaching situation, and as Schellenberg[29] points out some of the research findings of other studies can be difficult to apply to the academic situation. In looking at the effects of group size, for instance, he finds that most of the reported studies were on specially created and temporary groups, which he suggests

> "minimizes certain forms of prior expectations on the part of the students and teachers which are often of central significance in the culture of the classroom".[30]

Again the criteria of success in a university are likely to be complex and difficult to assess and quite different from artificially created groups. Perhaps one of the major problems which Schellenberg points out is that many studies do not impose a particular leadership pattern or communication pattern on the group, and this is very different from the teaching situation where the teacher often tries to control the

interaction. Gibb[31] refers to the situation as one of domination or headship rather than leadership since the form of authority rests on factors other than popular acceptance and selection. Most of the research on leadership is defined in terms of the authoritarian - democratic continuum, an approach which is the source of much controversy within the educational field.[32] McKeachie[33] enumerates some of the characteristics of the authoritarian - democratic dichotomy. Writing of student-centred instruction he labels this as democratic, permissive, concerned with student growth and personal development, insight into the subject and affective aspects. Instructor-centred instruction on the other hand is authoritarian, content-centred and more inclined to value knowledge for its own sake. Here the instructor decided on the goals of the course as against the joint decision of students and instructor in the student-centred setting. The two approaches again differ in respect to the degree of student participation, group cohesiveness, the amount of erroneous or irrelevant student contributions the instructor will accept and the amount of time spent on discussing personal experiences and problems. In looking through the literature, however, it would appear that the definitions of the concepts are not always in agreement.[34] In relation to the McMaster sociology class it can be seen that the lecture system is instructor-centred, whereas the tutorials are likely to be more student-centred, to a greater or lesser degree according to the individual tutor.

The problem of whether instructor- or student-centred

instruction is better has no clear answer as it is related not only to the objectives of the educational process but also to the overall structure of the course. So, for instance, McKeachie[35] in discussing the advantages and disadvantages of small discussion groups and large lectures illustrates that whether or not one method is seen as preferable depends on the criteria of success. Frequently, studies favouring the lecture system just test knowledge of the subject by exam whereas other studies favouring the discussions, used other measures as well.[36] Bills' study again supports these findings, in that the learning of the contrasted groups did not differ although the student- centred group was probably of more personal value to the students.[37] Again, McKeachie[38], after reviewing several reported studies, concludes that student-centred teaching is likely to increase student ability to reason, think creatively and to further personal adjustment and the development of social skills. Opposed to these benefits, however, is the fact that some of the students find the situation too ambiguous, and this creates anxiety. In a more ambitious study, Guetzkow et al.[39] compared three different types of tutorial teaching: recitation-drill, group-discussion, and tutorial-study, in a psychology class which experienced the same lectures, used the same texts and wrote the same assignments. Testing for factors such as achievement and liking for psychology, the authors found that the results were rather ambiguous. In terms of the final exam, the three ranked from high to low: recitation-drill, group-discussion, tutorial-study. The recitation-

drill method was more effective for all levels of I.Q. in the groups and created a greater liking for the subject. A study by Wispe[40] suggests that for the less able students the more directed type of tutorial was of greater benefit and tended to be preferred by the majority of the students. Whilst it is difficult to assess all the studies and compare them, Anderson's conclusion that the student-centred groups can be preferred for their socio-emotional and psychological functions seems to be the tentative conclusion as of now.[41] But even this no longer seems to hold if the course is very grade and exam oriented.

Research on the role and function of a group leader indicates that he is likely to increase the productivity of the group and to upgrade the group's thinking and ability to find solutions.[42] Most of the reported studies tend to be concerned with problem solving, an activity not directly relevant to sociology tutorials. The necessity of having trained as opposed to untrained leaders by Maier and Salem[43] indicates that even without any particular training a discussion leader can facilitate the finding of the correct decision. Although concerned with a problem solving situation in a psychology class, the characteristics that Maier and Salem list are pertinent to the sociology tutorials. The leader for instance, determines the subject for discussion, posing it in such a manner that the group will respond constructively. He needs the ability to ask stimulating and exploratory questions and to use minority opinions, which might get overlooked in a leaderless

situation, to upgrade the quality of group thinking.[44] The role of leadership and the functioning of the group are likely to differ according to the size of the group, a phenomenon on which there has been a considerable amount of research. Research reported by Ziller,[45] Slater,[46] and Schellenberg,[47] all indicate that satisfaction and effectiveness of a group appear to be at a maximum when the group consists of 4-6 members. Slater indicates that large groups are not as favoured because there are more difficulties in communication and they inhibit individual participation. Schellenberg[48] shows that smaller groups got the higher grades, although the author suggests that the groups may have been graded differently because of size. It would appear that as group size increases not everyone will have sufficient time to participate and this may lead to dissatisfaction with the group,[49] although it also allows for a minimum amount of participation for those who wish to remain anonymous. Obviously the degree of participation in tutorials will be affected by individual characteristics of students as well as by factors such as group size or leadership. Research indicates that the more communication acts a person initiates then the more communications he also receives,[50] which in terms of the tutorials may lead to the situation where the discussion revolves around a small number of people and the other members, either willingly or unwillingly, sit back and do nothing.

It is very probable that some students will participate more effectively in tutorials than others, perhaps because they have a

greater verbal facility or feel less self-conscious about expressing their opinions. But whether the amount of learning that takes place depends on active participation is not clear. There may be differences in participation associated with the general view of the male-female roles. Men may be expected to participate more actively as this is more in line with the view of them as leaders and decision makers, but neither this activity nor the relatively more passive role of the women, may be the factor or cause associated with learning. Such activity may in fact be irrelevant to how information is accepted and learned, as in lectures students have to learn with very little participation on their part. It may be, in fact, that students who can adopt a relatively more passive role or can be more flexible in the amount of participation they require in order to learn will be the ones who are most successful at university, but such questions are mere speculation at this time.

Lectures

The lecture system seems to be one of the firmly entrenched features of university life, and although not seriously challenged for decades its very structure and function have become an area of increasing debate, particularly since the advent of educational television. Research on the effects of teaching by television have shown very clearly the dearth of research on the conventional learning situations and the attitudes of students experiencing the 'normal' lecture. McKeachie[51] shows that lectures may be preferable to discussion groups in terms of

obtaining information, but whether one decides to adopt a given technique must depend on the objectives of the system and the resources available. Given the increasing student enrollment, the shortage of qualified teachers, the expansion in the amount of knowledge to be communicated[52] and the search for better quality instruction[53], then it would appear that the choice of teaching techniques becomes limited.

In terms of the McMaster sociology class by far the majority of the students heard the lecture via closed circuit television as the lectures were relayed from a small lecture theatre where there was a live audience of approximately one hundred students. The relative effectiveness of lectures to tutorials, and T.V. lectures to conventional lectures is an area of constant debate, and the research in the field leaves much to be desired in terms of the contradictory and ambiguous conclusions of many of the projects.[54] Perhaps one of the most noticeable side effects of the introduction of television teaching into the universities has been the stimulus for research,but the number and diversity of research projects makes it difficult to know exactly what effects T.V. has on the educational situation as very few research projects are directly comparable and it is problematic how far the reported results are influenced by the specific situation, such as the course, the lecturer or the viewing situation of the students.

The earliest studies on the effects of T.V. teaching were carried out at Pennsylvania State University[55], and although numerous other studies have been initiated since[56] many of the findings of the

Pennsylvania State project are still important. This research was concerned with four general areas: the comparative effectiveness of T.V. and conventional lectures, the appropriateness of the medium for different courses and functions, the acceptability of the new methods to students, faculty and administration and the feasibility of the system in terms of cost, for example[57].

Perhaps most research has been concerned with the effect of teaching by T.V. on the achievement of the students, and the evidence of by far the majority of the reported studies indicates that students learn at least as much, if not more, from the T.V. lectures as compared to conventional lectures. Meaney, in summarizing various studies, writes that:

> "Schramm points out that in nearly 400 scientifically designed experimental comparisons 86% 'resulted in as much learning in a T.V. as compared to a conventional classroom'".58

In such diverse courses as sociology and chemistry[59], college composition and the literature of England[60], and engineering[61], there is a continual repetition of the fact that the students learn as much by T.V. lectures as by conventional ones, and in the experiment on a psychology class at Pennsylvania State there was no difference in long term retention[62]. This broad statement does, however, overlook some of the issues in so far as T.V. teaching is not equally good for all students, courses or purposes. That the issue of comparative effectiveness of the two methods is not yet settled can be seen, but the existing information would suggest that T.V. teaching is a

viable alternative, especially when considered in conjunction with the problems higher education is facing. Whether or not it will be successfully adopted must depend to some extent on the attitudes of the students and faculty towards the new system.

When questioned about their dislikes of T.V. lectures, students in several different studies showed a similarity in their answers. The question of impersonality, for instance, is one which is constantly raised, along with the issue of whether T.V. teaching will lead to the 'dehumanization' of education and whether it will increase student independence is open to question. A further problem is the frequent complaints from students about the lack of opportunity to ask questions. The Pennsylvania State projects, however, show that when a two way system is available to the students it is used very infrequently. This complaint may in fact be more a criticism of a large lecture situation than the specific technique used.[63] Complaints of noise and disturbance in the T.V. room are again frequently mentioned as a disadvantage of the system.[64] It is to be noted, though, that it is not possible to infer how much the students are learning by directly observing their behaviour, nor are negative attitudes towards T.V. lectures necessarily a hinderance in the learning process.[65] The most frequently mentioned disadvantages of T.V. lectures for McMaster students coincided with the ones mentioned above. It may be that as T.V. becomes a more accepted part of the university environment students will be less hostile or less likely to view the experience as a form of

entertainment, rather than as a course for learning.[66] Also, as T.V. becomes a normal part in the learning situation then courses may be specifically adapted to be presented on T.V. and more use may be made of visual aids. At the moment, however, research would indicate that this may be a waste of time as students seem to learn just as much from a normal talk-and-blackboard type lecture as they do when various visual aids are added. Klapper maintains that whilst visual aids may make the course more interesting they do not seem to add to student learning.[67]

It is obvious, that despite the concern of low student participation in lectures, that this is where a great deal of learning takes place, but it perhaps raises issues about how far the student should be responsible for his own education. Faust maintains that

> "the essence of this process of education is not communication from teacher to the students,but the stimulation of profitable reflection in the student".[68]

This process may be as possible in a lecture situation as in a group discussion but as yet there is no very reliable evidence to prove the case either way. Concern over the use of T.V. in education has arisen because of these issues as it is felt that looking and listening to T.V. screen calls for even less student participation than the conventional lecture situation, though as Biddle and Rossi point out, all

> "group-use media make fewer demands upon the user than to individual-use media",[69]

e.g. books make for greater student independence, a high degree of user

control and a lower degree of communicator control. Whether educational T.V. leads to an underdevelopment of self-direction and independence, as Vernon Davies suggests,[70] or whether it has the opposite effect as Carpenter maintains is not yet resolved, but, in so far as educational T.V. seems here to stay, then it may be possible to agree with Carpenter's statement that

> "the greatest unused resources for educational advancement are the brains of our students. In this connection it seems possible that television might be used as an instrument to help wean students away from immature dependency on their instructors and to encourage their initiative, self-discipline, individual effort and unique personal development".[71]

The relative merits of lectures and tutorials cannot as yet be assessed, but the nature of the course at McMaster would benefit those who could learn in both situations. Whether the change over from one learning situation to another necessitates a change in the definition of the student role is an area where further research is needed. Turner[72] argues that students in the contest system do not regard the content of the education as the most important factor in terms of knowledge for knowledge's sake, but rather as a means to the end of securing a good job. If this is the case then the students are likely to favour those learning situations where they get the information that will enable them to pass the examination, and it seems that most of the evidence would point to the lectures as the place where the student sill pick up the basic information. Tutorials are more likely to be

the place where a student could develop his own ideas, but if this is not regarded as one of the fundamental reasons for education then tutorials will not be regarded as so important.

