

**The Relationship Between Sexual Differentiation,
Family And Education**

Frances Brummer

**A Thesis
in
The Department
of
Sociology**

**Presented in Partial Fulfillment of the Requirements
for the degree of Master of Arts at
Concordia University
Montréal, Québec, Canada**

March 1983

© Frances Brummer, 1983

ABSTRACT

The Relationship Between Sexual Differentiation, Family and Education

Frances Brummer

This study analyzes university women's ambitions and intentions for family life, education, work force participation, and economic independence. The analytic model used explains sex role differentiation as resulting from the social organization for production and reproduction. The thesis posits that authority structures and relationships in the family, education and the work force reinforce one another in reproducing the patriarchal and capitalist social order. The process of social control involves the reinforcement and legitimation of sexual identities of family and work place through education. Recent research into the structure, content and transmission of formal education indicates that sexual identities of male and female are reinforced in schooling.

For this study a questionnaire was administered to 427 undergraduate male and female students at Concordia University. The findings are that females are not less aware than males of the importance of education for high status occupation. Furthermore, women have egalitarian rather than restrictive or traditional beliefs about female personality traits. However, perceived maternal obligations as well as the belief that it is difficult for women to compete with men in the work force and education, are influences on women's feminine-type educational and occupational choices.

TABLE OF CONTENTS

Chapter		
I	INTRODUCTION	1
II	RESEARCH AND THEORIES	7
	Biological	7
	Psychological	9
	Marxian	10
	Feminist	13
III	THEORETICAL PERSPECTIVE	15
	Socialist Feminist Theory	15
	Socialist Feminist Theory Applied to Education	18
	Socialization in Schooling	21
	Gender Categorization	23
	Teacher-Student Interaction	26
	Summary	28
IV	METHODOLOGY	30
	The Questionnaire	30
	Sampling Technique	32
	Description of the Sample	34
	Sex and Faculty	34
	Level of Schooling	35
	Family Background Characteristics	36
	Statistical Procedures Used	39
	ANALYSIS OF THE DATA	41
	Awareness of the Relationship Between Education and Occupation	41
	Earning Aspirations	46
	Summary	47
	Work Force Intentions	48
	Earning Expectations Compared to Spouse	52
	Satisfactory Adult Activities	53
	Summary	55
	Justifications for Educational and Occupational Choices	56
	Beliefs Concerning Female Personality Traits	56
	Beliefs Concerning Competition Between the Sexes	58
	Guidance Counselling	63
	Summary	67

TABLE OF CONTENTS (continued)

VI	SUMMARY AND CONCLUSIONS	69
BIBLIOGRAPHY		78
	Books	78
	Articles in Books and Periodicals	80
	Other Sources	82
APPENDIX A	TABLES 30-65	83
APPENDIX B	QUESTIONNAIRE	102

LIST OF TABLES

Table

1	Concordia University Students, by Faculty and Sex	33
2	Respondents, by Faculty and Sex	35
3	Respondents' Level of Schooling	36
4	Parental Educational Attainment	36
5	Parental Occupational Rank	37
6	Maternal Involvement in Labour Force	38
7	University Education is Important for High Earnings	42
8	Education Determines how Successful People will be in their Life's Work	43
9	Faculty of Study Giving Better Job Opportunities	45
10	Faculty of Study Giving Better Job Opportunities, Controlling for Respondents' Faculty	46
11	Chose Program of Study for High Income	47
12	Circumstances Under Which Respondents Would not Work in the Labour Force	49
13	Respondents Who Would Work in the Labour Force When Married	51
14	Respondents Who Would Work in the Labour Force When Have a Child or Children	51
15	Respondents Who Would Work in the Labour Force When Child or Children are Grown	52

LIST OF TABLES (continued)

Table

16	Female Full-Time Labour Force Participation, by Salary Expectations	53
17	Keeping a Good Household as a Satisfactory Adult Activity	54
18	Men are More Inclined Toward Intellectualism than Women	57
19	Men are Better Able to Reason Logically than Women	58
20	Competition between Male and Female Students in Engineering	59
21	Competition Between Male and Female Students in Humanities	59
22	Competition Between Male and Female Students in Commerce and Administration	60
23	Competition Between Male and Female Students in Education	61
24	University Education Gives Males and Females Equal Opportunity on the Job Market	62
25	Women Have to Have Better Qualifications than Men in Order to Compete for Jobs	63
26	Guidance into Humanities	64
27	Guidance into Education	65
28	Guidance into Engineering	66
29	Guidance into Computer Science	66
30 - 65	Appendix A	83

CHAPTER I

INTRODUCTION

This study addresses the issue of sex role differentiation in Canadian social life. Education is related to aspects of social life in such a way that the amount and type of education acquired tend to influence the kind of job obtained, earnings from occupation, and social status. Education increases the productive capacities of people, facilitating the acquisition of skills and attitudes required in the job market. Since it is an important vehicle for adult occupation, this study specifically focuses on differentiation on the basis of sex in education as a contributor to occupational differentiation by sex and the inferior social status of females compared to males.

Social changes have been occurring in the roles of women. The trend during the last fifty years has been toward their steadily increasing participation in higher education and the work force. Also increasing has been the number of adult women who have never been or are not presently married. In view of these developments and of the publicity within the last several decades raising social awareness of the economic dependence of women and their vulnerability to poverty, it might be expected to find educational, occupational, and financial ambitions of females to be the same as those of males. Women, however, tend to enter traditional feminine areas of education leading to female-typed occupations which generally are not as highly valued and rewarded as those of men.

The information following, illustrate changes which have taken place for women in relation to the work force, family life and higher education. Their participation in the work force has been steadily increasing. In 1931 women made up 19.3 per cent of the total work force, while in 1971 this figure rose to 39.9 per cent (Connelly, 1978)¹. This increased female participation was largely accounted for by married women, who, as a percentage of total women in the work force, increased from 10.0 per cent in 1931 to 59.1 per cent in 1971. In the family, the numbers of single women ever married and single parent families have been steadily rising (National Council of Welfare, 1979). The majority of single parent families (85 per cent) are headed by women (Wilson, 1982). For the past few decades rates of increase in full-time university undergraduate enrollment for students between the ages of 18 and 21 have been higher for females than males (Hunter, 1981).² Men and women are now participating in education at the undergraduate level in almost equal numbers (Statistics Canada, 1981).

Recent research indicated that men and women differ in the kinds of education they pursue and the kinds of work they do. There is a male/female division by field of study in education. Most women in higher education are to be found in the arts and humanities, e.g., social science and education. Men are overrepresented in business administration, engineering, and natural science. These latter areas of study generally lead to relatively higher status positions in the work force and higher salary rates (Vickers & Adam, 1977).

The majority of women are located in female defined areas of

¹The 1931 statistics included females aged 10 and over; the 1971 data included those 15 years old and over.

occupation and receive lesser financial and other social rewards than men (Armstrong & Armstrong, 1975, 1978; Connelly, 1978; Hunter, 1979, 1981; Smith, 1975; Vickers & Adam, 1977). The Armstrongs (1975) examined the position of women in the work force for the thirty year period of 1941 to 1971. They found that although some women had been present in almost every kind of job and attitudes to women and their work were somewhat changed, such changes have had no appreciable effect on occupational differences by sex. Canadian women are generally less likely than men to be employed outside the home or to be employed full-time. The occupations in which they are concentrated are, on the average, lower in prestige than the occupations of men. They tend to be employed within a relatively small number of middle range occupations traditionally regarded as appropriate for women, many of which are extensions into the labour market of traditional household tasks. Ostry (1968:45) found there are "fairly sizeable pay gaps between male and female workers in Canada". McDonald (1978) found that the gap between men's and women's earnings appeared to be increasing. Men, on the average, tend to earn more money than women even when doing the same kinds of work (Hunter, 1979). Furthermore, the inequalities in pay between men and women cannot be explained away by differences in education or hours of work (Armstrong & Armstrong, 1978:38).

Women are more vulnerable than men to becoming poor, and traditional expectations of adult males financially taking care of adult females plus children increasingly have not been met (National Council of Welfare, 1979, 1981, 1982).

Gaskell (1977) stated that the women's movement in the 1960's and onwards identified the prevailing view of women as a stereotype and

made some women more aware of their true social position as dependents. Political groups developed, trying to have a new view of women incorporated into the official view of them in various Canadian social institutions such as the church and the media. Women also tried to make their new awareness known and accepted in the schools "which were seen as the cause of and the possible solution to a wide variety of social problems" (Gaskell, 1977:269).

Addressing the issue of the burden of poverty for women, the 1979 National Council of Welfare report on Women and Poverty suggested (among other things) that governments intervene to stop the damaging effects of sexual stereotyping in our schools and other socializing agents.

Social changes have included women's increased participation in higher education and the work force, and relative instability of the family. There have also been both publicity surrounding the poverty and dependent status of women, and officially stated policies for effecting change in this respect. One might therefore expect to find men and women preparing for similar occupations by participating equally in education at all levels. This, however, does not appear to be the case.

This project was undertaken to find out differences in the awareness of male and female undergraduate students of the relevance of education to their future social status; and the occupational ambitions of the females. The following hypotheses, centered around the differential purposes of higher education, were formulated for testing.

1. Females are less aware than males of a relationship between education and occupation.

2. Women do not intend to participate full-time in the work force on a continuous basis.
3. Women have traditional beliefs about female personality traits.
4. Women believe it is difficult for them to compete with men in the work force.

The procedure for investigation was to administer a structured questionnaire to undergraduate students at Concordia University in Montreal in the spring of 1982.

The study is presented as follows. First, several theoretical frameworks are considered as possible explanations for contemporary sex roles. A description of these is provided in Chapter II. Included are summaries of basic assumptions of Marxian and feminist theories. Specific aspects of these two theories, relevant to the relationship between sex role differentiation, education, occupation and social status is thought to be the best tool for guiding this project. This theoretical perspective (referred to here as socialist feminist) is discussed in Chapter III. It takes into account the fundamental importance of both work and human reproduction, emphasizing that social institutions reinforce one another to reproduce the social order. Thus, as explanations for contemporary differentiation on the basis of sex this perspective looks to the relationship between industrial production and human reproduction. Formal education is considered to be an important instrument of socialization into sex-typed occupations and a medium through which the patriarchal capitalist mode of production and the male dominated family are reproduced and legitimated. Consequently, the present analysis of university women

and men takes into account the home, the work force, the educational system, and the relations between these spheres.

Evaluation and description of the methodological approach used follows in Chapter IV. Explanation is given of the way in which respondents were selected, the selection of particular statistical procedures, and their limitations for generalization.

The analysis of the data is presented in Chapter V. The first section of this chapter deals with female and male awareness of a relationship between education and occupation. In the second section evidence is shown of female intention for future work force participation. The third section deals with hypotheses three and four, and is concerned with women's justifications for educational and occupational choices.

The findings from the data collected from the questionnaires, together with the theoretical considerations, form the concluding chapter of this study.

Because of the social changes outlined earlier, women's educational and occupational ambitions might be expected to be the same as those of men. In terms of the theoretical framework, however, the expectation is for the continuation of a dependent status for university educated women.

CHAPTER II

RESEARCH AND THEORIES

The body of research literature in education does not adequately explain the different and inferior education often received by women compared to men (Banks, 1980). An examination of literature in this field will show that while it is true that females are included in educational research studies as a normal sampling procedure, thereby facilitating analysis of differences between males and females, there is insufficient explanation for differentiation between the sexes in education. Some explanations of sex as a basis for educational differentiation have involved biological, psychological, and cultural analyses. Considerations follow for the position taken here of the inadequacy of these theoretical perspectives to explain sex role differences.

Biological Perspective

Arguments of biological determinism take the position that because there are physical differences between the sexes, there are also natural psychological, emotional and social differences.² A connection is considered to exist between sex differences in human chromosome and hormone composition, and variations in personality traits, thinking and behaviour. For example, research studies finding men to be more aggressive than women may base such personality

²See Prentice and Houston (1975), for an account of Canadian traditions in the segregation of women in education and occupation.

differences on hormonal differences (Nielsen, 1978). Aggression and other qualities may be associated with successful academic performance (Deem, 1978; Wolpe, 1978). It follows from this that if males are more aggressive, and if aggression is so linked, then they have better chances than females of succeeding academically. Conversely, it has been argued that because of hormonal and chromosome differences between the sexes, women are much better suited for tasks such as motherhood and homemaking than men (Goldberg, 1974). Such logic has lead education for women to be directed towards that purpose, while that of men to be directed towards work force participation (Prentice & Houston, 1975).

While it is true that studies have shown that males and females think and behave differently, and that males are more aggressive, most of the research documenting the connection between hormones and aggression has been done with animals. There are serious limitations in generalizing to human behaviour from this kind of research (Nielsen, 1978). There is insufficient evidence to conclude that differences of hormones and chromosomes between the sexes are determinants of sex roles (Deem 1978; Nielsen, 1978; Wolpe, 1978). Not enough is presently known about the effect of hormones and chromosomes on human thought and behaviour to either accept or reject this theory. Specific sexual personality traits such as aggression and differences between the sexes in thought and action, may be learned rather than the result of differing innate biological characteristics (Nielsen, 1978; Sutherland, 1981). Arguments of learning sex-appropriate behaviour directly contradict the biological ones (Nielsen, 1978).

Psychological Perspective

Arguments dealing with female/male psychological differences and sex-based adult aspirations, do not attribute such differences to innate sexual distinguishing characteristics. Rather, what is known is that boys and girls are assigned their sex at birth and are differentially socialized from then on (Hoffman, 1975; Nielsen, 1978).

Horner (1975), in examining women's motivations in forming relationships, found them to be motivated by a need for affective rather than mastery relationships. Women seemed to be afraid of academic success because it was associated with the possibility of being seen as unfeminine, and with negative social consequences such as loss of affection and acceptance. Their ambitions were oriented toward social acceptance as females. Both parental and male peer attitudes were likely to influence their achievement strivings. Hoffman (1975), supported these arguments, and showed evidence that early childhood experiences in the family had an effect on achievement behaviour. As a result of such experiences, girls were motivated by the desire for love, approval, and affiliation, while behaviour in boys was motivated by greater striving for instrumental achievement. Such aspects of socialization, she stated, may undermine female academic achievement and career pursuits.

The investigation of the content of women's ambitions by Turner (1964), found women to be more concerned with intrinsic than extrinsic rewards. Extrinsic rewards were defined here as being directly related to material gains, while those that were intrinsic were related to the goal of excellence within an occupation.

Hearn and Olzak (1981), found that the kind of satisfaction obtained by males and females played a significant role in choosing an area of study at university and in the continuance of sexual inequality. Women, more than men, tended to choose major departments of which they had favorable perceptions of obtaining departmental support. While women tended to opt for departments perceived by them to be relatively supportive and providing intrinsic rewards, men chose departments providing extrinsic, high status rewards and less support. Differential selection of areas of study for each sex, then, may be attributed to a tendency of males and females to have dissimilar educational orientations as a result of their early childhood training.

The major shortcoming of this theory in application to the issue at hand, however, is that it concentrates on the effects of differential socialization on the behaviour and orientations of individuals. Sex role differences have varied over time and between cultures. They may be learned, but they are learned within a given social context (Nielsen, 1978). Forcese (1980), for example, reported a study which noted that what may sometimes change expectations and aspirations of primary school children is extraordinary teacher encouragement. Psychological theories do not account for social structures as causal agents or for the many studies showing schools to place girls at a disadvantage in educational structural arrangements, course contents, and transmission of educational materials (Wolpe, 1978).

Marxian Perspective

This type of social analysis begins with the assumption that

The ultimately determining element in history (is) ... the sum total of the relations of production which 'constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness' (McLellan, 1971:124, 125).

Marxians believe that since people must always provide for their basic needs by work, productive and economic factors are primary in influencing attitudes, behaviour and social relations, and that the social organization for production is the cause of social inequalities (Armstrong & Armstrong, 1978; Bowles & Gintis, 1976; Carnoy, 1974; Collins, 1975).

The argument is presented that with each change or development of a mode of production specific kinds and amounts of labour are required, creating changes in social structures, including those for education and human reproduction. In capitalist societies owners of the means of production need surplus value and profit for expansion. Profits may be found in the use of reserve and elastic labour. It is this need for surplus value that in part determines the structures of the work place, the family, and the educational system. Since capitalism expands unevenly, a reserve work force provides employers with workers during periods of economic expansion, and keeps them unemployed and in reserve during periods of contraction. Since there are always more workers than jobs available, workers must compete with each other for jobs. The greater the supply of available workers, the lower their market price, and the greater may be the profits. For

capital accumulation and expansion, then, employers require reserve workers who compete for jobs, are available when needed and are relatively inexpensive (Connelly, 1978).

The social organization for production is basic in influencing the social position of women. Benston (1972:119) stated that "women as a group do indeed have a definite relation to the means of production and that this is different from that of men". The roots of the secondary status of women are economic. The material condition which defines the group of women is the separation of the production of exchange-values as male responsibility and use-values as female responsibility. Since women's, but not men's major responsibility is in the home in the maintenance and reproduction of labour power, women do have a relationship to production that is different from that of men. It can not be said, however, that women are excluded from exchange-value production, that "women are a group who work outside the money economy" (Benston, 1972:121), since some women have always worked for pay, and are increasingly drawn into the labour market (Armstrong & Armstrong, 1978). Women are used as a reserve and elastic labor force. "The 'cult of the home' makes its reappearance during times of labor surplus and is used to channel women out of the market economy" (Benston, 1972:125)

Systems of ideas may originate from those in dominant positions and are a fundamental form of social control used for defining and legitimating social reality. They may be passed on and learned through formal education which is a major means to occupation. Education as a tool of the ruling class, transmits ideas which contribute to

maintaining their power, maximizing their gains, and reproducing and legitimating social inequality (Armstrong & Armstrong, 1978; Bowles & Gintis, 1976; Carnoy, 1974; Smith, 1975; Young, 1971). Educational systems legitimate and reproduce the hierarchical social class order through a correspondence between their social structures and relations and those of the work force (Bowles & Gintis, 1976). Schools legitimate social inequality with the notion that rewards from schooling and work are based on merit and competence (Bowles & Gintis, 1976; Carnoy, 1974). For example, school and work correspond to each other in the extrinsic rewards for performance that are given in school as grades and in work as pay (Karabel & Halsey, 1977:34). The process of social control involves the categorization and socialization of children into cultural identities of social class (Bernstein, 1977), and cultural identities of gender and gender roles (MacDonald, 1980).

The mode of production is a major influence on social relationships. Change in the mode of production leads to change in power relationships.

Feminist Perspective

The feminist perspective was first developed as a critique of the Marxian one-sided economic analysis. For feminists, the central issue is institutionalized inequality for women. Firestone (1972) stated that the origin of the division of labour and differential social status resided in male/female differences in the process of reproduction of the species. Women give birth, men do not. Responsibility for the birth process and its period of dependency has

led women historically to be subordinated to men. Although Firestone thinks that technological changes in the future may change such areas of responsibility, it may be undesirable to utilize technology for this purpose.

Dinnerstein (1977) pointed to female responsibility for child care as the cause of social sexual inequalities. Whatever the differences in emphasis between Firestone and Dinnerstein, they come together in the belief that the family as presently structured and ideologically committed to the social position of women as mothers, is not an adequate pathway for female independence.

Women are oriented towards education in relation to their social role as mothers. The family as a structure for child bearing and rearing, contributing to the social role of females as mothers, is seen as being the cause of the subordinate status of women.

For feminists of the liberal tradition beginning with Wollstonecraft in the 18th century, the lack of equal educational opportunity is at the root of social inequality of women in the present day (Jaggar & Struhl, 1978). Differential education is basic to the inferior social position of females and remains a major means for sex-segregated occupational placement (Wolpe, 1978).

The socialist feminist perspective, which is presented in the next chapter, is a combination of feminist and Marxian theories. It attempts to overcome the limitations of feminist and Marxian theories taken separately, and states that both production and reproduction influence the position of women. Furthermore, "What needs to be examined is not just the home, not just the work place, but each in relation to the other" (Armstrong & Armstrong, 1978:136).

CHAPTER III

THEORETICAL PERSPECTIVE

Socialist Feminist Theory

From the socialist feminist perspective, fundamental to the subordinate status of women are the social structures bolstering male dominance and the mode of production (Jaggar & Struhl, 1978). Combining the Marxian theory of surplus value and the feminist theory of the role of women as mothers, in all industrial societies the nuclear family is a structure which provides the work place with women as a reserve and elastic group of workers. Extraction of surplus value applies to all societies depending on the specialized division of labour required for large scale production and exchange of goods, whether of socialist, capitalist, or mixed economy (Giddens, 1974). An important organizing principle in all such societies is the separation of the domestic and work force units (Nielsen, 1978). While women's major responsibility is in the home in the rearing of children, they also hold jobs in the work force. Men retain their traditional responsibility for exchange-value work. All contemporary industrial societies have unequal responsibility for child care in common, and so, what industrial social systems of both left and right have in common is patriarchy. Patriarchy is defined as the sexual politics whereby men establish their economic and social dominance over women and maintain power and control (Mitchell, 1971).

Socialist feminist theory applies to all contemporary industrial societies. However, the discussion has been limited to

capitalist organization. Dependency for women is considered to be intrinsic to this economic system. Social structures combine to reinforce and reproduce capitalism and patriarchy. In other words, the nuclear family with its graded patterns of power and privilege (MacDonald, 1980), and the mode of production, support each other in the reproduction of both male supremacy and capitalism (Eisenstein, 1979; Jaggar & Struhl, 1978).

In contemporary capitalist societies which depend on large scale production and exchange of goods, women form an underclass or potential reserve within the white collar sector of the work force. This underclass is characterized by relatively insecure occupations yielding lower incomes (Giddens, 1974). If the Canadian work force is seen as being comprised of two separate labour markets based on sex, Canadian women meet all the necessary preconditions of being a reserve work force (Connelly, 1978). They compete with other women for jobs in female-type work, and are relatively inexpensive and available. Connelly argued that the use of women as a reserve work force has become institutionalized. Women enter the work force when demand increases and leave when demand decreases. This was most noticeable during the last world war when women replaced men in the work force but were returned to domestic or female-type work when peace was declared and the men returned. In the period of 1901 to 1971 the demand for female labour has coincided with changes in the occupational structure. The growth in size of large corporations, the increasing division of labour and routinization of industrial and clerical work have steadily increased the number of occupations defined as female and

the absolute number of jobs available to them. Thus, the demand for women as workers outside the family has been increasing. In recent years the need of employers for relatively inexpensive workers combined with the need to maintain existing family standards of living have served to bring even larger numbers of women into the work force. One of the tools used to encourage the flow of women into wage work has been the availability of day care for pre-school children.³

The nuclear family is a biological and social reproductive unit. It is the centre for women's responsibility in the reproduction, nurturance, and socialization of present and future workers (Wolpe, 1978). The point is that women of all classes are seen and see themselves primarily as mothers caring for children (Deem, 1978; MacDonald, 1980). Ideology adjusts to women who are in the work force by defining them as working mothers (Eisenstein, 1979). Such definitions aid in maintaining the idea that it is natural for women to carry the responsibility for child care. Because women are defined as mothers and household workers and financially dependent on men, they are not expected to, nor do they expect to, pay the full costs of the household. For the same reason, they have lesser economic value in the work place. Employers may justify the use of women in female-type jobs, pay them less than the value of their work and less than that paid for the work of men (MacDonald, 1980). The interaction between

³An example of this may have occurred recently in the Province of Quebec where unemployment is considered to be high. In 1981 the Quebec Social Affairs Department announced cut backs in financial aid to children's day care centres (CBC Radio Noon, 1981). At the same time, the Government was providing incentives for marriage, the purchase of homes, and increased numbers of children by giving home mortgage subsidies to families having more children (sources: CBC Radio Noon, 1981; Societe d'habitation du Quebec).

the family and the work place results in a financially dependent status for women and the possibility of greater profits for employers.

In the socialist feminist perspective, the social status of women can change only with changes in the structures of production and reproduction and their accompanying ideologies (Eisenstein, 1979; Mitchell, 1971). While reform in education as a transmitter of idea systems may be able to have some positive consequences for the position of women, change in education alone can not change their subordinate social and economic position (Clement, 1977; Gaskell, 1977; Holter, 1972; MacDonald, 1980; Mitchell, 1973). Supplementing the Marxian theory stated earlier on education as an instrument of social control for the reproduction and legitimation of social classes is the reality of the patriarchal family and social structure (MacDonald, 1980).