FOOTNOTES FOR CHAPTER II

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CHAPTER III

METHODOLOGY

The first year sociology class was not the only class which was taught by closed circuit television, but it was chosen to be investigated for several reasons. In the first place, it was thought that the sociology class would contain a cross section of students in their first year at university as all students, regardless of faculty, have to take a social science course sometime during their studies. In most cases students outside the faculty seem to prefer to take their social science course in their first year. For these reasons it was assumed that the sociology course would contain more students from diverse subjects than other courses taught by T.V. and would, therefore, provide more diversified information on the type of student who was successful. It should perhaps be noted in relation to these factors that 83% of the students were in their first year of study and that 84% of them said that subjects other than sociology were their major interests. A further issue which was important in deciding to study the sociology class was the one of access. It was undoubtedly much easier to administer questionnaires in the sociology class where the faculty were interested and involved in the research than to try and persuade another department that this was a worthwhile project which would interest them.

The data were collected by means of two questionnaires, one administered in the last lecture of the Christmas term, and the other in the last lecture of the Easter term. In both cases this meant that the questionnaires were issued before the examinations in the subject were taken. It was found that after the first questionnaire had been given a considerable number of students had not been in that particular lecture. In order to have information on these students the first questionnaire was reissued to those students who had been absent through the tutorials. This had to take place in early January as the students could not be reached before then but this raised several important issues as by this time the students had taken and had the results of their first examination. This meant that some of the questions would probably be affected by this knowledge, for example, the question asking them to compare their expected grade in sociology with their expected grade in other subjects. It seemed very likely that the students would have difficulty thinking back to their pre-Christmas state, but it was decided that it would be best to reissue the questionnaire as it was and to later abstract those questions on which the information seemed of doubtful validity. When the first questionnaire and the retake were analysed on certain key questions it was found that there was no significant difference between the answers obtained before Christmas and those obtained in the retake in January. Because of this, for all later analysis these two questionnaires were treated together.

For all the precoded questions the students marked their answers directly onto mark-sense cards, whereas the open ended questions were later coded from the answers the students had written on the back of the questionnaire, and then put onto the cards as well. Of all the students who filled out questionnaires there were 605 usable cases, that is, 605 students who had completed both schedules and not just the first or the second only.

As the study was an exploratory one many questions were included which were not directly relevant to this particular thesis or the guidelines which were being followed. It seemed obvious to include such characteristics as sex, income, and religion, partly because so little is known about Canadian students and this was an opportunity to find out about one particular situation and maybe help later research, and also because such factors as socio-economic status have been regarded as important in attaining an education. In using Turner's ideas of sponsored and contest educational systems it was clear that some characteristics, e.g. socio-economic status, would be important in determining whether or not the contest or sponsored system was operative in Canada, and such information was therefore, directly relevant to the thesis.

When it came to looking at the learning situations which the students experienced, the problem of what was relevant and what was not was more difficult to determine. Whether the educational system is a contest or sponsored one undoubtedly has repercussions within the university in terms of how the students are taught and the subjects

they are required to take. Essentially what was necessary to know was whether or not a student's academic performance had some relationship to the actual learning situation. The available literature on how well students perform in certain learning situations gives indecisive conclusions in many cases and therefore there were few guidelines to indicate how students would learn in varying situations. Accordingly many questions were asked about the lectures and tutorials, where the students felt they learned most sociology, how much they participated in tutorials, how well they liked their tutorial leaders being the sole arbiter of their grade, and other related issues. This was an attempt to discover if there was any relationship between academic performance and learning situations. Several of the questions asked on the first questionnaire on this issue were repeated on the second one in order to see if student opinions and actions had changed over time. Because it was felt that so little was known about student attitudes towards the lectures and tutorials many of these questions were left open ended so that the students could express themselves more freely and one would have a better idea of how the student reacted to the situation. After the open ended questions had been coded all other analysis was completed on the computer.

A very brief description of some student characteristics reveals the following pattern: 57% of the class is male and 43% female; 83% of them are in their first year at university and 62% of them fall

within the age group 17-19 years; 56% of the students in this class live at home and a further 26% in residences on campus, but as only 26% of the class comes from Hamilton itself it is assumed that many of the students must come from the smaller surrounding towns. Indeed, 37% said their home community was a town of 50,000 people or less and while this figure does not indicate where in the province they come from it seems reasonable to assume that many of them live within easy reach of Hamilton.

The question on their reason for attending university revealed that the largest category - 44% - were there to get credentials for a future career. The next largest category was the 25% who regarded university as a part of a general education. It should be noted in relation to this that 77% of the students in the class had fathers who had not been educated past high school level, and thus for many students attendance at university was perhaps seen as an opportunity to gain a better job rather than for any intrinsic benefits which might accrue to the individual. This aspect may also be reflected in the fact that 33% of the class did not participate in any extra-curricular activities. This is the largest single category, but is closely followed by the 30% involved in sports. This gives a very partial description of the students in the class but many of the other aspects will be discussed in the following chapter.

A further note of caution has to be added in interpreting the presented results. The 605 questionnaires on which the data are based represents 93% of the total enrollment in the 1966-67 Sociology 1a6 class. The total enrollment was 651 students. Unfortunately, however, it was impossible to get information on those students who did not complete the questionnaires to see if the sample was biased or to get information on the McMaster student body as a whole in order to see how representative the particular students were who took part in this survey.

CHAPTER IV

SOCIAL VARIABLES AFFECTING ACADEMIC SUCCESS

The two questionnaires administered to the sociology class yielded a great deal of information, but it is possible in this chapter to consider only a small proportion of the results. This chapter is an attempt to look at factors that appear to explain to some degree, why all students are not equally successful at university. That all students do not succeed equally can be easily seen in so far as 55% of the students had a final grade in sociology of 65% or below, compared to the 45% who achieved 66% and above. The factors to be discussed in this chapter are the ones which seem most strongly related to academic success. None of them by themselves can explain very much of the discrepancy between the successful and the unsuccessful, but taken together it is possible that there may be some indication of why this phenomenon occurs.

In so far as high school grades are in part an index of factors which lead to academic success in that situation, it is perhaps not surprising to find that a reasonably good predictor for success in sociology,[1] as certain factors, e.g. study habits, motivation, I.Q., which were important in high school will also be important in university.

Table 4.1

SOCIOLOGY GRADE	HIGH SCHOOL GRADE 65% and below	66% and above
65% and below	69 (144)	48 (121)
66% and above	31 (61)	52 (133)

Since $x^2 > 10.8$ ($x^2 - 22$), the results are significant at the .001 level

SOCIOLOGY GRADE BY HIGH SCHOOL GRADE, IN PERCENTAGES.

It can be seen that for those students who had high school grades of 65% or less, there appears to be a trend towards continuity in their performance in so far as the sociology grade is concerned. It seems to be the case that if a student did not perform very well at high school, then his chances for later success are not very great. It has to be noted, however, that although the percentage of those who were successful at high school and in sociology is 21% greater than for those who were less successful in high school, a high high school grade does not ensure that the student will be successful in this particular course at university. There is a very slight trend towards continuity between high school and sociology grades, but it is not nearly so obvious as for those whose high school grade was 65% or less.

Perhaps the most important aspect of the data is the discrepancy between male and female students. Differences between the sexes

can be found not only in their actual achievement levels but, as will be shown later in the chapter, also in related factors such as attitudes towards lectures and participation in tutorials. In the final sociology examination, the following relationship is found:

Table 4.2

	SEX OF STUDENTS	
SOCIOLOGY GRADE	Male	Female
65% and below	70 (206)	58 (132)
66% and above	30 (89)	42 (95)

Since $x^2 \geq 6.635$ ($x^2 = 7.5$), the results are significant at the .01 level.

SOCIOLOGY GRADE BY SEX OF STUDENTS, IN PERCENTAGES.

Clearly female students perform better in sociology than do male students, at the first year level.[2]

Looking at high school grade and sociology grade and controlling for the sex of the student, the differences between male and female performances can be seen. For those who received 65% or less in high school they would most likely receive the same standing in sociology, regardless of their sex. If, however, their high school grade had been 66% and above, then the men would certainly perform better than if they had had a lower high school grade but not nearly as well as the women. In this category the women were much more likely to

have a sociology grade in accordance with their high school performance than were the men. Among the women, those who had a high school grade of 66% and above were 28% more likely to have this grade for sociology than those whose high school grade was 65% or below.

Table 4.3

	HIGH SCHOOL GRADE			
	MALE		FEMALE	
SOCIOLOGY GRADE	65% & below	66% & above	65% & below	66% & above
65% & below	64 (78)	55 (52)	64 (31)	36 (43)
66% & above	36 (43)	45 (41)	36 (16)	64 (77)
	x^2 not significant.		Since $x^2 > 10.82$ ($x^2 = 11.2$) the results are significant at the .001 level.	

SOCIOLOGY GRADE BY HIGH SCHOOL GRADE, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

The same relationship for men yields only a 9% difference. Even more striking is the fact that if the table is percentaged in the direction of the dependent variable, then women who had at least a second in sociology were 43% more likely to have had at least 66% in high school than those whose sociology grade was 65% or below. The same percentage difference is also observed between those with low high school and low sociology grades and those who achieved 66% or over in sociology. Only a 9% difference is observed for these relationships among the men. (See Table 4.4)

Table 4.4

HIGH SCHOOL GRADE

	MALE		FEMALE	
SOCIOLOGY GRADE	65% & below	66% & above	65% & below	66% & above
65% & below	60 (78)	40 (52)	62 (31)	38 (43)
66% & above	51 (43)	49 (41)	19 (16)	81 (77)
	x^2 not significant.		Since $x^2 > 10.827$ ($x^2 = 11.2$) the results are significant at the .001 level.	