Socialist Feminist Theory Applied to Education

Socialist feminist theory argues that the purpose of higher education for women is different from that of men. MacDonald (1980) has stated that a central organizing principle in the family, education, and the work place is patriarchy. The control of women is in two forms. Women, by and large, are expected to adhere to the appropriate cultural norms of family, education and the work place, and also to be obedient to men within each of these spheres. MacDonald further states that processes of gender construction in both family and education mirror the hierarchical and patriarchal capitalist division of labour in the work place. This is accomplished through a correspondence in hierarchical and patriarchal structures, and

relationships between the work place, the family, and the school. The reproduction of such social relations found in the production process and the family are perhaps the determining force in the structure, content and transmission of education. Education is a major means to adult occupation. The structure, content, and transmission of education, like the structures, relations and ideologies of the family and the work force, are class and sex based (Bowles & Gintis, 1976; MacDonald, 1980).

Schools transmit only a selection of available cultural content (Bourdieu & Passeron, 1978). Because men have been dominant historically, they have been able to define what counts as knowledge and to interpret social reality from one historical period to the next in order to protect their status (Eisenstein, 1979). Smith (1975) has argued that men and women have very different relations to the power structures of education and society. Over-all, the figures from Canadian educational institutions indicate an inverse relation between level in the educational hierarchy and the proportion of women. It is generally males who occupy positions of power in the academic world. While most women are to be found in the relatively temporary non-ladder and non-tenured university teaching positions, men tend to be concentrated within the tenured faculty. It is the tenured faculty which to a large extent control what shall be recognized as properly scholarly work and who shall be admitted to its ranks. Tepperman (1975:166,174) has suggested that if attention on the upward mobility of academic faculty were confined to years of service, the difference in mobility between the sexes would be only slightly in favour of men. He

concluded, however, that sex role stereotyping and difference between the sexes in aspirations might help account for difference in mobility.

Not only do men greatly outnumber women in the higher academic ranks, they also receive higher remuneration. Ambert (1976) draws definite conclusions with regard to financial rewards. Sex is a crucial factor in the distribution of financial rewards in favour of men, even when controlling for age, rank, highest degree and experience.

Women are also concentrated in the fields of arts and education which are not directly involved in preparing people for positions in the higher managerial and governing structures (Smith, 1975).

On a formal level, women are almost completely excluded from defining what counts as knowledge in the educational system and from influential social positions (Ambert, 1976; Smith, 1975). Men have social control in defining what counts as knowledge and in legitimating the sexual division of labor. Teachers too, are not free from societal sex role biases (Quarter, 1972; Ricks & Pyke, 1973). It can not be assumed, however, that ideologies of educational systems are homogeneous or that they immediately or directly reflect the needs of the economy or specific power groups. The struggle for power of various groups tends to result in compromises of some kind (Wolpe, 1978). The consequences of this for education within a capitalist patriarchal society, is that whatever the resolution of such struggles the reproduction of social class and male dominant structures and relationships continues in the educational system.

Socialization in Schooling

Bernstein has addressed the issue of social control through the socialization of children in the family and schooling into cultural identities of social class. Bernstein's theory on the role of the school as an instrument of social control through socialization basically states that schooling reproduces the class order through the categorization of pupils by social class (Bernstein, 1977a; MacDonald, 1980). Such categorization of pupils by social class lies embedded in the structuring of knowledge, the form of pedagogy, standards of evaluation, and the spatial organization of the school. Bernstein's theory takes into account two critical features of the school experience. These are the construction and maintenance of boundaries between different categories, and the form and degree of pupil control by teachers. The first feature is termed by him 'classification', the second is called 'framing' (Bernstein, 1977a; MacDonald 1980:22).

MacDonald (1980) has argued that the conceptual tools of classification and framing as used by Bernstein in analyses of reproduction of social class, can also be used for investigating the ways in which schools reinforce gender differences. Applying Bernstein's theoretical framework to sex roles, schools transmit specific gender codes "whereby individuals' gender identity and gender roles are constructed under the school's classification system" (MacDonald, 1980:22). Boundaries are created and maintained between males and females in the school. Definitions of gender may be reinforced through sexual boundaries and the hierarchy in the spatial organization of the school, curricula, activities and interests.

Gender codes transmitted in maintaining boundaries include what may or may not be taught to girls and boys in pedagogic relationships, and the form and degree of discipline and pupil control (MacDonald, 1980).

Deem (1978) has argued that by the time children reach school age, they have already acquired sex-specific occupational ambitions. Major socializing agents have been the family, peer groups and the media. Deem noted that girls and boys have already, in many respects, acquired separate cultures. Referring to British children, she stated that by the time they are five or six years old, they are already aware of distinctions between male and female roles, and the higher valuation of male roles. Girls have different interests and pursuits than boys. Thus, children enter formal education at the primary level already sexually restricted in their personalities, thoughts, behaviour, abilities and skills (Deem, 1978). The educational system intervenes in time between the family and the work force. It reinforces the existing structure and ideology of the family, qualifying students in skills and attitudes for sex-typed work. The process of socialization beginning at birth in the family and continuing in formal education makes men and women aware of the appropriate social role for females as mothers, and as subordinate workers in the labour force. Women may recognize that the achievement of schooling similar to that of men does not necessarily guarantee entrance into non-feminine occupations. That is, subjective educational choices may also be influenced by perceived objective educational and occupational possibilities (Bourdieu & Passeron, 1977; Deem, 1978).

Research into Canadian (and British) school content, structures

and teacher-pupil interaction revealed that embedded in schooling is the categorization of students by sex. The point will be made below that, in Canadian schools, beginning at the primary level and continuing at all others, emphasis is placed on differences between males and females, and girls are treated differently from boys. Thus, the ideas most likely to be acquired by students of both sexes in Canadian education are those of the social position of women as mothers, dependents in the family, and subordinates in the work force (MacDonald, 1980). Even if the ideology were that of different, but equal, when one sex is more highly valued and rewarded than the other, the result is a system of structured social inequality (Banks, 1980). The following is a description of formal schooling as a socializing agent into sexual identities.

Gender Categorization in Education

In Canadian schools there is an omission of knowledge about women and issues of concern to them. Completely absent from curricula is the issue of sex stereotyping and its effects. Students are therefore not able to learn about or examine critically the assumptions about sex roles that are prevalent in the society (Gaskell, 1977). They are thus less likely to become aware of the social construction of sex roles and alternative styles of life. Much of the knowledge presented to students serves to reinforce for them the definition of females as a second sex.

The downplaying or ignoring of female creativity and potential in textbooks (Maeots, 1972), implies official sanction of gender

differences (Synge, 1977), or may appear as being part of the natural order of things (Deem, 1978). In British schools females are virtually ignored by history since texts deal mainly with the activities and accomplishments of men (Deem, 1978). Content analysis of Canadian elementary textbooks have revealed hidden curricula. Information about differences between the sexes were passed on at the same time as transmitting curricula.

There is an over-whelming mass of written and pictorial examples of the social superiority of men that children must absorb in the exercises of learning to read, write, and do arithmetic (Maeots, 1972:146).

Males were also more visible as actors and in public life. They appeared in books far more frequently than did females.

A Quebec study found fewer than a third of the fictional characters in elementary texts were female, and at the secondary level only 10 - 12 per cent were female (Gaskell, 1977:269).

For non-fictional characters and in science and math books, the percentages of women appearing were much lower (Gaskell, 1977).

Studies have found that sex stereotyping in books has been even more extreme than the actual sexual division of labour in society. In actual life

there are working mothers, single parent families, and fathers who do the dishes... but there ... (were) none pictured in school materials (Gaskell, 1977:270).

Similarly, Pyke (1977:430) noted that the male/female division of labour is reinforced in first and second grade readers where

fathers are typically depicted in bread-winner and family leadership roles, while mothers are homemakers and shoppers.

Sexual division of labour and female dependency are further reinforced in primary school readers where

Fathers are found outdoors, mothers indoors, nurturing and housekeeping. Girls are seen in sedentary activities, needing help and protection, giving up easily and lacking competence in many tasks (Pyke, 1977:430).

According to Gaskell (1977), all of the basic reading series used in elementary schools reinforce and legitimate the adoption of such sex roles for children. Similarly, vocational literature differentiates between females and males. Vocational literature in high schools tends to direct females into female areas of higher education (Maeots, 1972; Vickers & Adam, 1977). In such literature, women are "discouraged from entering the domains of men such as physical sciences, engineering, law, and medicine" (Maeots, 1972:147). Vickers & Adam (1977:135) stated that in recruitment brochures provided to the high schools by Canadian universities

illustrations often show only men in laboratories, classrooms and offices, while women are shown training only in traditional fields.

In studies done in Britain it was found that sports and play aid in encouraging active boys and relatively passive girls, since school playgrounds are often segregated by sex with boys playing games requiring more activity than those of girls (Deem, 1978). Similarly, in Canadian schools, divisions are created between the sexes by their segregation in sports and gym classes, and with the glorification of mens' sports competitions. The guiding attitudes for such separations tend to be that females are more fragile than males and must be protected from either harming themselves or others harming them (Maeots, 1972).

In Canadian schools children see in the structures concrete examples of male dominance (Maeots, 1972). Males are a minority yet they dominate the upper levels in authority. While there exists a preponderance of female teachers at the elementary level, the principals are usually men (Gaskell, 1977; Maeots, 1972; Synge, 1977). Schools, then, recreate the traditional family structure, the heads of both being, by and large, men (Gaskell, 1977; Maeots, 1972).

Teacher-Student Interaction in Gender Categorization

Quarter (1972) has stated that the teacher-student relationship is defined by the teacher's training and the role of the school as an agent of socialization. As such, he said, teachers tend not to be free from societal biases. They may prefer male students. Ricks and Pyke (1973) found that of those teachers expressing a preference for teaching either males or females, the majority preferred to teach males. Ricks and Pyke also found that while Ontario secondary school teachers are not always aware of their own sexual biases, their expectations for and behaviour toward male and female children are often different. Teachers' attitudes concerning differences between the sexes in intellectual abilities and proper gender behaviour reinforce children to live up to rather than to challenge such expectations. They are also aware that boys and girls expect to be treated differently (Ricks and Pyke, 1973). Thus, teachers do not encourage deviations from the patterns of male or female behaviour traditionally expected of students (Ricks & Pyke, 1973). Expectations of teachers and students may result in self-fulfilling prophecies

(Gaskell, 1977; Pyke, 1977).

An important point in the transmission of gender codes is that a good female student should also be feminine in behaviour. Similarly, a good male student is masculine in behaviour. Reward and punishment of behaviour may extinguish unwanted actions while reinforcing or shaping those preferred (Pyke, 1977). Ricks and Pyke (1973) found that activity, achievement and competition were generally more likely to be encouraged in males than in females. In Canadian elementary schools females, but not males, were rewarded as good pupils for being passive, obedient, eager to please, and doing conscientious rather than creative work (Maeots, 1972). Similarly, in British schools girls, but not boys, "are reinforced for silence, for neatness and conformity" (Deem, 1978:40). In Canadian post-elementary grades male aggressiveness and female passivity are reinforced by type and amount of attention shown (Pyke, 1977).

Other pedagogic interactions may often draw attention to sex differences with girls and boys being urged to compete with each other, lining up the sexes separately, and addressing children as 'boys and girls' (Gaskell, 1977; Deem, 1978).

Schools, then, socialize children into particular sexual cultural identities, reinforcing the development of socially appropriate masculine and feminine thought and behaviour, defining females as future mothers and dependents. By the time pupils reach higher education they are confronted with the realities of a sexual division of labour in the academic sphere and work force (MacDonald, 1980).

Summary

The discussion in this chapter was in explanation of the continued entrance of females into traditional feminine areas of education leading to occupations that are less highly valued and rewarded than those of men. The theoretical perspective used states that authority structures and relationships in the family, education and the work force reinforce one another in reproducing the patriarchal and capitalist social order. Organizing principles are the separation of the domestic from the work force unit, and the hierarchy of men over women in the family, education, and work. Adhering to cultural norms of family, education and work, and obedience to men tend to be synonymous for women. The process of social control involves the reinforcement and legitimation of sexual identities of family and work place through education. Gender roles are a major aspect of patriarchal capitalist culture. Learning the socially appropriate definitions of masculinity and femininity begins at birth within the family and continues in the schooling process. Recent research into the areas of school hierarchies, curricula, hidden curricula and teacher-student interactions indicated that girls are treated differently from boys. The educational system reinforces the identity of women as mothers and subordinates in the work force, reproducing and legitimating the sexual division of labour between family and work place. This kind of division in responsibility between the sexes results in the availability of women as a group, as a reserve and elastic work force, the possibility of greater employer profits, women's economic dependence on men, and their lesser social valuation.

The acceptance by women of their social role as mothers makes available to employers women as a group who may be manipulated into or out of the work force, who will do work defined as less important and who will accept lesser financial reward, thereby increasing employer profits. Because women are mothers with major responsibility for child-rearing in the home, they are economically dependent on men. Women's responsibility for child care in the nuclear family, and their availability and use of as surplus labour are believed to be inimical to female independence. Even if women did obtain an education similar or equal to that of men, this would not necessarily guarantee their entrance into wider range, higher status, and economically more rewarding occupations. The dependent status of women can change only with changes in structures of reproduction and production and their accompanying ideologies.

CHAPTER IV

METHODOLOGY

This chapter deals first with questionnaire development and then with sampling and data collection procedures. These sections are followed with a description of the sample by independent and control variables of faculty and sex, level of schooling, and family background characteristics. Finally, statistical methods used are given.

The Questionnaire

In an attempt to complement this quantitative research project, it was tied into a pilot study of in-depth interviews (Lofland, 1971; Sjoberg & Nett, 1968) which was conducted with ten English-speaking female faculty members at Concordia University in the summer of 1981. The purpose of that study was to "shed some light on the character of women's ambitions" (J. Barakett, 1981). A major finding of that study was that men, but not women, measure their success primarily in terms of earning money and gaining high status. A questionnaire was constructed for Concordia University students using information gleaned from those interviews.

Many of the questions were drawn from Breton (1972), Kammeyer (1966), and Porter, Porter & Blisshen (1973), most of which were modified for this study. Before the questionnaire was finalized, it was pretested twice during the third week in March (1982), using approximately thirty respondents each time. The purpose of the pretests was to discover and eliminate problems which could occur through misunderstanding the questions; the evoking of more than one

response dimension; and to ensure that the time taken for completion was twenty minutes or less. Verbal feedback from respondents, especially relating to potentially offensive questions, was also sought.

As a result of these pretests, several revisions were made to the final questionnaire (Appendix B). The following questions were added. The circumstances under which respondents would not work in the labour force; marriage intentions; the sort of job they would prefer to have; and the capacity for female students to compete on an equal basis with male students in the various university departments. The question concerning the circumstances under which respondents would work in the labour force was revised.

A third pretest may have further reduced the problematic responses which various questions evoked. A listing of such problems follows. First, the category of "would not work at all" was not included in the question dealing with the circumstances under which the respondent would continue to work in the labour force. As a result, those who did not intend to work at all under the circumstances given were not covered by the question and had to be included in the "all others" category. Second, approximately fifteen per cent of the respondents could not select one of the departments or faculties of study generally regarded by students as giving the better job opportunities. A rank order response format may have been more appropriate. Third, ambiguous or irrelevant response patterns to the open-ended questions showed that closed-choice questions would have been preferable.

Sampling Technique

Various problems made the selection of a true random sample extremely difficult, and although a pure quota sample was not achieved, some quota sampling was attempted. This was considered to be the best way of achieving some degree of representativeness of the University undergraduate population. The quota type of sampling procedure, which is extensively used in social science, involves deciding what kinds of people and how many of each kind to include before going into the field (Sjoberg & Nett, 1968).

No quota was set for full-time and part-time students. This was rejected as not being feasible together with the other quotas.

Quotas were set for respondents' faculty, sex, and level of schooling. The total sample size for the research was to be 400, with proportionate numbers of male and female respondents from each of the three faculties. Since the intention was to compare those students who were closer to the beginning of their university undergraduate career with those who were closer to the end, the decision was made to distribute questionnaires only to students in courses at the introductory (200) and final (400) levels. Since it was assumed that there were more undergraduate students at the lower than the upper university level, an attempt was made to obtain slightly more respondents at the 200 than at the 400 level.

In September 1981, the total number of Concordia undergraduate students (excluding those in the Fine Arts Faculty) was 19,068. There were 4 per cent more males than females (Table 1).

TABLE 1

DISTRIBUTION OF CONCORDIA UNIVERSITY UNDERGRADUATE STUDENTS (1981/82),
BY FACULTY AND SEX*

Faculty	Sex		Total
	Female %	Male %	
Arts & Science	61.6	38.5	49.6
Commerce & Administration	26.9	37.9	32.6
Engineering & Computer Science	3.5	17.2	10.6
Independent	8.1	6.5	7.2
Total Students	48.0	52.0	100.0
(N)	(9088)	(9980)	(19,068)

*Source: Derived from information obtained from Concordia Dept. of Institutional Research. The total of 19,068 did not include 2,335 Fine Arts students and was not adjusted for changes during the school year such as drop-outs and winter registration.

Courses were selected from the most recent timetable (Concordia University Day and Evening Schedule, 1981/82). Teachers whose names appeared in this timetable of courses were contacted with a view to arranging in-class questionnaire distribution to students. In some departments names of professors were not supplied with course numbers in the timetable. In such cases, the various departmental offices had to be contacted first in order to obtain the names of those who were conducting 200 and 400 level courses.

Questionnaires were completed by students in those classes in which teachers were co-operative. By the second week of the three-week period during which this study was in the field, attempts were made to

distribute additional questionnaires to those areas for which it seemed the quota would not be reached, e.g., females. One of the problems encountered in obtaining quotas was that in many instances teachers incorrectly estimated the number and sex of students who would be present to complete the questionnaire. In the end, therefore, many of the questionnaires were distributed to available respondents, or by convenience, resulting in some oversampling or undersampling by sex or faculty.

Description of the Sample

Sex and Faculty

The required male-female distribution was not met since completed questionnaires were obtained from far fewer females than males (Table 2). A comparison, however, between Tables 1 and 2 will show that the sample obtained is similar in several respects to the university population. Arts and Science is slightly underrepresented since there are only 4.5 per cent more female students than female respondents, and only 1.1 per cent more male students than male respondents. The greatest underrepresentation was of males in Commerce and Administration, where there are 4.7 per cent more students than respondents. The greatest overrepresentation was also of males in Engineering and Computer Science where there are 10.7 per cent more respondents than students. Total percentage differences between students and respondents are as follows. There are 4.7 per cent more students than respondents in Arts and Science, and 1.5 per cent more respondents than students in Commerce and Administration. The greatest

difference is 9.2 per cent more respondents than students in and Engineering Computer Science.

TABLE 2

RESPONDENTS, BY FACULTY AND SEX

Faculty	Sex		Total
	Female	Male	
	%	%	%
Arts & Science	57.1	37.4	44.9
Commerce & Administration	35.6	33.2	34.1
Engineering & Computer Science	6.7	27.9	19.8
Independents	*	*	*
Fine Arts	0.6	1.5	1.2
Total Respondents	38.0	62.0	100.0
(N)	(163)*	(262)	(425)

*Almost all students placed themselves into one of the faculties.

Level of Schooling

Students in years one and two were combined and categorized as being 'closer to the beginning or "lower" level of university. Similarly students in years three and four were categorized as being at a "higher" educational level. The distribution of the sample of respondents' present level of schooling is given in Table 3. Slightly more than half of the respondents were at the beginning rather than at the end of their university undergraduate career.

TABLE 3

RESPONDENTS' PRESENT LEVEL OF SCHOOLING

Level of Schooling	Total Respondents	
	%	(N)
Lower	57.8	(244)
Higher	42.2	(178)
		(422)

Family Background Characteristics

Parental education was recorded, in response to frequency distribution problems, into the two categories of lower and higher. Those parents who had no high school experience through those who had finished high school were categorized as "lower", the remainder being "higher". For all respondents, the greater proportion of parents were in the "lower" category. In addition, fewer mothers than fathers were in the "higher" category (Table 4).

TABLE 4

PARENTAL EDUCATIONAL ATTAINMENT

Education	Mother		Father	
	%	(N)	%	(N)
Lower	70.0	(290)	59.8	(245)
Higher	30.0	(124)	40.2	(165)
		(414)		(410)

Fourteen socio-economic categories were used for categorizing the occupations of mothers and fathers (Pineo, Porter & McRoberts, 1977). These were collapsed for parental occupational prestige analyses into the two categories of "higher" and "lower" (Table 5). The first six categories (self-employed professionals; employed professionals; high level management; semi-professionals; technicians; and middle management, officials and small business) were classified as "higher". The remaining categories (foremen; skilled clerical-sales-service; supervisors; skilled crafts and trades; semi-skilled clerical-sales-service; semi-skilled manual; unskilled clerical-sales-service; and unskilled manual), were "lower". A greater proportion of fathers were in the "higher" prestige level, while the greater proportion of the mothers were in the "lower".

TABLE 5

PARENTAL OCCUPATIONAL RANK

Rank	Mother		Father	
	%	(N)	%	(N)
Higher	25.8	(78)	54.9	(192)
Lower	74.2	(224)	45.1	(158)
		(302)		(350)

Most of the mothers of respondents had worked or continue to work in the labour force (Table 6).

TABLE 6

MATERNAL INVOLVEMENT IN LABOUR FORCE

Number of Years	Total	
	%	(N)
0 to 10	52.9	(175)
11 to 40	47.1	(156)
		(331)

In summary, there were many more male than female respondents. Slightly less than half of all respondents were in the Faculty of Arts and Science, about one-third were in Commerce and Administration, and the balance were in Engineering and Computer Science.

Slightly more than half of the respondents were at the beginning rather than at the end of their university career.

Most of the parents, and more mothers than fathers, had lower rather than higher educational attainment. Approximately three quarters of the mothers and slightly less than one-half of the fathers had lower rather than higher occupational prestige. Maternal labour force participation ranged from 0 to 40 years. This was almost evenly divided between those who had worked from 0 to 10 years and those who had participated from 11 to 40 years.

In addition, over three-quarters of respondents were full-time students, but more females than males were part-time. Respondents ranged in age from 17 to 41, the greatest proportion of them were at age 22, and only about 10 per cent were married.

All questionnaires were completed during the last two weeks in March and the first week in April (1982). A total of 427 questionnaires were coded for computer analysis using the Statistical Package for the Social Sciences (SPSS), (Nie, et al, 1975).

Statistical Procedures Used

All variables are at the nominal or ordinal levels, thus permitting the use of nonparametric statistical procedures only. In addition, quota and convenience sampling do not permit the estimation of sampling error. Thus, no attempt was made to generalize to the University or other populations.

The chi square test was employed to determine whether observed differences between independent groups attained statistical significance. The criterion level for acceptance of the existence of statistical significance is, by convention $p < .05$.

The chi square test can not be used with two by two tables where one expected frequency is less than five. In cases of this type, only a comparison of percentages was made. Where a two by two table had at least one expected cell frequency of less than ten, Yates' correction formula was used.

Chi square was not used for tables that were larger than two by two when the expected frequency in 20 per cent or more of the cells was five or less, or if at least one cell had an expected frequency of less than one. In such cases, appropriate categories were combined or eliminated, wherever possible, in order to increase the expected frequencies in the various cells (Siegel, 1956). In some analyses, only a comparison of percentages was permissible.

The phi & Cramer's V coefficients indicate the strength of association between variables that attained statistical significance. The former was shown for two by two tables, while the latter was shown for those tables larger than two by two. Both these measures range from 0 to +1. Zero indicates that there is no relationship between the variables, and +1 indicates that the variables are perfectly related (Nie, et al, 1975).

CHAPTER V

ANALYSIS OF THE DATA

Awareness of Relationship Between Education and Occupation

On the basis of the previous research presented above, that Canadian women are less likely than men to be in programs of study leading to higher paying positions, the hypothesis was generated that

females are less aware than males of a relationship between education and occupation.

Thus, if women do not know that certain types of education lead to the better or higher paying jobs, then they can not be expected to choose their education for this purpose. The findings of this study indicated that females are as aware as men of a relationship between education and occupation, but that men are more likely than women to choose their program of study with high income in mind.