HIGH SCHOOL GRADE BY SOCIOLOGY GRADE, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Table 4.5 again shows the trend towards continuity in grades. At the extremes, those who had 65% or below for high school and Christmas sociology exams, were likely to receive this grade in the final; and those who had 66% or above for the first two grades would most likely receive the same grade in the summer exam. Looking at those students who had had mixed high school and Christmas sociology grades, it is not surprising to find that the Christmas grade is the better predictor for success in the final.

Table 4.5

	HIGH SCHOOL GRADE			
	65% & below		66% & above	
	GRADE IN SOCIOLOGY AT CHRISTMAS			
SOCIOLOGY GRADE	65% & below	66% & above	65% & below	66% & above
65% & below	85 (117)	28 (18)	69 (91)	26 (30)
66% & above	15 (21)	72 (47)	31 (40)	74 (87)
	Since $x^2 > 10.82$ ($x^2 = 64.65$) the results are significant at the .001 level.		Since $x^2 > 10.82$ ($x^2 = 44.06$) the results are significant at the .001 level.	

SOCIOLOGY GRADE BY CHRISTMAS SOCIOLOGY GRADE, CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

Discrepancies between the sexes are again in evidence in the Christmas sociology exam.

Table 4.6

	GRADE IN SOCIOLOGY AT CHRISTMAS			
	MALE		FEMALE	
SOCIOLOGY GRADE	65% & below	66% & above	65% & below	66% & above
65% & below	77 (110)	24 (16)	73 (57)	18 (15)
66% & above	23 (32)	76 (52)	27 (21)	82 (70)
	Since $x^2 > 10.82$ ($x^2 = 54.1$) the results are significant at the .001 level.		Since $x^2 > 10.82$ ($x^2 = 50.7$) the results are significant at the .001 level.	

SOCIOLOGY GRADE BY CHRISTMAS SOCIOLOGY GRADE, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

From Table 4.6, it appears that if male students get below 65% at Christmas, they are slightly more likely to get 65% and below in the final exam than are the female students. If on the other hand one looks at those who had 66% or above at Christmas, it can be seen that it is the female students who are most consistent in that they are more likely to be in the same grade category in the final than are the men.

One aspect which was raised in the first questionnaire, but not in the second, was the question of student expectations with regard to the Christmas exam. The data indicate that this would be a fruitful line of approach for there is a significant relationship when the grade expected on the Christmas examination is related to the final sociology grade. Although it would have been preferable to have had student expectations for the final grade, there is a close relationship between this and the Christmas grade and, therefore, it is perhaps justifiable to look at expectations on the Christmas examination, in relation to the final grade. It appears that women not only perform better but are more accurate in their expectations of obtaining a final grade of 66% and above. (See Table 4.7)

Table 4.7

MARK EXPECTED IN SOCIOLOGY AT CHRISTMAS

SOCIOLOGY GRADE	MALE		FEMALE	
	65% & below	66% & above	65% & below	66% & above
65% & below	65 (103)	42 (25)	50 (60)	28 (14)
66% & above	35 (55)	58 (34)	50 (60)	72 (33)
	Since $x^2 > 6.635$ (x^2-9.2) the results are significant at the .01 level.		Since $x^2 > 5.412$ (x^2-5.7 the results are significant at the .02 level.	

SOCIOLOGY GRADE BY MARK EXPECTED IN SOCIOLOGY AT CHRISTMAS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

It is noticeable that women are more accurate in predicting success and men are more accurate in predicting that their sociology grade will be 65% or below. Women who get 65% or below on the final and men who get 66% or above were poor predictors of their final grade.

If the grade expected at Christmas and the grade received in the summer examination are compared by percentaging the figures in the direction of the dependent variable, the summer sociology grade, then it can be seen that students who were in the less successful category had expected this result at an earlier date.

Table 4.8

MARK EXPECTED AT CHRISTMAS

SOCIOLOGY GRADE	MALE		FEMALE	
	65% & below	66% & above	65% & below	66% & above
65% & below	81 (103)	19 (25)	81 (60)	19 (14)
66% & above	63 (55)	37 (34)	64 (60)	36 (33)
	x^2 not significant		Since $x^2 > 5.412$ ($x^2 = 5.62$) the results are significant at the .02 level.	

MARK EXPECTED IN SOCIOLOGY AT CHRISTMAS BY SOCIOLOGY GRADE, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Table 4.9

GRADE IN SOCIOLOGY AT CHRISTMAS

SOCIOLOGY GRADE	MALE		FEMALE	
	65% & below	66% & above	65% & below	66% & above
65% & below	81 (110)	19 (16)	80 (57)	20 (15)
66% and above	43 (30)	57 (42)	23 (21)	77 (70)
	Since $x^2 > 10.827$ ($x^2 = 54.1$) the results are significant at the .001 level.		Since $x^2 > 10.827$ ($x^2 = 50.7$) the results are significant at the .001 level.	

GRADE IN SOCIOLOGY AT CHRISTMAS BY FINAL SOCIOLOGY GRADE, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Although more females than males in the sociology class had high high school grades, (see Table 4.10), it is evident that among the men whose high school grade was 66% or above, that once they are at university they do not continue to perform at this level. Women, on the other hand, are more likely to continue to perform at their previously high level.

Table 4.10

SEX OF STUDENTS	HIGH SCHOOL GRADE	
	65% & below	66% & above
Male	72 (121)	41 (93)
Female	27 (47)	59 (120)

Since $x^2 > 10.8$ (x^2-34.5), the results are significant at the .001 level.

HIGH SCHOOL GRADE BY SEX OF STUDENTS, IN PERCENTAGES.

Because of these observed discrepancies in performance, it is, perhaps, reasonable to assume that the actual university environment or the personal characteristics of the students bear some relationship to their academic performance, and may effect the students differentially so as to account for the differences between male and female achievement.

Looking at the faculty in which students choose to major, the women tend to be the better performers in sociology, with the exception

of those majoring in the humanities.

It may be possible to argue that as the majority of the students (77%) had fathers who had not been educated past the high school level the first generation which goes to university will be concerned more with getting a better job than any other aspect of university education. For women this may well mean becoming a teacher and perhaps leads to enrollment in the humanities as these are the subjects which are taught in schools. This does not necessarily explain why these students should not perform as well in sociology as women in the other subject areas except that it may indicate that different types of students chose the subjects to be studied for diverse reasons. Presumably, some of these ideas could be tested with a more adequate breakdown of the type of student in different courses.

Table 4.11

STUDENTS' INTENDED MAJOR

	MALE			FEMALE		
SOCIOLOGY GRADE	Soc. Sci.	Human.	Nat. Sci.	Soc. Sci.	Human.	Nursing & Nat. Sci.
65% & below	61 (98)	52 (13)	64 (18)	41 (35)	58 (30)	27 (8)
66% & above	39 (62)	48 (12)	36 (10)	59 (51)	42 (22)	73 (21)
	x^2 is not significant			Since $x^2 > 7.82$ ($x^2=8.5$), the results are significant at the .02 level		

SOCIOLOGY GRADE BY STUDENTS' INTENDED MAJOR, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

If one turns to the specific learning situations of the sociology class and looks at the attendance of students at lectures, several issues can be raised.

Table 4.12

	HIGH SCHOOL GRADE			
	65% & below		66% & above	
	% ATTENDANCE AT LECTURES (FALL TERM)			
SOCIOLOGY GRADE	75% & below	100%	75% & below	100%
65% & below	83 (68)	78 (171)	53 (23)	44 (77)
66% & above	17 (14)	22 (48)	47 (20)	56 (99)

x^2 is not significant

SOCIOLOGY GRADE BY PERCENTAGE OF ATTENDANCE AT LECTURES (FALL TERM), CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

Table 4.13

	% ATTENDANCE AT LECTURES (FALL TERM)			
	MALE		FEMALE	
SOCIOLOGY GRADE	75% & below	100%	75% & below	100%
65% & below	56 (25)	61 (106)	56 (18)	41 (56)
66% & above	44 (20)	39 (68)	44 (14)	59 (82)

x^2 is not significant

SOCIOLOGY GRADE BY ATTENDANCE AT LECTURES (FALL TERM), CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Regardless of previous achievement levels, a full attendance at lectures tends to benefit all students, but it benefits most those whose high school grade was 66% or over. Since more females than males fall into this category, it is not surprising to find that women benefit more from lectures than men. It also seems to be the case that full attendance at lectures may actually be detrimental to the male students' performance. As both categories of students perform equally well on 75% or below attendance rate, the extra benefit that women receive from lectures is particularly noteworthy, (see Tables 4.12 and 4.13).

Students had some choice of whether to hear the lecture via closed circuit television or be in the room where the lecturer was, so they were asked to state their rate of attendance at the room they preferred, (see Table 4.14).

Table 4.14

% ATTENDANCE AT ROOM OF PREFERENCE (FALL TERM)

SOCIOLOGY GRADE	MALE		FEMALE	
	75% or less	100%	75% or less	100%
65% & below	56 (45)	62 (108)	47 (31)	39 (40)
66% & above	44 (35)	38 (33)	53 (36)	61 (62)
	Since $x^2 > 6.635$ ($x^2=9.7$) the results are significant at the .01 level.		x^2 is not significant.	

SOCIOLOGY GRADE BY PERCENTAGE OF ATTENDANCE AT THE ROOM OF PREFERENCE (FALL TERM), CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

To the men, a lecture is a lecture regardless of where or how it is given, and their academic performance is not improved by their being in the room of their preference. For the women, however, there was some improvement in their final grade if they attended the room they preferred.

A further question on the learning situations was concerned with where students thought they learned most of their sociology, (See Tables 4.15 and 4.16)

Table 4.15

HIGH SCHOOL GRADE

	65% & below			66% & above		
	LEARN MORE SOCIOLOGY - LARGE LECTURES OR TUTORIALS					
SOCIOLOGY GRADE	More in Lectures	Same	More Tutorials	More in Lectures	Same	More in Tutorials
65% & below	82 (130)	72 (54)	80 (51)	41 (50)	45 (23)	58 (26)
66% & above	18 (28)	28 (21)	20 (13)	59 (71)	55 (30)	42 (19)

x^2 is not significant

SOCIOLOGY GRADE BY LEARNING IN LECTURES AND TUTORIALS, CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

Table 4.16

LEARN MORE SOCIOLOGY IN LARGE LECTURES OR TUTORIALS

	MALE			FEMALE		
SOCIOLOGY GRADE	More in Lectures	Same	More in Tutorials	More in Lectures	Same	More in Tutorials
65% & below	62 (67)	55 (31)	61 (33)	41 (41)	46 (21)	54 (13)
66% & above	38 (41)	45 (25)	39 (21)	59 (59)	54 (25)	46 (11)

x^2 is not significant

SOCIOLOGY GRADE BY LEARNING IN LECTURES AND TUTORIALS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

It can be seen from these tables that for the more able students, i.e. those who had a high school grade of 66% and above, and for the women students, success coincided with answering that most sociology was learned in lectures. On the other hand, men and those students whose high school grade had been 65% or less were most successful if they maintained that they learned an equal amount in tutorials and lectures. If they cited lectures as being the main source of learning then the rate of success was the lowest of the three possible alternatives. This, again, represents a noticeable discrepancy between men and women and between the most able and less able students.