The above hypothesis was first measured in terms of potential financial success. Respondents were asked to answer on a five-point scale if a university education is important for high earnings. The five-point scale was collapsed into the three categories of agree, uncertain and disagree. The differences between male and female responses were not statistically significant (Table 7).

TABLE 7

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	53.4	55.2	54.5
Uncertain	22.7	17.8	19.7
Disagree	23.9	27.0	25.8
(N)	(163)	(259)	(422)

Chi square = 1.675 (d.f. = 2) Not statistically significant at $p < .05$ ✓

When respondents' present level of education was introduced as a control variable, differences between females and males did not attain statistical significance at either level of education.

Further analyses were performed with sex as the independent variable and family background characteristics as control variables. The control variables of - parental educational attainment, parental occupational ranking, and the length of maternal involvement in the labour force - were introduced. None of the comparisons attained statistical significance except for the group whose mothers had been in the labour force from 11 to 40 years. In this category, slightly more females than males agreed with the statement. The greatest gap between the sexes was in the "disagree" category where a smaller proportion of females than males disagreed. In this group, females were more likely than males to think university education is important for high

earnings. Females, then, are not less aware than males of the importance of higher education for high earnings.

The hypothesis was next measured in terms of success in life's work. Respondents were asked if they believed that "education determines how successful people will be in their life's work". Using the same kind of analyses as above, responses to this statement showed no statistically significant differences by sex (Table 8). This remained true when respondents' level of education was introduced as a control variable.

TABLE 8

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	40.1	41.5	41.0
Uncertain	24.1	18.2	20.5
Disagree	35.8	40.3	38.6
(N)	(162)	(258)	(420)

Chi square = 2.236 (d.f. = 2) Not statistically significant at $p < .05$

When family background characteristics were employed as control variables in relation to this question, none of the comparisons attained statistical significance except among those respondents whose fathers' occupations were ranked as being higher. In this category

more women than men agreed with the statement and a smaller proportion of females than males disagreed. Females were more likely than males, in this instance, to attribute importance to education as determining success in life's work. Females then, are not less aware than males of a connection between education and success in life's work.

To further determine if male and female respondents have dissimilar understandings of a link between education and occupation, respondents were asked to choose the faculty or department which they believed was thought by students to lead to the better job opportunities. None of the respondents believed students thought Humanities, Social Science, Physics, Education, or Mathematics to be better. The ten given categories were collapsed into the three faculties for analysis by sex. More than half of both female and male respondents believed students thought Engineering and Computer Science was better and near to none of either the male or female respondents believed Arts and Science was better (Table 9). Chi square test could not be used for differences between males and females because of cell frequency problems.

TABLE 9

FACULTY OF STUDY "GENERALLY REGARDED BY STUDENTS AS GIVING THE BETTER JOB OPPORTUNITIES", BY SEX

Faculties leading to better job opportunities	Sex		Total
	Female %	Male %	
Arts & Science	0.7	1.8	1.4
Commerce & Administration	37.2	30.7	33.1
Engineering & Computer Science	62.0	67.6	65.5
(N)	(137)	(225)	(362)

Chi square test could not be used for this table because of cell frequency problems.

When the faculty in which the respondent was located (either Arts & Science; Commerce & Administration; or Engineering & Computer Science) was introduced as a control variable, more than half of the males and females in all three faculties believed Engineering and Computer Science to be better, with one exception. Slightly more than half of the males in the Commerce and Administration Faculty thought their own faculty was better while slightly less than half thought that Engineering and Computer Science was better (Table 10). Near to none or none of the male and female respondents in all three faculties believed Arts and Science was better. The chi square test could not be used for differences between males and females as the cell frequency distribution was inadequate.

TABLE 10

FACULTY OF STUDY "GENERALLY REGARDED BY STUDENTS AS GIVING THE BETTER JOB OPPORTUNITIES", BY SEX, WHEN CONTROLLING FOR FACULTY IN WHICH RESPONDENT WAS LOCATED

Better Job Opportunities	Faculties					
	Arts & Science		Commerce & Administration		Engineering & Comp. Science	
	Sex		Sex		Sex	
	Female	Male	Female	Male	Female	Male
	%	%	%	%	%	%
A. & S.	1.4	2.4	0.0	2.6	0.0	0.0
C. & A.	34.2	26.5	45.3	51.3	25.0	9.7
E. & C.S.	64.4	71.1	54.7	46.2	75.0	90.3
(N)	(73)	(83)	(53)	(78)	(8)	(62)

Chi square test could not be used for this table because of cell frequency problems.

Earning Aspirations

Respondents were asked why they chose their program of study, and were given four categories from which to choose. Both males and females said they chose their program of study because it trained them for a particular type of work; because it lead to further education; and because of interest. But a significantly greater proportion of men (52.3 per cent) than women (33.3 per cent) said they chose their program of study because it enabled them to get a job with high income (Table 11).

TABLE 11

CHOSE PROGRAM OF STUDY "BECAUSE IT ENABLES ME TO GET A JOB WITH HIGH INCOME", BY SEX

Chose Program of Study For High Income	Sex		Total
	Female	Male	
	%	%	%
Yes	33.3	52.3	45.0
All Others*	66.7	47.7	55.0
(N)	(165)	(262)	(427)

Chi square = 14.702 (d.f. = 1) Statistically significant at
 $p < .001$; Phi = .186

*This category includes all those who didn't circle the answer for various reasons.

Summary


Females and males almost equally agreed that "university education is important for high earnings" and that "education determines how successful people will be in their life's work". In two instances women were more likely than men to attribute importance to a relationship between education and occupation. For those respondents whose mothers had been in the work force for a longer period of time, a greater proportion of women than men thought education to be important for high earnings. For those respondents whose fathers had a higher ranking occupation, a greater proportion of women than men thought education determines success in life's work. Females, then, are not less aware than males of a relationship between education and occupation. While the question asking respondents which areas of study

were generally regarded by students as leading to the better job opportunities did not measure their own awareness, it did give hearsay information on the awareness of other students of the connection between area of education and job opportunity. The majority of male and female respondents believed that the better faculty of study is considered by students to be Engineering and Computer Science. None or near to none of the respondents of both sexes thought Arts and Science was better. The data from these three questions, then, do not support the hypothesis that females are less aware than males of a relationship between education and occupation. Men, however, are more likely than women to choose their program of study because it enables them to get a job with high income.

Work Force Intentions

The following hypothesis deals with the generally held belief that a woman's major adult responsibility is for child-rearing in the home rather than in work force participation. It was hypothesized that women do not intend to participate full-time in the work force on a continuous basis.

Upon analyses, the responses for full-time labour force intentions were not surprising, given societal sex role structures. Women intended to leave the full-time work force upon maternity. They were more likely than men to define a satisfactory adult life in terms of keeping a good household. Differences among women were substantial but not statistically significant in relation to earning expectations compared to spouse and full-time work force participation following maternity.



Respondents were asked two separate questions concerning their future work force intentions. First it was ascertained whether or not women actually do intend to leave the labour force after having children by asking them under what circumstances they would not work in the labour force. The proportion of women who spontaneously said they would not work in the labour force if they had children was greater than the proportion of those who would always work in the labour force (54.1 per cent compared to 45.9 per cent) (Table 12).

TABLE 12

CIRCUMSTANCES UNDER WHICH RESPONDENTS SPONTANEOUSLY SAID THEY WOULD NOT WORK IN THE LABOUR FORCE, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Would not Work in the Labour Force if had Children	54.1	0.9	25.8
Would Always Work in the Labour Force	45.9	99.1	74.2
(N)	(98)	(111)	(209)

Chi square = 76.821 (d.f. = 1) Statistically significant at $p < .0001$; Phi = .606

The respondents were then asked under which conditions they would work in the labour force, either full-time or part-time, for each of the three categories of "when married", "when have a child or children", and "when child or children are grown". The majority of women did not intend to work full-time continuously or without

interruption in the labour force. While 84.5 per cent of the females intended to work full-time in the labour force "when married" (Table 13), this percentage dropped to 28.0 per cent for "when have a child or children" (Table 14), and went up to 68.3 per cent for "when child or children are grown" (Table 15). The reverse pattern was true for women's part-time labour force employment intentions. Eleven per cent of the women intended to work part-time "when married" (Table 13). This percentage increased to 49.7 per cent for "when have a child or children" (Table 14), and decreased back to 11.0 per cent for "when child or children are grown" (Table 15). The male work force participation pattern was different from the female. Approximately the same percentage indicated they would work full-time for all the circumstances given. The same holds true for their part-time participation pattern. Differences between males and females were statistically significant only for the circumstances of "when have a child or children" (Table 15). Many more males than females intended to work full-time and many more females than males intended to work part-time. A greater proportion of women intended to work part-time rather than full-time upon maternity.

TABLE 13

CIRCUMSTANCES UNDER WHICH RESPONDENT WOULD WORK IN THE LABOUR FORCE, BY SEX

When Married	Full-Time			Part-Time		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Yes	84.5	76.6	79.8	11.0	7.5	9.0
All Others*	15.5	23.4	20.2	89.0	92.5	91.0
(N)	(161)	(231)	(392)	(163)	(239)	(402)

Chi square = 3.632
(d.f. = 1)
Not statistically
significant at
 $p < .05$

Chi square = 1.466
(d.f. = 1)
Not statistically
significant at
 $p < .05$

TABLE 14

CIRCUMSTANCES UNDER WHICH RESPONDENT WOULD WORK IN THE LABOUR FORCE, BY SEX

When Have A Child or Children	Full-Time			Part-Time		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Yes	28.0	74.5	55.4	49.7	9.2	25.6
All Others*	72.0	25.5	44.6	50.3	90.8	74.4
(N)	(161)	(231)	(392)	(163)	(239)	(402)

Chi square = 83.041
(d.f. = 1)
Statistically
significant at
 $p < .0001$; $\Phi = .460$

Chi square = 83.361
(d.f. = 1)
Statistically
significant at
 $p < .0001$; $\Phi = .455$

*This category includes all those who answered incorrectly, or who didn't circle the answer for various reasons.

TABLE 15

CIRCUMSTANCES UNDER WHICH RESPONDENT WOULD WORK IN THE LABOUR FORCE, BY SEX

When Child or Children are Grown	Full-Time			Part-Time		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Yes	68.3	65.4	66.6	11.0	13.0	12.2
All Others*	31.7	34.6	33.4	89.0	87.0	87.8
(N)	(161)	(231)	(392)	(163)	(239)	(402)

Chi square = .372

(d.f. = 1)

Not statistically
significant at $p < .05$

Chi square = .336

(d.f. = 1)

Not statistically
significant at $p < .05$

*This category includes all those who answered incorrectly, or who didn't circle the answer for various reasons.

Earning Expectations Compared to Spouse

Of the 16 women who expected to earn more than their husbands, 43.8 per cent intended to work full-time after having a child or children, while only 23.1 per cent of the 39 women who expected to earn less intended to work full-time (Table 16). The proportion of women who expected to earn more who would work full-time under these circumstances was substantially greater (by 20.7 per cent) than those who expected to earn less. Differences between the groups of women, however, did not attain statistical significance.

TABLE 16

FEMALES WHO WOULD WORK FULL-TIME IN THE LABOUR FORCE AFTER HAVING A CHILD OR CHILDREN, BY SALARY EXPECTATIONS COMPARED TO SPOUSE

Response	Salary Expectations Compared to Spouse				Total %
	More %	Less %	About Same %	Not Thought %	
Yes	43.8	23.1	27.3	25.7	27.6
All Others*	56.3	76.9	72.7	74.3	72.4
(N)	(16)	(39)	(66)	(35)	(156)

Chi square = 2.555 (d.f. = 3) Not statistically significant at $p < .05$

*This category includes all those who didn't circle the answer for various reasons, e.g., those who may have answered "no"; those who may intend not to work at all; or those who do not intend to have children.

Factors Relating to Satisfactory Adult Activities

To determine definitions of satisfactory work, home, and family life activities, respondents were asked to indicate (on a four-point scale ranging from "major importance" to "no importance"), how important each of six activities were to them personally. Briefly, these activities dealt with having a career; doing community work; keeping a good household; having skills for some personal independence; having rewarding relationships; and raising and caring for children.

The statements dealing with doing community work and raising and caring for children did not attain statistical significance. Males and females commonly thought that raising and caring for children was of "major importance" and that doing community work was of "moderate importance".