Of course, it is possible to argue that even though students say they learn more sociology in lectures for instance, in actual fact they are relatively unaware of how much they do learn in any given situation. This is perhaps borne out by Tables 4.17 and 4.18 which indicate that all students profited if they attended a high percentage of tutorials.

Table 4.17

	HIGH SCHOOL GRADE					
	65% & below			66% & above		
	% ATTENDANCE AT TUTORIALS (CHRISTMAS TERM)					
SOCIOLOGY GRADE	50% and less	75%	100%	50% & less	75%	100%
65% & below	87 (21)	82 (82)	76 (134)	60 (6)	47 (28)	44 (65)
66% & above	13 (3)	18 (18)	24 (42)	40 (4)	53 (31)	56 (84)

x^2 is not significant

SOCIOLOGY GRADE BY PERCENTAGE ATTENDANCE AT TUTORIALS (CHRISTMAS TERM), CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

Table 4.18

% ATTENDANCE AT TUTORIALS (CHRISTMAS TERM)

SOCIOLOGY GRADE	MALE			FEMALE		
	50% & less	75%	100%	50% & less	75%	100%
65% & below	67 (6)	64 (39)	59 (87)	83(5)	49 (26)	39 (42)
66% & above	33 (3)	36 (22)	41 (60)	17 (1)	51 (27)	61 (67)

x^2 is not significant

SOCIOLOGY GRADE BY PERCENTAGE ATTENDANCE AT TUTORIALS (CHRISTMAS TERM), CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Although some of the numbers in the categories are very small and therefore cannot be relied upon too extensively, it appears that women profit most from attending tutorials, despite the fact that they maintained that they learned most sociology in lectures. It may well be the case that the successful woman student finds it profitable to attend all lectures and tutorials, whereas the men do not find it so useful.

Looking at actual participation in tutorials it could be the case that women students regard tutorials as a continuation of the lecture system in so far as the definition of their own role is concerned. They, therefore, play a predominantly passive role, although learning the subject as they do so, while the men are more successful

if they change from the passive role required in lectures to a more active one required in tutorials. (See tables 4.19, 4.20, and 4.21)

Table 4.19

HIGH SCHOOL GRADE

65% & below — 66% & above

STUDENTS PARTICIPATION IN TUTORIALS

SOCIOLOGY GRADE	Less than others	Same	More than others	Less than others	Same	More than others
65% % below	88 (90)	73 (77)	75 (69)	50 (34)	47 (44)	39 (22)
66% & above	12 (12)	27 (29)	25 (23)	50 (34)	53 (50)	61 (34)

x^2 is not significant

SOCIOLOGY GRADE BY STUDENTS' PARTICIPATION IN TUTORIALS, CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

Table 4.20

STUDENTS PARTICIPATION IN TUTORIALS

MALE — FEMALE

SOCIOLOGY GRADE	Less than others	Same	More than others	Less than others	Same	More than others
65% & below	80 (41)	55 (48)	52 (42)	53 (41)	38 (24)	32 (9)
66& & above	20 (10)	45 (39)	47 (38)	47 (36)	63(40)	68 (19)

x^2 is not significant

SOCIOLOGY GRADE BY STUDENTS' PARTICIPATION IN TUTORIALS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Table 4.21

HOW STUDENTS LEARNED IN TUTORIALS

MALE

SOCIOLOGY GRADE	Mainly from own questions	Equally from own & others questions	Mainly from others questions
65% & below	56 (15)	54 (59)	69 (54)
66% & above	44 (12)	46 (50)	31 (24)
	FEMALE		
65% & below	36 (5)	40 (29)	49 (40)
66% & above	64 (9)	60 (43)	51 (42)

x^2 is not significant

SOCIOLOGY GRADE BY HOW STUDENTS LEARNED IN TUTORIALS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Some of the percentage differences between the poor and the good students are very small and the suggestion that the less able students and the men need to be more active in learning can only be very tentative. Such a conclusion seems to indicate that women and the more able students will learn regardless of how the student role is defined, whereas other students need to be able to discuss the subject matter and require a participatory role.

The need for a less active role among women students is perhaps also reflected in the answers to the question of whether students discuss sociology outside the lectures and tutorials. For the men,

the discussion of the subject with other people could be an important variable for the percentage obtaining 66% and above in sociology. For the women, however, such discussion does not enhance their final grade. (see Table 4.22)

Table 4.22

DO STUDENTS DISCUSS THE COURSE WITH OTHER PEOPLE

	MALE			FEMALE		
SOCIOLOGY GRADE	With other students	With members of outside community	No	With other students	With members of outside community	No
65% & below	57 (70)	55 (7)	71 (35)	45 (44)	44 (8)	42 (13)
66% & above	43 (52)	45 (5)	29 (14)	55 (53)	56 (10)	58 (18)

x^2 is not significant

SOCIOLOGY GRADE BY DISCUSSION OF THE COURSE, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES

Tabel 4.23

HIGH SCHOOL GRADE

	65% & below			66% & above		
	PRE-REGISTERED IN SOCIOLOGY					
SOCIOLOGY GRADE	In Hons.	Pass or course next yr.	No/maybe course in future	In Hons.	Pass or course next yr.	No/maybe course in future
65% & below	60 (6)	71 (54)	68 (91)	11 (2)	48 (44)	53 (76)
66% & above	40 (4)	29 (21)	32 (43)	89 (16)	52 (47)	47 (62)

x^2 is not significant

SOCIOLOGY GRADE BY PRE-REGISTRATION IN SOCIOLOGY, CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

Table 4.24

PRE-REGISTRATION IN SOCIOLOGY

	MALE			FEMALE		
SOCIOLOGY GRADE	In Hons.	Pass or course next yr.	No/maybe course in future	In Hons.	Pass or course next yr.	No/maybe course in future
65% & below	71 (5)	59 (34)	61 (94)	7 (1)	50 (37)	48 (37)
66% & above	29 (2)	41 (24)	39 (56)	93 (14)	50 (37)	52 (40)

x^2 is not significant

SOCIOLOGY GRADE BY PRE-REGISTRATION IN SOCIOLOGY, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Information on pre-registration in Sociology was also included. Although Tables 4.23 and 4.24 are somewhat suspect because of the small number of cases in some of the categories, it is perhaps worth noting that men who pre-register in sociology are not among the top achievers, and that a considerable number of students do in fact fail to reach the required minimum level for entrance into Honours Sociology.

Although it was thought that student success or failure would be effected by the actual university situation, it was also suggested that personal characteristics of the students would be important. It appears, however, that generally speaking the demographic variables are not as important in terms of success within the university as they are within the high school situation.[3] On the whole, social class factors do not seem to be related to academic sucess, the one exception being the educational level of students' fathers.

Table 4.25

HIGH SCHOOL GRADE

65% and below

FATHER'S EDUCATIONAL LEVEL

SOCIOLOGY GRADE	Part. High School	High School Grad. part. Coll.	Coll Grad. & above
65% & below	71 (90)	62 (37)	67 (23)
66% & above	29 (36)	38 (23)	33 (10)
	66% and above		
65% & below	49 (63)	49 (34)	37 (15)
66% & above	51 (65)	51 (36)	63 (26)

x^2 is not significant

SOCIOLOGY GRADE BY FATHER'S EDUCATIONAL LEVEL, CONTROLLING FOR HIGH SCHOOL GRADE, IN PERCENTAGES.

The percentages of Table 4.25, however, are not very consistent although it seems to be the case that student's achievement levels increase if the fathers' educational level is above that of partial high school, and this is particularly true for the women students.

(See Table 4.26)

Table 4.26

MALE

FATHER'S EDUCATIONAL LEVEL

SOCIOLOGY GRADE	Part. High School	High School Grad. Part. Coll.	Coll. Grad. & above
65% & below	60 (76)	63 (38)	60 (15)
66% & above	40 (50)	37 (22)	40 (10)
	FEMALE		
65% & below	51 (45)	31 (13)	39 (13)
66% & above	49 (43)	69 (29)	61 (20)

x^2 is not significant

SOCIOLOGY GRADE BY FATHER'S EDUCATIONAL LEVEL, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

A further discrepancy between male and female students is in relation to their ethnicity and academic success. Canadian women are 20% more likely to have 66% and above in sociology than are Canadian men. This is perhaps even more surprising when it is seen that for the other ethnic groups sex differences are not significant. (See Table 4.27)

Similarly, differences between male and female students can be observed in relation to their religion and age. The small numbers of cases in some categories may again distort the information, but the

evidence here would suggest that the differences in achievement between Roman Catholic and Protestant men and women are worthy of closer investigation.

Table 4.27

ETHNICITY OF STUDENTS

	MALE			FEMALE		
SOCIOLOGY GRADE	Canadian	British	Other	Canadian	British	Other
65% & below	62 (88)	61 (22)	52 (22)	40 (52)	61 (11)	52 (11)
66% & above	38 (54)	39 (14)	48 (20)	60 (79)	39 (7)	48 (10)
	Since $x^2 > 13.815$ ($x^2=33.8$) the results are significant at the .001 level.			x^2 is not significant.		

SOCIOLOGY GRADE BY ETHNICITY OF STUDENTS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Table 4.28

RELIGIOUS AFFILIATION

	MALE			FEMALE		
SOCIOLOGY GRADE	None	R.C.	Prot.	None	R.C.	Prot.
65% & below	41 (7)	58 (26)	64 (81)	40 (6)	53 (8)	43 (55)
66% & above	59 (10)	42 (19)	36 (45)	60 (11)	47 (7)	57 (74)
	x^2 is not significant					

SOCIOLOGY GRADE BY RELIGIOUS AFFILIATION OF STUDENTS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Equally notable is that those that have been classified as 'other' (mostly those with no religious affiliation) seem to succeed most. In regard to age, the older male students are the ones who perform best while the reverse is true in the case of women. (See Table 4.29)

Table 4.29

	AGE					
	MALE			FEMALE		
SOCIOLOGY GRADE	17/18/ 19 yrs.	20/21/ 22 yrs.	23 & over	17/18/ 19 yrs.	20/21/ 22 yrs.	23 & over
65% & below	61 (70)	55 (54)	50 (13)	42 (58)	50 (16)	60 (3)
66% & above	39 (44)	45 (36)	50 (13)	58 (81)	50 (16)	40 (2)

x^2 is not significant

SOCIOLOGY GRADE BY AGE OF STUDENTS, CONTROLLING FOR SEX OF STUDENTS, IN PERCENTAGES.

Perhaps the only consistent piece of information that emerges from these results is that the difference between male and female students seem to be crucial to explaining academic success. Some tentative explanations for these results will be presented in the next chapter and some attempt will be made to look at the wider implications in terms of the contest educational system.

FOOTNOTES FOR CHAPTER IV

1. See Henry E. Klugh and Robert Bierley, "The School and College Ability Test and High School Grades as Predictors of College Achievement", Educational and Psychological Measurement, 19 (1959), pp. 625-626, for a discussion of the relationship between high school grades and college grades.

2. Robert P. Abelson, "Sex Differences in Predictability of College Grades", Educational and Psychological Measurement, 12(1952), pp. 638-644; Robert A. Jackson, "Prediction of the Academic Success of College Freshmen", Journal of Educational Psychology, 46(1955), pp. 296-301.

3. Natalie Rogoff, "Local Social Structure and Educational Selection", in Education, Economy and Society, ed. by A. H. Halsey et al, The Free Press of Glencoe Inc., 1961, pp. 241-251.

CHAPTER V

CONCLUSION

Since the study of the sociology class was an exploratory one, it was not possible to investigate many of the issues in sufficient depth. Because of this any of the conclusions drawn from this survey are very tentative indeed, and any reasons given for the findings presented in Chapter IV are extremely speculative in nature. Despite the speculative nature, however, it is hoped that these suggestions will be of some benefit in perhaps indicating areas which are important to the understanding of academic success.

From the data on this course, the first question seems to be why are women better academic performers than men.[1] One of the consistent findings is that there are considerable differences in performance between men and women when sex is related to widely different variables, e.g. ethnicity, high school grade or attendance at lectures. When the survey was set up, it was not expected that sex would be such a crucial variable, but that it is, is constantly seen. Women students come to university with better academic records than men and manage to retain their higher standing to a greater degree than men do, (see Tables 4.2, 4.3, 4.6). As only one university course was investigated, it is possible that this is an atypical course. Davis[2] notes, for instance, that the social sciences tend to attract students who want

to work with people, and that such subjects have a larger proportion than usual of female students in the freshman year. As students realize, however, that the social sciences are not particularly people - or service-oriented those who chose the subject because of these factors will move out of the social sciences, and students who value originality and creativity are likely to be attracted to the area.[3] Thus by the time of graduation, the social sciences are likely to be less female dominated and men will perform at as high rates of success as the women. Davis suggests that being male is negatively related to freshman choice of social science subjects but positively related to retention in these courses and recruitment to them later in the men's academic career.[4]

A further factor operating at McMaster is that for many of the students, and particularly those of the male dominated faculties e.g. engineering, the first year sociology course was taken simply because it was a course requirement. For these students interest in sociology was possibly low and may help to explain why male students, who had high high school grades, did not continue to perform at such a high level, (see Table 4.3). Women, on the other hand may have been attracted to sociology because they thought that it was service-oriented and were therefore highly motivated. This view does imply that even when the women discovered that sociology was not service-oriented, they had sufficiently high motivation to maintain a high standing in the course.

It may be possible, therefore, to explain the variations in performance between men and women in terms of the perceived direction the course would take. In such a view this particular course would be regarded as atypical for in other subjects it would be assumed that the sex difference in academic performance would not be important or that it would work in the opposite direction. In the latter case it could be hypothesised that men would be the better performers. In his study Davis does not give adequate explanation of why female students would be attracted to service-oriented subjects, except by a form of implicit assumption about the female role in society. It is then, particularly interesting to note from Table 4.11, that female students in sociology will perform better than men, more or less regardless of their intended major. Of course, it could be suggested that no matter what subject the female student majors in she is aiming for a service-oriented career and thus views all subjects from this perspective. If this is the case then the success of women in this course is simply an indication of what will be found in other courses.

It seems possible that a further explanation for the academic differences between male and female students may lie in the differing expectations for the two categories of students. In so far as a student's level of achievement depends not only on factors such as I.Q. but also on socio-psychological variables such as achievement motivation[5] then it may be that the two sexes are responding to different levels of expectations and needs. A student's level of achievement is likely to be

effected by what he perceives others expecting of him[6] and as universities tend to be predominantly male, female students who attend university may be expected to perform very well in order to justify their bearing in a position not traditionally associated with the female sex. Because of this only the more able female students probably go on to university, whereas the male student population will tend to include wider ranges of ability and motivation as they are more likely to be pressured to seek higher education in order to establish a future career. This last aspect is probably not considered as important for female students as the attitude still tends to prevail that it can be a waste of time educating women as they get married and do not then 'use' their education. Women who do go to university, therefore, have to justify their existence and one way of doing this is to perform at a high level.

Further evidence for these ideas may also be pointed out. Older male students for example, tend to achieve better results than the younger male students, whereas the opposite is the case for the women, (see Table 4.29). This may be an indication that women have to perform well at their first attempt but that the men will be encouraged to stay on at university for further attempts if they do not succeed at their first try. Particularly for the Canadian students it could be suggested that there are different expectation patterns for the academic performance of men and women, (see Table 4.27). Presumably, the Canadian students are responding to some norm held by people inside and outside the university as well as by themselves, which the other ethnic groups,

maybe because of their recent arrival here, do not share. It is, perhaps, reasonable to assume that the student's own expectation of his performance will have been shaped before his arrival at university, but it would be relevant to know whether the university has different expectations of its students. Further, does it differentiate for instance, between male and female students simply in terms of their sex or do the perceived ethnic backgrounds of the students complicate the expectations even more. If such ideas of the expectation patterns are important then it could be assumed that these are crucial to the role the student plays in the university.

If the suggestion that women learn more than men in the lectures can be upheld, then it may be necessary to indicate that a relatively passive role in the learning situation is most beneficial. This may again point to the socialization processes and expectation patterns of the students since women are usually expected to play a less dominant role than men in most spheres of society. If this is the case it seems to indicate that men may be handicapped in the university situation because the role that is expected of them and the role by which they may learn most, is one to which they have not been adequately trained. It is not clear whether those who maintain a passive role will succeed best or whether this is an actual constraint which the university places on its students. In either case, however, it would appear that women will find it easier to meet the requirements. Evidence from questions on the tutorials indicates that while all students will learn more if they

participate actively, such a situation probably helps the male students most, (see Table 4.19 and 4.20).

While it is not possible to draw very definite conclusions from the study of one course, it is possible to look at some tentative conclusions about the relationship between the university and a contest type of educational system.[7] The very nature of such a system is to differentiate people, by such means as examinations, and to award the 'prize' to those who survive the contest. The whole assumption is, of course, that the students are competing on an equal footing, and that the educational system is open to anyone who has the relevant abilities. It is these basic assumptions which can be questioned on the basis of the information from the sociology class. There has been considerable evidence to show that higher education is the stronghold of the middle class, to the exclusion of people from the lower economic groups,[8] and the evidence from this study tends to further support this idea. Further biasing of the students at university is seen in the fact that more male than female students are at university. The social class bias and the sex bias evident in this class at McMaster may lead to the conclusion that these types of people do not have the abilities necessary for academic work. We have no evidence as yet, however, to indicate that intelligence is not normally distributed throughout the population, and with regards to the question of the sex bias the available studies indicate that females are higher achievers than males.

Females are noted for their high levels of performance at high school and for those who continue on to university, the same high levels of achievement seems to be maintained.[9]

The issues discussed here suggest that there are factors at work which will discourage certain sections of the potentially eligible population from seeking higher education. In the case of the social class phenomenon, the important factor may well be the cost of such education, whereas for the women the issue may be one of role prescription. Obviously in some cases these factors will overlap and this would lead to the speculation that the group with the least representation at university would be lower class females. Again the lack of lower class students cannot be attributed solely to economic factors but must involve the notion of achievement motivation and relevant expectation states, both the student's own expectations and those of the community and people with whom he is in contact. Such factors would tend to negate the idea that the educational system is a contest system since there is not equal opportunity for all potentially able people to attend the institutions of higher education.

Turner's theory of the organizing folk-norm of social mobility leading in this instance perhaps to a contest system of education would seem to operate in such a way as to exclude the majority of women from being eligible for social mobility through education by maintaining expectation patterns for women which run contrary to the

public and idealized norm. To the extent that women will respond to and accept these expectation structures then it could be postulated that the women will tend to eliminate themselves from the contest by maintaining that they do not want to go to university. However, in explaining why women are so successful if they do attend university, it may be necessary to argue that the educational institutions themselves, either consciously or unconsciously, do not permit equal opportunity for all students but in fact work so as to favour one group of students - in this case the women. Should this be the case then more emphasis will have to be placed on those factors which seem to prevent the educational system from being the ideal that it is supposed to be, both by preventing eligible students from entering the universities and by treating students differently once they are there.

It would seem that there is serious doubt as to whether the Canadian educational system can in fact be put in the category Turner labels contest system. Although he is writing in terms of ideal types this particular system may be more closely allied to a contest type than a sponsored one, but such a conclusion is not justified until there is more comparison between the two systems. Since only one course at one university was studied it is unreliable to generalize to that university or to the wider educational system. In terms of the theoretical issues Turner raises further research must be concerned with what system is operating in Canada, and why it may not fit all

the characteristics he lists for the particular type. Until comparisons are available with the two systems it cannot be shown that the distinctions made by Turner are viable ones, and if they are, whether the reasons he suggests for the differences are the crucial ones.

FOOTNOTES FOR CHAPTER V

1. Differences between the sexes in terms of academic success have been noted, but an adequate explanation of the phenomenon is lacking. See for example, R. P. Abelson, "Sex Differences in Predictability of College Grades", Educational and Psychological Measurement, 12(1952), p. 638-644; R. A. Jackson, "Prediction of the Academic Success to College Freshmen", Journal of Educational Psychology, 46(1955), pp. 296-301.
2. J. A. Davis, Undergraduate Career Decisions, Aldine Publishing Co., Chicago, 1956.
3. Ibid., p. 61.
4. Ibid., p. 116.
5. David E. Lavin, The Prediction of Academic Performance, Science Editions, John Wiley and Sons Inc., New York, N.Y., 1967, pp. 78-79.
6. R. E. Herriott, "Some Social Determinants of Educational Aspiration", Harvard Educational Review, 33(1963),pp. 157-177.
7. R. Turner, "Modes of Social Ascent through Education: Sponsored and Contest Mobility", in Education, Economy and Society, edited by A. H. Halsey et al., New York, N.Y. The Free Press of Glencoe Inc., 1961, pp. 121-139.
8. David E. Lavin, op. cit., pp. 123-127.
9. See footnote 1 above.

APPENDIX

The information on the 1a6 Sociology class at McMaster University was collected by means of questionnaires during the 1966-67 academic year. The first questionnaire was administered on 9th December 1966 and in order to include many of those students who were not at the lecture when the questionnaire was filled in, questionnaires were issued, (to those students who had not responded) through the tutorials during the first week of the spring term 1967. This retake of the first questionnaire was the same as the one issued on the 9th December except that students were not asked to compare their grade in Sociology 1a6 with their grade in other subjects (question 13, page 7). All other questions were, however, left in to be answered although it was somewhat more difficult for students to answer some of the questions now that they knew their Christmas grade for instance. A preliminary analysis of the first questionnaire and the retake indicated that there were no great differences in the student responses and therefore the two were treated together in the later analysis. The first questionnaire contained several open ended questions and these were later coded and put onto the mark sense cards on which the students had marked their answers.