Although the majority of responses for both males and females was in the "major importance" category for the statements about career, rewarding male-female relationships and the acquisition of skills for some independence, chi square analysis was not possible because of cell frequency problems.

Response differences between females and males were statistically significant only for the statement concerning the importance of keeping a good household (Table 17). The greatest differences between the sexes were at the "moderate importance" and "no importance" levels. More females than males (37.8 per cent compared to 29.6 per cent) thought this to be of moderate importance. More males than females thought this to be of no importance (16.7 per cent compared to 9.1 per cent).

TABLE 17

HOW IMPORTANT IS IT TO YOUR DEFINITION OF A SATISFACTORY ADULT LIFE "TO KEEP A GOOD HOUSEHOLD...?", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Major Importance	19.5	16.3	17.6
Moderate Importance	37.8	29.6	32.8
Low Importance	31.7	29.2	30.2
No Importance	9.1	16.7	13.8
No Opinion	1.8	8.2	5.7
(N)	(164)	(257)	(421)

Chi square = 14.098 (d.f. = 4) Statistically significant at
 $p < .01$; Cramer's V = .183

Males and females, then, commonly agreed that raising and caring for children was of major importance but varied in their attitudes toward household work. More females than males believed it was important to have skills that go into being a good homemaker. The majority of respondents thought that having a career and skills for independence were of major importance.

Summary

Most of the women intended to work in the full-time work force when married, to leave it upon maternity, and to return after their child or children were grown. The majority of them intended to participate full-time in the work force when married and only part-time upon motherhood. Although fully one-quarter of the females intended to work full-time upon maternity almost one-half planned to work part-time under these circumstances. The data support the hypothesis that women do not intend to participate full-time in the work force on a continuous basis. Most of the men intended to work full-time under all circumstances. The proportion of women who expected to earn more who said they would work full-time after having a child or children was substantially greater than those who expected to earn less. However, differences among the groups of women did not attain statistical significance. The majority of respondents thought that having a career and skills for independence were of major importance. Males and females commonly agreed that raising and caring for children was of major importance. Females, however, were more likely than males to believe that having skills for keeping a good household was important.

Justifications for Educational and Occupational Choices

This section is concerned with the reasons women give for choosing their educational programs and occupational careers. Since women continue to enter traditional areas of education and occupation, it was hypothesized that

women have traditional beliefs about female personality traits, and,

women believe it is difficult for them to compete with men in the work force.

Beliefs Concerning Female Personality Traits

Respondents were asked to indicate their beliefs about female personality traits. Those respondents who agreed with the statements were said to have restrictive or traditional beliefs about female personality traits. Those who disagreed were said to have egalitarian beliefs.

The proportion of female disagreement was greater than that of agreement for each of the eight statements. It is clear from the data, then, that more women have egalitarian than traditional or restrictive beliefs about female personality traits.

A comparison of the eight statements revealed that the lowest proportions of feminine agreement were for the statements that "men are more inclined toward intellectualism than women" (5.2 per cent), and "men are better able to reason logically than women" (5.7 per cent) (Tables 18 & 19). The proportion of women who disagreed with these statements were 80.6 and 85.4 per cent respectively.

There were statistically significant differences between male and female responses on all eight categories. Consistently more males

than females agreed, and more females than males disagreed. In general, beliefs about female personality traits were more modern than traditional for both sexes, but more males than females had traditional beliefs. The only three statements, however, for which a greater proportion of males expressed traditional rather than egalitarian beliefs were that "men are more aggressive than women", "women are more sympathetic than men", and "women are more emotional than men". Slightly over half of the men thought that men were more aggressive than women and that women were more emotional than men. Slightly less than half agreed that women were more sympathetic than men, but only one-third disagreed.

TABLE 18

"MEN ARE MORE INCLINED TOWARD INTELLECTUALISM THAN WOMEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	5.2	24.2	16.4
Uncertain	14.2	20.6	18.0
Disagree	80.6	55.2	65.6
(N)	(155)	(223)	(378)

Chi square = 31.399 (d.f. = 2) Statistically significant at $p < .0001$; Cramer's V = .288

TABLE 19

"MEN ARE BETTER ABLE TO REASON LOGICALLY THAN WOMEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	5.7	24.5	16.9
Uncertain	8.9	19.7	15.4
Disagree	85.4	55.8	67.7
(N)	(157)	(233)	(390)

Chi square = 38.696, (d.f. = 2) Statistically significant at $p < .0001$;
 Cramer's V = .315

Beliefs Concerning Competition Between the Sexes

Respondents were asked how difficult or easy it was for female students to compete with male students in ten of the University departments or faculties. Response differences between females and males did not attain statistical significance for either Engineering, Humanities, Commerce and Administration, or Education (Tables 20 to 23). The majority of the respondents of both sexes thought it was difficult for female students to compete with male students in Engineering (Table 20).

TABLE 20

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS IN" ENGINEERING, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	66.9	60.3	62.8
Easy	18.5	22.7	21.1
No Opinion	14.6	16.9	16.0
(N)	(151)	(242)	(393)

Chi square = 1.733 (d.f. = 2) Not statistically significant at $p < .05$

Most of the respondents of both sexes thought it was easy for female students to compete with male students in Humanities (Table 21).

TABLE 21

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS IN" HUMANITIES, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	1.4	2.5	2.1
Easy	76.4	77.3	76.9
No Opinion	22.3	20.2	21.0
(N)	(148)	(242)	(390)

Chi square = .763 (d.f. = 2) Not statistically significant at $p < .05$

More than half of the respondents of both sexes thought it was easy for female students to compete with male students in Commerce and Administration (Table 22).

TABLE 22

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN COMMERCE AND ADMINISTRATION, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	25.0	23.9	24.3
Easy	61.2	59.3	60.0
No Opinion	13.8	16.9	15.7
(N)	(152)	(243)	(395)

Chi square = .664 (d.f. = 2) Not statistically significant at $p < .05$.

The vast majority of respondents of both sexes also thought it was easy for female students to compete with male students in Education (Table 23).

TABLE 23

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN EDUCATION, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	2.0	6.8	4.9
Easy	81.1	75.5	77.7
No Opinion	16.9	17.7	17.4
(N)	(148)	(237)	(385)

Chi square = 4.518 (d.f. = 2) Not statistically significant at $p < .05$

Males and females, then, commonly agreed that it was difficult for female students to compete with male students in Engineering, and easy for female students to compete with male students in Humanities, Commerce and Administration, and Education (Tables 20 to 23).

Many more women disagreed than agreed with the statement that "University education gives males and females equal opportunity on the job market" (Table 24). Only 5.7 per cent of them strongly agreed, 34.8 per cent agreed, while 50.0 per cent disagreed and 9.5 per cent strongly disagreed with this statement. The total percentages of disagreement versus agreement were 59.5 and 40.5 respectively.

Comparing males and females, the differences between their responses attained statistical significance. Males were more likely than females to agree with the statement that "university education gives males and females equal opportunity on the job market". Females,

(then, were more likely to disagree, while men were more likely to agree (Table 24).

TABLE 24

"UNIVERSITY EDUCATION GIVES MALES AND FEMALES EQUAL OPPORTUNITY ON THE JOB MARKET", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Strongly Agree	5.7	12.1	9.5
Agree	34.8	45.4	41.2
Disagree	50.0	37.9	42.7
Strongly Disagree	9.5	4.6	6.5
(N)	(158)	(240)	(398)

Chi square = 13.446 (d.f. = 3) Statistically significant at $p < .01$; Cramer's V = .184

The majority of women also believed that women have to have better qualifications than men in order to compete for jobs (Table 25). Fifteen point seven per cent of the women strongly agreed with the statement "Women have to have better qualifications than men in order to compete for jobs", 54.2 per cent agreed, 27.5 per cent disagreed and only 2.6 per cent strongly disagreed. The total percentages of agreement versus disagreement were 69.9 and 30.1 respectively.

Once more differences between female and male responses attained statistical significance. Males were more likely than females

to disagree with the statement that "women have to have better qualifications than men in order to compete with jobs". Females, then, were more likely to agree, while males were more likely to disagree (Table 25).

TABLE 25

"WOMEN HAVE TO HAVE BETTER QUALIFICATIONS THAN MEN IN ORDER TO COMPETE FOR JOBS", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Strongly Agree	15.7	10.3	12.5
Agree	54.2	36.6	43.6
Disagree	27.5	42.7	36.6
Strongly Disagree	2.6	10.3	7.3
(N)	(153)	(232)	(385)

Chi square = 22.071 (d.f. = 3) Statistically significant at $p < .001$; Cramer's V = .239

Guidance Counselling

School representatives played a role in educational sex-typing. Respondents were asked which program of study a teacher or guidance counsellor had suggested they enter. While only a minority of respondents said they had received such guidance, response differences between males and females attained statistical significance for guidance to Education, Humanities, Engineering, and Computer Science

(Tables 26 to 29). A larger percentage of females than males said they were guided to Humanities and to Education. Eighteen point two per cent of the females compared to 11.1 per cent of the males stated that they were guided into the Humanities, while 20.6 per cent of the females compared to 6.5 per cent of the males stated that they were guided into Education (Table 26 and 27).

TABLE 26

GUIDED INTO HUMANITIES, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	18.2	11.1	13.8
All Others*	81.8	88.9	86.2
(N)	(165)	(262)	(427)

Chi square = 4.302 (d.f. = 1) Statistically significant at $p < .05$; Phi = .100

*This category includes all those who didn't circle the answer for various reasons.

TABLE*27

GUIDED INTO EDUCATION, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	20.6	6.5	11.9
All Others*	79.4	93.5	88.1
(N)	(165)	(262)	(427)

Chi square = 19.185 (d.f. = 1) Statistically significant at $p < .0001$; Phi = .212

*This category includes all those who didn't circle the answer for various reasons.

A larger proportion of males than females were guided into Engineering and Computer Science. Twenty point six per cent of the males compared to 7.3 per cent of the females were guided into Engineering. Twenty point six per cent of the males compared to 8.5 per cent of the females were guided into Computer Science (Tables 28 and 29).

TABLE 28

GUIDED INTO ENGINEERING, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	7.3	20.6	15.5
All Others*	92.7	79.4	84.5
(N)	(165)	(262)	(427)

Chi square = 13.783 (d.f. = 1) Statistically significant at
 $p < .001$; Phi = .180

TABLE 29

GUIDED INTO COMPUTER SCIENCE, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	8.5	20.6	15.9
All Others*	91.5	79.4	84.1
(N)	(165)	(262)	(427)

Chi square = 11.118 (d.f. = 1) Statistically significant at
 $p < .001$; Phi = .161

*This category includes all those who didn't circle the answer for various reasons.

Females, then, were more likely to be guided into Humanities and Education, while males were more likely to be guided into both Engineering and Computer Science.

Summary

The majority of women disagreed on all eight statements concerning female personality traits. They had egalitarian rather than restrictive or traditional beliefs about female personality traits. The data, then, do not support the hypothesis that women have traditional beliefs about female personality traits. The vast majority of female respondents believed women to be as intellectually capable as men. Many of the females, however, thought that it was difficult for female students to compete with male students in Engineering. Males and females commonly agreed that it is difficult for female students to compete with male students in Engineering and easy in Humanities, Commerce and Administration, and Education. The majority of the women did not think it was difficult for female students to compete with male students in Commerce and Administration but did believe it to be difficult for them to compete with men for jobs. They thought that university education does not give males and females equal opportunity on the job market, and that "women have to have better qualifications than men in order to compete for jobs". The data, then, support the hypothesis that women believe it is difficult for them to compete with men in the work force.

Although the hypothesis about beliefs concerning female personality traits does not address the male respondents, it was interesting to note that while more male respondents were egalitarian

rather than traditional in their beliefs, they were consistently more traditional than the females. The only three statements, however, for which a greater proportion of males expressed traditional rather than egalitarian beliefs were that "men are more aggressive than women", "women are more sympathetic than men", and "women are more emotional than men".

Similarly, male respondents were less likely than the females to believe that it is difficult for women to compete with men in the work force. The men were more likely than the women to agree with the statement that "university education gives males and females equal opportunity on the job market", and to disagree with the statement that "women have to have better qualifications than men in order to compete for jobs".