The second questionnaire was issued during the last Sociology 1a6 lecture of the spring term. All questions were precoded and again the students put their answers straight onto mark sense cards. As

the students did not at this time know their summer grade in Sociology, this grade was added later from the official list of marks. There were 605 cases that could be used in the study and all analysis was done by computer.

On questionnaire 1 columns 9-10 (age) originally an open ended question, were recoded as follows:

0 -- no response
1 -- 17, 18, 19 years
2 -- 20, 21, 22 years
3 -- 23 years and over

Other questions which were open ended on questionnaire 1 were coded as follows:

Question	Page	Code Col.	Code
22(a)	4	34 - 35	DISADVANTAGES

Recoded See Page	First Code	
	00	no response
1	01	not much opportunity to ask questions: too much noise
1	02	not much opportunity to ask questions
1	03	too much noise
2	04	technical difficulties of TV lack of focus on small print e.g. sound not on at first
3	05	lecturer -- fails to repeat question asked in live lecture.

Recoded See Page	First Code	
8	06	classes are very large
7	07	combination of 03:04:05:06
4	08	" " 03:04
8	09	seats are too comfortable -- too like a movie
8	10	combination of 03:09
1	11	attention wanders easily
3	12	lecturer not influenced by student response
6	13	combination of 01:12
1	14	impersonal
6	15	combination of 01:05
1	16	combination of 02:14
4	17	combination of 02:04
1	18	combination of 02:11:12
1	19	combination of 14:11
1	20	combination of 01:02:14
8	21	no disadvantages
1	22	combination of 01:14
3	23	graduate student in charge often answers the question himself while professor goes on and you miss one or the other
1	24	combination of 01:23:11

Recoded See Page	First Code	
7	25	combination of 05:04:14
1	26	combination of 14:11:03
2	27	harder to see
1	28	combination of 27:14:03
8	29	unspecified disadvantages
3	30	personal characteristics of lecturer
6	31	combination of 30:03
1	32	lack of control - e.g. noise, smoking
1	33	combination of 02:14:11
7	34	combination of 02:04:05
6	35	combination of 30:05
1	36	combination of 32:11
4	37	combination of 01:04
1	38	combination of 03:14
1	39	combination of 02:11
1	40	combination of 03:11
6	41	combination of 02:12
1	42	combination of 32:02
6	43	combination of 05:32
5	44	combination of 02:30
4	45	combination of 04:11
6	46	combination of 02:05
8	47	limits the material presented

Recoded See Page	First Code	
4	48	combination of 04:11:32
6	49	combination 03:05
4	50	combination of 03:04:14
8	51	lectures less effective
8	52	combination of 51:03
6	63	combination of 05:11
1	54	combination of 14:32
1	55	combination of 03:32
4	56	combination of 04:32
6	57	combination of 02:05:32
4	58	combination of 02:04:32
4	59	combination of 01:04:32
4	60	combination of 03:04:11
6	61	combination of 30:14:32
5	62	combination of 04:05
6	63	combination of 03:12
2	64	too dark - strain eyes taking notes
4	65	combination of 03:64
6	66	combination of 01:05:11
4	67	combination of 02:04:14

Question	Page	Code Col.	Code
22(b)	4	36 - 37	ADVANTAGES

Recoded See page	First Code	
	00	no response
2	01	efficiency i.e. # of people taught: room not overcrowded
1	02	visual advantages
1	03	audio advantages
3	04	combination of 01:02
1	05	combination of 02:03
9	06	discourages lot of clods from asking stupid questions
2	07	lectures given by same person therefore all get same material
4	08	have a choice of rooms
5	09	combination of 02:07:08
3	10	combination of 02:07
9	11	no advantages
4	12	more relaxed atmosphere e.g. can leave
7	13	combination of 05:12
6	14	combination of 12:01
2	15	combination of 01:07
6	16	combination of 01:08
3	17	combination of 01:05

Recoded See page	First Code	
9	18	combination of 06:12
9	19	combination of 06:01
9	20	you can smoke
2	21	advantages for the staff: flexibility and potentiality of the T.V. techniques e.g. pre-recording advantages
4	23	have to depend on yourself not the teacher
7	24	combination of 05:23
7	25	combination of 03:12
3	26	combination of 01:03
4	27	prefers impersonality
7	28	combination of 05:27
4	29	building (Arts II) much nearer
7	30	combination of 02:29
3	31	combination of 21:02
9	32	something different unusual
9	33	combination of 06:05
5	34	combination of 01:05:12
2	35	combination of 01:21
4	36	combination of 12:20
7	37	combination of 02:12

Recoded See page	First Code	
5	38	combination of 01:02:12:21
9	39	easier to pay attention
7	40	combination of 05:29
6	41	combination of 01:08
2	42	combination of 07:21
5	43	combination of 01:02:06:08:20:29
6	44	combination of 01:29
9	45	easier to concentrate
9	46	cuts down on desire to watch T.V. at home
9	47	combination of 46:05:12
2	48	combination of 01:20
9	49	combination of 11:21

Question	Page	Code Col.	Code
10e	6	38	Mark deserved at Christmas
			0 - no response
			1 - less than 50%
			2 - 50-59%
			3 - 60-65%
			4 - 66-70%
			5 - 71-75%
			6 - 76-80%
			7 - more than 80%
			8 - other meaningful response
			9 - don't know

Question	Page	Code Col.	Code
9c	6	39	(Positive) Reasons Re Participation in Tutorials
			0 - no response, don't know answered column 40.
		Sociology	1 - some positive comment regarding the tutorial leaders.
		"	2 - some positive comment regarding respondents perception of tutorial group discussion groups, etc.
		"	3 - some positive comment regarding respondents own comprehension of the subject matter
		"	4 - some positive comment regarding respondent's interest in Sociology
		"	5 - some positive comment regarding respondent's ability, ease, etc. in participating in group situations

Question	Page	Code Col.	Code
		Sociology	6 - some positive comment regarding tutorial group as a teaching technique i.e. feel one learns more through participation
		"	7 - some positive comment regarding respondent's preparation for tutorial groups
		"	8 - some combination of the above categories
		"	9 - any other meaningful response
9c	6	40	<u>(Negative) Reasons Re Participation in Tutorials</u>
			0 - no response, don't know, answered column 39
			1 - negative comment regarding the tutorial leaders
			2 - some negative comment regarding respondents perception of tutorial group

Question	Page	Code Col.	Code
			3 - some negative comment regarding respondent's own comprehension of the subject matter
			4 - some negative comment regarding respondent's interest in Sociology
			5 - some negative comment regarding respondent's ability, ease, etc. in participating in group situations
			6 - some negative comments regarding tutorial group as a teaching technique -- feels we learn more by listening, etc.
			7 - some negative comment regarding respondent's preparation for tutorial groups
			8 - some combination of the above categories

Question	Page	Code Col.	Code
			9 - any other meaningful response
10d	6	41	Reason for grade selection at Christmas Negative (Code First response) 0 - no response, don't know or answered in col. 42 1 - indicating lack of effort or preparation 2 - indicates lack of interest in subject (i.e. course is dry, etc.) 3 - indicates lack of comprehension (i.e. don't know how to study Sociology or what is expected) 4 - negative comment about T.V. as teaching technique 5 - expectation based on former results i.e. high school term work

Question	Page	Code Col.	Code
			6 - negative comment about tutorial groups as a teaching technique/or negative comment regarding tutorial leaders (finds it difficult to relate tutorials with lectures
			7 - indicates low tutorial attendance or lecture attendance
			8 - sociology is an elective: the work load (i.e. outside readings) is too heavy for amount of time available
			9 - other meaningful response
10d	6	42	Reasons for grade selection at Christmas
			Positive (Code First response)
			0 - no response, don't know or answered in col. 41

Question	Page	Code Col.	Code
10d	6	42	1 - indicates preparation: effort 2 - indicates interest in Sociology 3 - indicates comprehension of subject matter 4 - positive comment about T.V. as a teaching technique 5 - expectation based on former results, i.e. high school, term work 6 - positive comment about tutorial group as a teaching technique/or indicates positive comment regarding tutorial leader 7 - indicates high lecture: tutorial attendance 8 - sociology is an elective/ or work load is not too heavy for the amount of time 9 - other meaningful response

Question	Page	Code Col	Code
11	6	43	Reasons for Probability of taking or not taking another course in Sociology 0 - no response 1 - interest in subject 2 - comprehension of subject 3 - achievement 4 - future expectations (monetary market value) 5 - future expectations with concern for humanity 6 - sociology (readings discussions) applicable to life situations 7 - some combination of the above 8 - other meaningful response 9 - don't know, undecided depends on results
14q	7	44	Positive reasons for satisfaction level regarding tutorial leaders marking exams (Code First response) 0 - no response

Question	Page	Code Col.	Code
14q	7	44	1 - will assign fairer marks - knows us and the areas he has stressed 2 - more personal 3 - has fewer to mark than if 1 or 2 people did them all 4 - professors would expect too much 5 - no real alternative 6 - why not - he is qualified and competent 7 - any combination
14g	7	45	Negative reasons for satisfaction level regarding tutorial leaders marking exam. (Code First response) 1 - professor knows more, no bias, etc. 2 - tutors will be more biased.

Question	Page	Code Col	Code
14g	7	45	3 - need a uniform marking scheme then doesn't matter 4 - immaterial who marks it 5 - prefer some other system e.g. chain marking outside marker objective and marking 6 - tutorial leader not sufficiently competent 7 - differences in marking between leaders
14h	7	46	Do students discuss sociology with other people. 0 - no response 1 - Yes, with other class members 2 - Yes, with other students 3 - Yes, with other members of the community 4 - 1 & 2

Question	Page	Code Col.	Code
14h	7	46	5 - 2 & 3
			6 - 1 & 3
			7 - all
			8 - no discussion
			9 - other meaningful response

Questionnaire 1

Recoding of question 22(a), p. 4, code columns 34-35.

Disadvantages of T.V. lectures

0 - no response

1 - too much noise and lack of control, no opportunity to ask questions, impersonal, attention wanders easily

2 - technical factors e.g. camera doesn't stay on the blackboard long enough so students can copy information

3 - problems with the lecturer himself e.g. talks too quickly

4 - combination of codes 01 and 02

5 - combination of codes 02 and 03

6 - combination of codes 01 and 03

7 - combination of codes 01, 02 and 03

8 - any other meaningful response

Recoding of question 22(b), p. 4, code columns 36-37

Advantages of T.V. lectures

0 - no response

1 - audio-visual advantages

2 - the efficiency of the system e.g. more students can take the course

3 - combination of codes 01 and 02

4 - personal advantages e.g. can smoke, more relaxed

5 - combination of 01, 02 and 04

6 - combination of 02 and 04

7 - combination of 04 and 01

8 - any other meaningful response

Questionnaire 2

Those questions which had used double columns were recoded to form single column answers. Question on the building the students are in prior to the Sociology 1a6 lecture, p.3, card column 61.

0 - no response

1 - Arts I, Arts II, Commons Building, Gilmour Hall, University Hall, Temporary Building e.g. Psychology

2 - Divinity College, Mills Memorial Library, Wentworth House

3 - Drill Hall, General Sciences Building, Hamilton Hall, Physical Sciences Building

4 - Engineering Building, Nuclear Building

5 - Residence Halls

6 - Off campus building - walk to campus, off campus building - bus to campus, off campus building - commute by car

7 - Physical Education Building

8 - Other building on campus

Questionnaire 2

Question on course registered in, p. 4, card column 68.

0 - no response

1 - Social sciences, including psychology

2 - Physical sciences

3 - Physical education

4 - Engineering and Metallurgy

5 - Nursing

6 - Commerce

7 - Humanities, including history

9 - Any combination of the above categories

Mark on the summer exam in Sociology, p. 6, card column 72

1 - 65% and below

2 - 66% and above

In order to facilitate the analysis of the results, many of the responses were recoded. The final codes were as follows:

Card Column	New Code	Old Code (as on the questionnaire).
9 see p.	1	1.2
	2	3. 4. 5.
	3	6. 7. 8
11	1	1.
	2	2.
12	1	1.
	2	2.
	3	3. 4. 5.
13	1	1.
	2	2.
	3	3.

Card Column	New Code	Old Code (as on the questionnaire).
14	1	1.
	2	2. 3.
	3	4.
	4	5. 6.
15	1	1. 2.
	2	3. 4. 5.
	3	6. 7. 8. 9.
16	0	2. 9.
	1	8.
	2	1.
	3	3. 4. 5. 6. 7.
17	1	1.
	2	2.
	3	3. 4. 5.
18	1	1.
	2	2. 3. 4. 5.
19	1	1.
	2	2.
20	1	1. 2. 3.
	2	4.
21	1	1. 2.
	2	3.
	3	4

Card Column	New Code	Old Code (as on the questionnaire)
22	1	1. 2.
	2	3.
	3	4. 5.
23	1	1. 5.
	2	2. 4.
	3	3.
24	1	1. 2.
	2	3.
	3	4. 5.
25	1	1. 2. 3.
	2	4.
	3	5.
26	1	1. 2.
	2	3.
	3	4. 5.
27	1	1. 2.
	2	3.
	3	4. 5.
28	1	1. 2.
	2	3.
	3	4. 5.
29	1	1.
	2	2. 3.
	3	4. 5. 6. 7.

Card Column	New Code	Old Code (as on the questionnaire)
30	1	1. 2.
	2	3.
	3	4. 5.
31	1	1. 2.
	2	3. 4.
	3	5. 6.
32	1	1. 2.
	2	3.
	3	4. 5.
33	1	1. 2.
	2	3.
	3	4. 5.

For initial responses and codes to questions in card columns 34 - 46 see page of the Appendix.

These were later recoded as follows:

Card Column	New Code	Old Code
34 see p.	1	1, 2, 4.
	2	3, 5, 6, 7, 8.
36	1	1, 2, 3, 8.
	2	4, 5, 6, 7.
38	1	1
	2	2, 3.
	3	4, 5, 6, 7.
	4	8, 9.
39	1	1, 2, 5, 6.
	2	3, 4, 7.
	3	8, 9.
40	1	1, 2, 5, 6.
	2	3, 4, 7.
	3	8, 9.
41	1	1, 2, 3.
	2	4, 6, 7.
	3	5, 8, 9.
42	1	1, 2, 3.
	2	4, 6, 8.
	3	5, 7, 9.

Card Column	New Code	Old Code
43 see p.	1	1, 2
	2	3, 4, 5, 6.
	3	7, 8, 9.
44	1	1, 2.
	2	3, 4, 5, 6, 7.
45	1	1, 2, 6, 7.
	2	3, 4, 5.
46	1	1, 2, 4, 6, 7.
	2	3, 5.
	3	8.
49	1	1.
	2	2.
	3	3, 4, 5, 6.
50	1	1, 2, 3.
	2	4, 5, 6, 7.
	3	8, 9.
51	1	1. 4. 5. 7. 9.
	2	2. 3. 6. 8.
52	1	1. 2. 3. 4. 6. 7. 8.
	2	5.
	3	9.
53	1	1.
	2	3. 5.
	3	2. 4. 6. 7. 8. 9.

Card Column	New Code	Old Code
54 see p.	1	1. 3.
	2	4
	3	2. 5. 6. 7. 8. 9.
55	1	1. 2. 3.
	2	4. 5. 6.
	3	7. 8. 9.
56	1	1. 2. 3.
	2	4. 5. 6. 7. 8.
	3	9.
57	1	1. 2.
	2	3. 4.
	3	5. 6.
58	1	1. 2.
	2	3. 4.
	3	5. 6.
59	1	1. 2.
	2	3. 4. 5.
	3	6. 7. 8. 9.
60	1	1.
	2	2. 3.
	3	4.
61	1	3. 4.
	2	1. 2. 5. 7. 8.
	3	6.

Card Column	New Code	Old Code
63 see p.	1	1
	2	2.
64	1	1. 2.
	2	3.
	3	4. 5.
65	1	1. 5.
	2	2. 4.
	3	3.
66	1	1. 2.
	2	3.
	3	4. 5.
67	1	1.
	2	2. 3.
	3	4. 5.
68	1	1.
	2	2. 4. 5.
	3	3. 6. 7. 8
70	1	1. 2. 3. 4. 5.
	2	6. 7. 8. 9.
71	1	1.
	2	2.

Card Column	New Code	Old Code
72 see p.	1	65% & below
	2	66% & above

Unless otherwise stated 0 was used for no response.

SOCIOLOGY 1a6

MR. R. SILVERS

Television Survey Questionnaire Friday, December 9, 1966

NAME (Please Print) _____

(Signature) _____

Student Number _____ MARK THIS NUMBER IN THE COLUMNS SO DESIGNATED ON YOUR ANSWER CARDS.

INSTRUCTIONS

Before beginning to answer the questions, please read these instructions carefully.

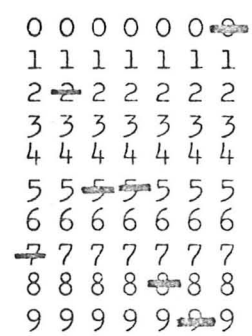
i. Print your name in pencil on the blank side, along the left edge, of each of your two IBM cards.

ii. Use only the electrographic pencil for marking on the face of the cards. Make all your pencil marks heavy and fill the entire oval. If your pencil breaks, signal for a replacement.

iii. Two answer cards are provided for your answers. Do not fold or bend these cards. Ask for a new card if any of yours are damaged.

iv. Mark your Student Number (the number stamped below your name) in the columns so designated on each card.

e.g., Student Number



If the candidate's examination number were 7255890, he would mark his card as shown.

v. A Column number is assigned to each item, e.g., the first item on the questionnaire is card 1, column 1.

vi. Read each question and its numbered answers. When you have decided which is the best alternative, mark the whole of the corresponding oval space in the appropriate column of the relevant answer card.

Continued on Page 2 . . .

You are to use the back of this question booklet for some of the questions and you may mark the alternatives in it when you are considering them.

vii. Do not enter more than one mark for any question, otherwise it will be INVALID.

viii. You must enter one mark for every question. If you want to change your answer, ERASE your original answer completely. If you are unsure, mark the response that seems to represent your feelings about the item.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

Continued on Page 3 . . .

PLEASE PLACE YOUR NAME AND STUDENT NUMBER

ON THE BACK OF EACH CARD (and on the questionnaire)

CARD COL.	QUESTIONS TO BE ANSWERED BY YOU	Final Column After Recoding and as Referred to in Appendix page
1	Card number - (1)	
2 - 8	Put in your Student Number	
9 - 10	Your age	9 - (10)
11	Sex 1. Male 2. Female	11
12	How long have you been at McMaster? 1. 1 year or less 2. 2 years 3. 3 years 4. 4 years 5. four years or more	12
13	Where do you live? 1. Off campus -- at home 2. Off campus -- not at home 3. Residence Hall	13
14	What is your major area of study? 1. Social Science 2. Humanities 3. Divinity 4. Nursing 5. Natural Science 6. Engineering	14
15	What do you consider your ethnic background to be? 1. Canadian 2. French Canadian 3. Irish 4. British 5. American 6. Italian 7. Slavic 8. Oriental 9. Other	15
16	What is your Religious Affiliation? 1. Roman-Catholic 2. Jewish 3. Anglican 4. United 5. Baptist 6. Presbyterian 7. Lutheran 8. None 9. Other	16

Continued on Page 4 . . .

CARD COL. QUESTIONS TO BE ANSWERED BY YOU

17 How many of your current courses are being taught on television? 17
1. One
2. Two
3. Three
4. Four
5. Five

18 Before this year, had you ever taken a course of this type (like Sociology 1a6) using closed-circuit television? 18
1. No
2. Yes, at McMaster
3. Yes, at another university
4. Yes, in high school
5. Yes, some other institution such as technical school or trade school

19 Relative to the Introductory Course in Sociology, do you prefer to attend: 19
1. The "live" lecture
2. The closed-circuit "television" lecture

20 How often have you attended the lectures during this term? 20
1. About 25%, or less, of the time
2. About 50% of the time
3. About 75% of the time
4. 100% of the time

21 When you attended lectures, how often this term did you go to the room of your preference? 21
1. About 25%, or less, of the time
2. About 50% of the time
3. About 75% of the time
4. 100% of the time

22 Compared to large lecture classes would you say that closed-circuit television is: 21
1. Much worse
2. Worse
3. About the same
4. Better
5. Much better

(a) List on the back of this questionnaire any disadvantages of this type of teaching technique as YOU see it. 34(35)

(b) List on the back of this questionnaire any advantages of this type of teaching technique as YOU see it. 36-(37)

Continued on Page 5 . . .

CARD COL. QUESTIONS TO BE ANSWERED BY YOU

23 In which of the following situations do you think you learn the most Sociology? 23

1. The television lectures
2. The tutorial discussions
3. Private study and reading on your own
4. Discussions with other students
5. The "live" lectures

24 Do you feel that you learn more Sociology in large lectures or tutorials? 24

1. Much more in lectures
2. Somewhat more in lectures
3. About the same
4. Not as much in lectures
5. Much less in lectures

25 During the past term, what has been your attendance at tutorials? 25

1. No attendance at tutorials
2. Attended about 25% of the tutorials
3. Attended about 50% of the tutorials
4. Attended about 75% of the tutorials
5. Attended 100% of the tutorials

26 When you attended tutorials, how much did you feel you participated in discussion? 26

1. Much less than others in the tutorial group
2. A little less than others in the tutorial group
3. About the same as others in the tutorial group
4. A little more than others in the tutorial group
5. Much more than others in the tutorial group

27 Relative to learning Sociology in your tutorial group, would you say that you: 27

1. Learned mostly from your own questions
2. Learned more from your own than from other questions
3. Learned about the same from both
4. Learned more from other peoples' questions than your own
5. Learned mostly from other peoples' questions

Continued on Page 6 . . .