Although only a minority of respondents said they had been guided into their area of study by a teacher or guidance counsellor, there were differences between males and females in educational guidance. More females than males had been guided into the Humanities and Education. More males than females were guided into Engineering and Computer Science.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The aim of this study has been to explain the continued entrance of women into feminine type areas of education leading to occupations which are not as highly valued and rewarded as those of men.

The concepts used to analyze the data are the role of women as mothers, the relationship of men and women to the economic sphere, and the role of formal education in reproducing the social order. The theoretical perspective used states that patriarchal and capitalist social organization support and benefit each other. Males are dominant over females in the educational system, the family, and the work place. Education is used by dominant groups as an instrument for socialization and thereby social control. Research has shown that schooling reinforces gender identity differences, transmitting ideas which contribute to the sexual division of labour between family and work place. Schools train women for acceptance of social roles as mothers and subordinates in the work force, resulting in greater profits for employers, and women's economic dependence on men. Women's lesser earning potential and the difficulty they encounter or believe they will encounter in competing with men in education and in the work force serve as reinforcement to their acceptance of responsibility for child-rearing.

The hypotheses that were not supported by the research were that females are less aware than males of a relationship between

education and occupation, and that women have traditional beliefs about female personality traits.

The hypotheses that were supported by the research were that women do not intend to participate full-time in the work force on a continuous basis, and that women believe it is difficult for them to compete with men in the work force. While the women were not less aware than the men of a relationship between education and occupation, they were less likely than the men to choose their area of study for eventual high income.

The data lend support to several aspects of socialist feminist theory. Child-rearing was of major importance for women's work force participation. While men and women seemed to have similar definitions of the activities involved in a satisfactory adult life, these definitions may have had different meanings for males and females. In terms of career and raising and caring for children, since more males aspired to higher earnings through their education and intended to work full-time on a continuous basis, it probably meant major responsibility for the financial support of the family and assisting in the home raising and caring for children. The men's career aspirations seemed to be more oriented toward material existence than were the women's. The women were less likely than the men to choose their program of study for high income and were more likely than the men to define satisfactory adult activities in terms of keeping a good household. The majority of women intended to leave the full-time labour force upon maternity. Most of the women's commitment to motherhood seemed to be greater than their commitment to full-time work force participation.

This may serve to reinforce female aspirations towards education leading to work compatible with their perceived maternal obligations.

While this study did not collect data that specifically suggest that women are defined as mothers so that they can be deliberately used as a reserve labour force, the data did lend support to the argument that because women accept their role as mothers caring for children in the home, they can be used in this way. The men and women had differing relationships to the economic sphere. The facts were that most of the females planned to remain in the full-time work force when they married, to leave it when they had children, and to return when the children were grown. The majority of the women were in traditionally feminine areas of study and were less likely than males to be seeking high income. They seemed to be preparing themselves for both bringing up children and work force participation in feminine areas of work. These aspirations on the part of women make them available as a reserve and elastic labour force group. Since there are always women in the process of rearing children and those who have either not yet begun or already finished, women as a group can readily serve as such reserve. Their motherhood intentions and lesser earnings aspirations may in fact be financially beneficial to employers. Employers may, for these reasons, justify the lower salaries and support-type jobs for women. Lower salaries for female employees may signify greater employer profits, and economic dependence of women on men. While females indicated that they wanted some independence, economic independence for most of them seemed to be incompatible with their family responsibilities. The women could not be financially

independent while out of the full-time labour force. Most people who do not work in the labour force can not be economically independent, and in general, people who work part-time are likely to be less economically independent than those who work full-time. Economic evaluations are included in social rankings of people. Women's responsibility for child-rearing in the nuclear family results in their economic dependence on men and their lesser social valuation. Thus, the nuclear family as a structure for the socialization of children as feminine responsibility, and the mode of production, may support each other to the benefit of patriarchy and capitalism.

The women's beliefs about differences between male and female personality traits could not be said to greatly influence their entrance into traditional areas of study and work. The majority of women had egalitarian rather than restrictive or traditional beliefs about female personality traits. The vast majority of them did not consider men to be intellectually more capable than women, but in contradiction to this, many believed it to be difficult for female students to compete with male students in Engineering. Similarly, the women believed it was easy for female students to compete with male students in the Faculty of Commerce and Administration, but that university education did not give them equal opportunity with men in the job market, and that women had to have better qualifications than men in order to compete for jobs. These findings substantiate the importance attributed by women to education in relation to occupation. In short, they believed it was difficult for them to compete with men in the job market. Women, then, may choose not to enter the Faculty of

Engineering because engineering is socially defined as a masculine area of study in which it is difficult for women to compete. They may not aspire to jobs in engineering because of beliefs of formidable competition with men in educational institutions and in this field of work. Furthermore, they may not aspire to study in the Faculty of Commerce and Administration and masculine-typed jobs in general through beliefs of difficult competition with men in the work force. They choose instead those areas of education socially defined as feminine, such as Education and Humanities, in which it is easy for females to compete with males and which lead to female-typed jobs for which they compete with other women.

A feminine justification for the entrance of women into traditional feminine areas of education and occupation, is that it is difficult for women to compete with men in the work force. The men were less likely than the women to think it was difficult for women to compete with men in the work force. The division of labour by sex, then, is less likely to be justified by males than by females in terms of the difficulty of women in competing with men for jobs. But greater proportions of males had traditional or restrictive rather than egalitarian beliefs about the personality traits of emotion, sympathy, and aggression. Male justification, then, for the division of labour between the sexes may still include the ideas that since women are more emotional and sympathetic than men they are better suited for child-rearing, and that since males are more aggressive than women they are better suited for continuous work force participation.

Guidance counselling for women to suitable feminine areas of

study, agreement of male peers of the difficulty or ease of female students to compete with male students, and their more restrictive attitudes about female personality traits, all reinforce the self-image of women, influencing their educational and occupational aspirations. Because women are defined as mothers, they intend to be mothers. Since they intend to be mothers, and because they believe their educational and occupational choices are limited to those opportunities that exist for them as females, they enter those areas of study in which they think it is easier for them to compete as females, leading to jobs they think are realistically more attainable, and less difficult to succeed in. Thus, in the Concordia University school year 1981/82, those faculties leading to the better or higher income jobs had more males than females, while the greater proportion of the females were in the Arts and Science Faculty.

Beliefs or knowledge that women are mothers, as well as about differences in personality traits between women and men and competition between the sexes in education and the work force, may be acquired in the family, through peers, in schooling, and other socializing agencies. Research into the structure, content, and transmission of education has indicated that the socialization process into gender identities and roles suitable to the sexual division of labour between family and work place is part of the social construction of reality in schooling. The theoretical perspective used states that the dependent status of women can change only with changes in structures of reproduction, production, and their accompanying ideologies, that education or ideas alone can not change the sexual division of labour.

If only ideas about sex roles or the sexes are changed, then the dependent status of women can not change. Seemingly similar definitions of satisfactory adult activities, and egalitarian attitudes expressed for female personality traits, while reflecting some change in attitudes about the sexes, are not necessarily an indication of a trend for sexual equality in work and social rewards. In the light of the theoretical perspective, egalitarian attitudes expressed may be due in large part to the consciousness raising projects of the women's liberation movement in recent decades, and may be connected to the publicity given the cause of equality for women. The basic foundation of the differential role and status between the sexes is the structural division between family and work place, women's responsibility for child care, and men's responsibility for material existence. This kind of division in responsibility results in the traditional status of women as economic dependents of men, and their lesser valuation. Egalitarian ideas notwithstanding, the facts are that although a small proportion of the women intended to work full-time following maternity, the majority did not and were still in those areas of study leading to occupations that are less highly valued and rewarded.

On the other hand, it might be argued that there is a time lag between egalitarian attitudes and egalitarian sex roles and rewards, and that an egalitarian model of sex roles is in the process of emerging. If socialist feminist theory is sound, then women will remain primarily mothers with lower earning aspirations than men, and the gap in earnings between the sexes will not substantially decrease, or may even continue to increase. Further research regarding women's

educational, occupational, and economic aspirations that can be generalized to larger populations may, therefore, be a good test of this theory.

The data in this study also do not provide conclusive evidence of the effects of the women's aspirations for higher earnings than their husbands, on full-time work force participation after having children. Larger sample sizes for the different groups of women that also can be generalized to larger populations might provide more conclusive evidence of the influence of greater earnings compared to husbands, on women's continuous full-time work force participation. Such findings might indicate the extent to which the role of women as mothers continues to influence women's work force participation.

Some women have successfully entered traditional male areas of education and occupation. The socialist feminist theoretical perspective suggests that success for some women in male areas may be attributed to a combination of factors. In very general and abstract terms these are structural and individual characteristics that cut across the sexes; i.e., characteristics generated from socialization which result in the appropriate motivating factors and the availability of existing opportunities.

Holter (1972) talks about the more subtle ways in which sex differentiation is maintained. In describing contemporary differentiation by sex, Holter has argued that industrial societies use covert rather than overt mechanisms for ensuring such differentiation. She suggested that mechanisms for supporting sex role differentiation may include an emphasis on legal definitions, or on official ideology

which distracts from actual practice; ritualized selection of women for a small number of official positions; and an increase of women's influence in institutions which are, in some respects becoming obsolete.

Gender socialization begins in the family. This research shows that it continues in schooling, reproducing the division of labour by sex. The attitudes of the women studied indicated that the majority will give motherhood priority over work force participation and will be available as a surplus labour force.

BIBLIOGRAPHY

Books

- Ambert, Anne-Marie. Sex Structure, second edition. Canada: Longman, 1976.
- Armstrong, Pat and H. Armstrong. The Double Ghetto. Toronto: McLelland and Stewart, 1978.
- Bernstein, Basil. Class, Codes and Control. London: Routledge and Kegan Paul, 1977a.
- Bourdieu, Pierre and Jean-Claude Passeron. Reproduction in Education, Society and Culture. London and Beverley Hills: Sage Publications, 1977.
- Bowles, Samuel and H. Gintis. Schooling in Capitalist America. New York: Basic Books, 1976.
- Breton, Raymond. Social and Academic Factors in the Career Decisions of Canadian Youth. Ottawa: Manpower and Immigration, 1972.
- Carnoy, Martin. Education as Cultural Imperialism. New York: David McKay, 1974.
- Clement, Wallace. Continental Corporate Power. Toronto: McClelland and Stewart, 1977.
- Collins, Randall. Conflict Sociology: Toward an Explanatory Science. New York: Academic Press, 1975.
- Connelly, Patricia. Last Hired, First Fired. Toronto: The Women's Press, 1978.
- Deem, Rosemary. Women and Schooling. London: Routledge and Kegan Paul, 1978.
- Dinnerstein, Dorothy. The Mermaid and the Minotaur. U.S.A.: Harper and Row, 1977.
- Firestone, Shulamith. The Dialectic of Sex. U.S.A.: Bantam Books, by arrangement with W. Morrow, 1972.
- Forcese, Dennis. The Canadian Class Structure. Canada: McGraw-Hill Ryerson, 1980.
- Giddens, Anthony. The Class Structure of the Advanced Societies. London: Hutchinson, 1974.
- Goldberg, Steven. The Inevitability of Patriarchy. New York: Morrow, 1974.

- Hunter, Alfred A. Class Tells. Toronto: Butterworth, 1981.
- Jaggar, Allison M. and P.R. Struhl. Feminist Frameworks. U.S.A.: McGraw-Hill, 1978.
- Lofland, John. Analyzing Social Settings. Belmont, California: Wadsworth Publishing, 1971.
- McLellan, David. The Thought of Karl Marx. Hong Kong: The Macmillan Press, 1978.
- Mednick, Martha T.S., S.S. Tangri and L.W. Hoffman. Women and Achievement. U.S.A.: John Wiley and Sons, 1975.
- Mitchell, Juliet. Woman's Estate. U.S.A.: Pantheon Books, 1971.
- Nie, Norman H., C.H. Hull, J.G. Jenkins, K. Steinbrenner, and D.H. Bent. Statistical Package for the Social Sciences, second edition. U.S.A.: McGraw Hill Book, 1975.
- Nielsen, Joyce McCarl. Sex in Society. Belmont, California: Wadsworth Publishing, 1978.
- Porter, John. The Vertical Mosaic. Toronto: University of Toronto Press, 1965.
- Porter, Marion R., J. Porter and B.R. Blishen. Does Money Matter? Downsview, Ont.: Institute for Behavioural Research, 1973.
- Prentice, Alison L. and S.E. Houston. Family, School and Society. Toronto: Oxford University Press, 1975.
- Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw Hill Book, 1956.
- Sjoberg, Gideon and R. Nett. A Methodology for Social Research. U.S.A.: Harper and Row, 1968.
- Sutherland, Margaret B. Sex Bias in Education. Oxford, Eng.: Basil Blackwell, 1981.
- Tepperman, Lorne. Social Mobility in Canada. Toronto and Montreal: McGraw-Hill Ryerson, 1975.
- Turner, R. The Social Context of Ambition. San Francisco: Chandler Publishing, 1964.
- Vickers, Jill M. and J. Adam. But Can you Type? Canada: Clarke, Irwin, 1977.
- Wilson, Susannah J. Women the Family and the Economy. Canada: McGraw-Hill Ryerson, 1982.