FOR THE REST OF THE QUESTIONS, USE THE SECOND CARD* CARD TWO

CARD COL.	QUESTIONS TO BE ANSWERED BY YOU	
1	Card number - (2)	
2 - 8	Put in your Student Number	
9	Are you satisfied with your participation in tutorials?	28
	1. Highly dissatisfied 2. Somewhat dissatisfied 3. Neither satisfied nor dissatisfied 4. Somewhat satisfied 5. Highly satisfied	
	(c) On the back of this questionnaire, give reasons for your answer to the previous question.	39 40
10	What mark do you expect to get on the Christmas Examination? 1. Less than 50% 2. 50% to 59% 3. 60% to 65% 4. 66% to 70% 5. 71% to 75% 6. 76% to 80% 7. More than 80%	29
	(d) On the back of the questionnaire, list, in the order of their significance, reasons for choosing the above grade.	41 42
	(e) Write on the back of the questionnaire the grade you think you most deserve to get on the Christmas exam.	38
11	Would you like to take another course in Sociology? 1. Definitely yes 2. Probably yes 3. Don't know 4. Probably not 5. Definitely not	30
	(f) Give a reason for your answer on the back of the questionnaire.	43
12	At the present time, are you considering majoring in Sociology? 1. Definitely not 2. It is doubtful 3. I am undecided right now 4. It is a possibility 5. Probably yes 6. Definitely yes	31

Continued on Page 7 . . .

CARD COL. QUESTIONS TO BE ANSWERED BY YOU

13 In comparison to your other courses, do you think your grade in Sociology 1a6 will be: 32

1. Much lower
2. Lower
3. About the same
4. Higher
5. Much Higher

14 Are you satisfied with the arrangement of having your tutorial leader mark your essays and examinations and assign your final mark? 33

1. Very satisfied
2. Satisfied
3. Indifferent
4. Dissatisfied
5. Very dissatisfied

(g) Give reasons for your answer to the above question <u>on the back of the questionnaire</u>. 44 45

(h) <u>On the back of the questionnaire</u>, please answer the following: 46

1) Do you discuss any materials from the course (lectures, tutorials, readings) with other persons?
(If your answer is <u>no, please write it on the questionnaire</u>)

2) If you said yes:

(a) write the names of any other members of this class with whom you discuss the materials,

and/or (b) write the names and year and major (e.g. II - Arts) of any other students with whom you discuss the materials,

and/or (c) describe members of the community (e.g. father, minister) with whom you discuss the materials.

<u>THANK YOU FOR YOUR COOPERATION</u>

SOCIOLOGY 1a6 - SECOND QUESTIONNAIRE

Card Column		Card Column after final recoding
1	Card number 3	
2 - 8	Put in your Student Number	
	What is your marital status? 1. Single, don't expect to be married before Fall, 1969 2. Single, expect to be married before Fall, 1969 3. Married, no children 4. Married, expecting a child 5. Married, one or more children 6. Separated, divorced, widowed.	49
10	Which of the following best describes the community which you think of as your home town during High School days? 1. Farm or open country 2. Less than 50,000 population 3. 50,000 to 100,000 population 4. Suburb in a metropolitan area of 100,000 to 250,000 population 5. Central city in a metropolitan area of 100,000 to 250,000 population 6. Suburb in a metropolitan area of 250,000 to 500,000 population 7. Central city in a metropolitan area of 250,000 to 500,000 population 8. Suburb in a metropolitan area of 500,000 or more population 9. Central city in a metropolitan area of 500,000 or more population.	50
11	What is the source of your income while your are studying at college? 1. Your parents or spouse 2. A part-time job 3. A loan 4. Your parents or spouse <u>and</u> a part-time job 5. Your parents or spouse <u>and</u> a loan 6. A part-time job <u>and</u> a loan	51

Card Column		Card Column
11 (cont'd)	7. Your parents or spouse and a part-time job and a loan 8. Other, such as scholarship, your own savings, etc. 9. A combination of 1, 2, or 3 with any other source of income.	
12	If you participate in extra-curricular activity at this University, which one of the following best describes your sphere of participation? 1. Editorial staff of "Silhouette" or other campus publication 2. Musical, dramatic or debating group 3. Business staff of a campus publication 4. Campus group concerned with national or wold issues 5. Inter-collegiate or intramural sports 6. Special interest groups (e.g. Physics Club, Baptist Club, etc.) 7. Student government or residence government 8. Other 9. None.	52
13	Which one of the following purposes or results of college is the most important to you personally? 1. A basic general education and appreciation of ideas 2. Having a variety of experiences while getting a degree 3. Getting the information, training and qualification necessary for a career 4. Developing the ability to get along with different kinds of people	53

Card Column		Card Column
13 (cont'd)	5. More rapid promotion in my chosen career 6. Developing my latent creative mental ability 7. Help develop moral capacities, ethical standards and values 8. Develop knowledge and interest in community and world problems 9. Other.	
14	From the list below select the discipline which you feel has the most practical application for a professional career. 1. Economics 2. Political Science 3. Sociology 4. Psychology 5. Anthropology 6. History 7. Religion 8. Geography 9. Other.	54
15	Which of the following categories best describes the usual occupation of your father? 1. Professional - income from fees e.g., doctor, lawyer 2. Professional - income from salary e.g., teacher, social worker, clergyman 3. Proprietor or manager, e.g., farm owners, managers of financial and industrial enterprises, assistant executives 4. Sales (other than sales manager or administrator) e.g. auto salesman, real estate salesman 5. Clerical e.g., bankclerk, secretary, cashier 6. Skilled worker, e.g., electrician, plumber, watchmaker	55

Card Column		Card Column
15 (cont'd)	7. Semi-skilled worker e.g., assembly line worker, assistant to plumber 8. Service worker e.g., policeman, baker, taxi-driver, bartender 9. Unskilled worker, e.g., janitor, farm and other heavy labour.	
16	Which of the following categories best describes the usual occupation of your mother? (SEE EXAMPLES ABOVE) 1. Professional 2. Proprietor or manager 3. Sales (other than sales manager or administrator) 4. Clerical 5. Skilled worker 6. Semi-skilled worker 7. Service worker 8. Unskilled worker 9. Housewife	56
17	What is your father's educational level? 1. 8th grade or less 2. Part High School 3. High School graduate 4. Part College 5. College graduate 6. Graduate or professional degree beyond Bachelor's degree.	57
18	What is your mother's educational level? 1. 8th grade or less 2. Part High School 3. High School graduate 4. Part college 5. College graduate 6. Graduate or professional degree beyond Bachelor's degree.	58

Card Column		Card Column
19	Which of the following is the income category for your family. Please consider annual income from all sources before taxes. 1. Less than $3,999 per year 2. $4,000 to 6,999 3. $7,000 to 7,999 4. $8,000 to 8,999 5. $9,000 to 9,999 6. $10,000 to 11,999 7. $12,000 to 14,999 8. $15,000 to 19,999 9. $20,000 and more.	59
20	Please indicate which one of the following is true? 1. Both my parents were born in Canada 2. Only my father was an immigrant 3. Only my mother was an immigrant 4. Both of my parents were immigrants.	60
21-22	From the buildings listed below select the one you are usually in immediately prior to the sociology 1a6 lecture. 1. Arts I 2. Arts II 3. Commons Building 4. Divinity College 5. Drill Hall 6. Engineering Building 7. General Sciences Building 8. Gilmour Hall 9. Hamilton Hall 10. Mills Memorial Library 11. Nuclear Building 12. Physical Education Building 13. Physical Sciences Building 14. Temporary Building e.g., psychology 15. University Hall 16. Wentworth House 17. Residence Halls 18. Other buildings on campus.	61 - (62)

Card Column		Card Column
21-22 (cont'd)	19. Off campus building - walk to campus 20. Off campus building - bus to campus 21. Off campus building - commute by car to campus.	
23	Relative to the Introductory Course in Sociology, do you prefer to attend: 1. The "live" lecture 2. The closed-circuit "television" lecture	63
24	Compared to large lecture classes would you say that closed-circuit television is: 1. Much worse 2. Worse 3. About the same 4. Better 5. Much Better	64
25	In which of the following situations do you think you learn the most Sociology? 1. The television lectures 2. The tutorial discussions 3. Private study and reading on your own 4. Discussions with other students 5. The "live" lectures.	65
26	Do you feel that you learn more Sociology in large lectures or tutorials? 1. Much more in lectures 2. Somewhat more in lectures 3. About the same 4. Not as much 5. Much less in lectures.	66
27	Have you pre-registered in pass or honours sociology? 1. Yes - in honours sociology 2. Yes in pass sociology 3. No - but plan to take another course in sociology next year 4. No - but plan to take another course in sociology before graduating 5. No - do not plan to take any more sociology.	67

Card Column		Card Column
1	Card Number 4	
2 - 8	Put in your Student Number	
28-29	What course have you registered in:	68-(69)

1. Anthropology
2. Classics
3. Economics
4. Economics and History
5. Economics and Methematics
6. Economics and Political Science
7. English
8. English and Fine Arts
9. English and French
10. English and German
11. English and History
12. English and Latin
13. English and Philosophy
14. English and Russian
15. English and Spanish
16. Fine Arts and Art History
17. Fine Arts and History and Methods
18. Fine Arts and French
19. Fine Arts and German
20. Fine Arts and Religion
21. French
22. French and German
23. French and Latin
24. French and Political Science
25. French and Russian
26. French and Spanish
27. Geography
28. German
29. German and Russian
30. History
31. History and Philosophy
32. History and Political Science
33. History and Religion
34. Latin and Greek
35. Mathematics and Philosophy
36. Philosophy
37. Philosophy and Political Science
38. Philosophy and Religion
39. Political Science
40. Political Science and Religion
41. Political Science and Russian

Card Column		Card Column
28 - 29 (cont'd)	42. Psychology 43. Religion 44. Russian and Spanish 45. Sociology 46. Sociology and others 47. Commerce 48. Music 49. Applied Mathematics and Theoretical Physics 50. Biochemistry 51. Biology 52. Chemistry 53. Chemistry and Geology 54. Chemistry and Physics 55. Geography 56. Geology 57. Mathematics 58. Mettalurgy 59. Physics 60. Physical Education 61. Divinity 62. Engineering 63. Nursing 64. Physical Education and another	
30	What was your final High School grade? 1. 50 and below 2. 51 - 54 3. 55 - 59 4. 60 - 62 5. 63 - 65 6. 66 - 69 7. 70 - 74 8. 75 - 79 9. 80 and above.	70
31	On the Christmas exam in sociology was your grade? 1. 66% and over 2. 65% and below	71
32 - 33	Mark on Summer Exam	72

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