Articles in Books and Periodicals

- Armstrong, Hugh and P. Armstrong. "The Segregated Participation of Women in the Canadian Labour Force", Canadian Review of Sociology and Anthropology, XII (1975), Part 1, 370-384.
- Banks, Olive. "Women and Education", British Journal of Sociology of Education, I (1980), 129-134.
- Benston, Margaret. "The Political Economy of Women's Liberation", Woman in a Man-Made World. Edited by N. Glazer-Malbin and H.Y. Waehrer. U.S.A.: Rand McNally, 1972. pp. 119-128.
- Bernstein, Basil. "Social Class, Language and Socialization", Power and Ideology in Education. Edited by J. Karabel and A.H. Halsey. New York: Oxford University Press, 1977. pp. 473-486.
- Clement, Wallace. "The Education of the Corporate Elite", Sociological Theories of Education. Edited by R. Murphy. Canada: McGraw-Hill Ryerson, 1979. pp. 107-136.
- Eisenstein, Zillah. "Developing a Theory of Capitalist Patriarchy and Socialist Feminism", Capitalist Patriarchy and the Case for Socialist Feminism. Edited by Z.R. Eisenstein. U.S.A.: Monthly Review Press, 1979. pp. 5-35.
- Gaskell, Jane. "Stereotyping and Discrimination in the Curriculum", Precepts, Policy and Process: Perspectives on Contemporary Canadian Education. Edited by H.A. Stevenson and J.D. Wilson. London, Ont.: Alexander, Blake Associates, 1977.
- Hearn, James C. and S. Olzak. "The Role of College Major Departments in the Reproduction of Sexual Inequality", Sociology of Education, LIV (1981), 195-205.
- Hoffman, Lois W. "Early Childhood Experiences and Women's Achievement Motives", Women and Achievement. Edited by M. Mednick, S. Tangri and L. Hoffman. U.S.A.: John Wiley and Sons, 1975. pp. 129-150.
- Hoffman, Lois W. "Fear of Success in Males and Females, 1965 and 1971", Women and Achievement. Edited by M. Mednick, S. Tangri and L. Hoffman. U.S.A.: John Wiley and Sons, 1975. pp. 221-230.
- Holter, Harriet. "Sex Roles and Social Change". Toward a Sociology of Women. Edited by C. Safilios-Rothschild. Toronto: Xerox College Publishing, 1972. pp. 331-343.
- Horner, Matina S. "Toward an Understanding of Achievement-Related Conflicts in Women", Women and Achievement. Edited by M. Mednick, S. Tangri, and L. Hoffman. U.S.A.: John Wiley and Sons, 1975. pp. 206-220.

- Hunter, Alfred A. "Studies of Class, Power, and Status", Social Stratification: Canada, second edition. Edited by J. Curtis and W. Scott. Scarborough, Ont.: Prentice-Hall of Canada, 1979. pp. 59-86.
- Kammeyer, Kenneth. "Birth Order and the Feminine Sex Role Among College Women", American Sociological Review, XXXI (1966), 508-515.
- Karabel, Jerome and A.H. Halsey. "Educational Research: A Review and an Interpretation", Power and Ideology in Education. Edited by J. Karabel and A.H. Halsey. U.S.A.: Oxford University Press, 1977. pp. 1-85.
- Kuhn, Annette and A.M. Wolpe. "Feminism and Materialism", Feminism and Materialism. Edited by A. Kuhn and A.M. Wolpe. London, Eng., and Boston, Mass.: Routledge and Kegan Paul, 1978. pp. 1-10.
- MacDonald, Madeleine. "Socio-Cultural Reproduction and Women's Education", Schooling for Women's Work. Edited by Rosemary Deem. Boston: Routledge and Kegan Paul, 1980. pp. 13-25.
- Maeots, Krista. "Education and Women: Old Roles and New Realities", Must Schools Fail? Edited by N. Byrne and J. Quarter. Toronto: McClelland and Stewart, 1972.
- McDonald, Lynn. "Wages of Work: A Widening Gap Between Women and Men", Women in Canada. Edited by M. Stephenson. Don Mills, Ont.: General Publishing, 1978. pp. 181-191.
- Mitchell, Juliet. "Women: The Longest Revolution", Woman in a Man-Made World. Edited by N. Glazer-Malbin and H.Y. Waehrer. U.S.A.: Rand McNally, 1973. pp. 45-52.
- Papanek, Hanna. "Men, Women, and Work: Reflections on the Two-Person Career", Changing Women in a Changing Society. Edited by J. Huber. Chicago: University of Chicago Press, 1973.
- Pineo, Peter C., J. Porter, and H.A. McRoberts. "The 1971 Census and the Socioeconomic Classification of Occupations", The Canadian Review of Sociology and Anthropology, XIV (1977), 91-102.
- Pyke, S.W. "Sex Role Socialization in the School System", Education, Change and Society. Edited by R.A. Carlton, L.A. Colley, and N.J. MacKennon. Toronto: Gage, 1977. pp. 426-438.
- Quarter, Jack. "The Teacher's Role in the Classroom: The Primary Source of Teacher Frustration and Discontent", Must Schools Fail? Edited by N. Byrne and J. Quarter. Toronto: McClelland and Stewart, 1972.
- Ricks, Frances A. and S.W. Pyke. "Teacher Perceptions and Attitudes that Foster or Maintain Sex Role Differences", Interchange, IV (1973), 26-33.

Smith, Dorothy E. "An Analysis of Ideological Structures and How Women are Excluded: Considerations for Academic Women", Canadian Review of Sociology and Anthropology, XII (1975), Part I, 353-369.

Synge, Jane. "The Sex Factor in Social Selection Processes in Canadian Education", Education, Change, and Society. Edited by R.A. Carlton, L.A. Colley, and N.J. MacKennon. Toronto: Gage, 1977. pp. 298-310.

Wolpe, Ann Marie. "Education and the Sexual Division of Labour", Feminism and Materialism. Edited by A. Kuhn and A.M. Wolpe. Great Britain: Routledge and Kegan Paul, 1978. pp. 290-328.

Young, Michael F.D. "An Approach to the Study of Curricula as Socially Organized Knowledge", Knowledge and Control. Edited by M.F.D. Young. Great Britain: Collier-MacMillan, 1971. pp. 19-44.

Other Sources

Barakett, Joyce. Women in Higher Education. Montreal: A research proposal submitted to CASA, Concordia University, 1981.

Concordia University. Day and Evening Schedule. Montreal, 1981/82.

Concordia University. Undergraduate Calendar. Montreal, 1981/82.

Gouvernement du Québec. Home Ownership Assistance Program. Québec: Societe d'habitation du Quebec, form SHQ-035-04 (81-12).

National Council of Welfare. Poverty in Canada. Ottawa: Jan., 1982.

National Coucil of Welfare. Women and Poverty. Ottawa: Oct., 1979.

National Council of Welfare. The Working Poor: People and Programs. Ottawa: March, 1981.

Ostry, Sylvia. The Female Worker in Canada. Ottawa: Queen's Printer, Statistics Canada, Catalogue 99-553, 1968.

Statistics Canada. Education in Canada. Ottawa: Catalogue 81-229, Annual, 1973.

Statistics Canada. Canada Year Book 1980-81. Ottawa: Minister of Supply and Services, 1981.

Veevers, J.E. The Family in Canada. Ottawa: Statistics Canada, 1971
Census of Canada, Catalogue 99-725, V (1977), Part III.

APPENDIX A

TABLES

TABLE 30

STUDENTS IN THE UNIVERSITY AND RESPONDENTS, FULL-TIME OR PART-TIME, BY SEX

Status	Concordia Under-graduate Students*			Respondents		
	Sex			Sex		
	Female %	Male %	Total %	Female %	Male %	Total %
Full-Time	40.0	52.7	46.6	81.0	87.9	85.2
Part-Time	60.0	47.3	53.4	19.0	12.1	14.8
(N)	(9088)	(9980)	(19,068)	(163)	(257)	(420)

*These figures and classifications were obtained from Concordia University's Department of Institutional Research.

TABLE 31

AGE OF RESPONDENTS

Age	Total Respondents % (N)
17 to 22	56.3 (240)
23 to 41	43.7 (186)
	(426)

TABLE 32

MARITAL STATUS OF RESPONDENT

Marital Status	Total Respondents	
	%	(N)
Married	11.0	(47)
Not Married	89.0	(380)
		(427)

TABLE 33

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS" BY SEX, WHEN CONTROLLING FOR RESPONDENTS' LEVEL OF EDUCATION

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	52.8	57.5	55.4	53.7	52.9	53.1
Uncertain	22.2	12.7	16.9	24.1	22.3	22.9
Disagree	25.0	29.9	27.7	22.2	24.8	24.0
(N)	(108)	(134)	(242)	(54)	(121)	(175)

Chi square = 3.955
 (d.f. = 2) Not
 statistically
 significant at
 $p < .05$

Chi square = .158
 (d.f. = 2) Not
 statistically
 significant at
 $p < .05$

TABLE 34

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS", BY SEX, WHEN CONTROLLING FOR MATERNAL EDUCATIONAL ATTAINMENT

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	50.0	58.5	55.4	58.9	47.1	52.4
Uncertain	24.5	18.0	20.4	19.6	17.6	18.5
Disagree	25.5	23.5	24.2	21.4	35.3	29.0
(N)	(102)	(183)	(285)	(56)	(68)	(124)

Chi square = 2.305
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 2.925
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 35

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS", BY SEX, WHEN CONTROLLING FOR PATERNAL EDUCATIONAL ATTAINMENT

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	53.4	59.7	57.4	51.5	46.3	48.5
Uncertain	28.5	15.6	17.4	26.5	21.1	23.3
Disagree	26.1	24.7	25.2	22.1	32.6	28.2
(N)	(88)	(154)	(242)	(68)	(95)	(163)

Chi square = 1.204
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 2.286
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 36

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS", BY SEX, WHEN CONTROLLING FOR PATERNAL OCCUPATIONAL RANKING

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	53.0	59.3	56.7	53.9	48.2	50.5
Uncertain	22.7	18.7	20.4	22.4	14.9	17.9
Disagree	24.2	22.0	22.9	23.7	36.8	31.6
(N)	(66)	(91)	(157)	(76)	(114)	(190)

Chi square = .662
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 4.210
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 37

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS", BY SEX, WHEN CONTROLLING FOR MATERNAL OCCUPATIONAL RANKING

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	53.7	58.3	56.3	55.6	46.3	50.6
Uncertain	23.2	15.7	18.9	22.2	14.6	18.2
Disagree	23.2	26.0	24.8	22.2	39.0	31.2
(N)	(95)	(127)	(222)	(36)	(41)	(77)

Chi square = 1.955
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 2.665
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 38

"UNIVERSITY EDUCATION IS IMPORTANT FOR HIGH EARNINGS", BY SEX, WHEN CONTROLLING FOR YEARS OF MATERNAL INVOLVEMENT IN THE LABOUR FORCE

Response	0 to 10 Years			11 to 40 Years		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	53.7	54.2	54.0	55.6	54.3	54.9
Uncertain	19.4	23.4	21.8	25.0	12.3	18.3
Disagree	26.9	22.4	24.1	19.4	33.3	26.8
(N)	(67)	(107)	(174)	(72)	(81)	(153)

Chi square = .634
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 6.090
(d.f. = 2)
Statistically
significant at
 $p < .05$;
Cramer's V = .200

TABLE 39

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX, WHEN CONTROLLING FOR LEVEL OF EDUCATION

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	36.1	41.5	38.1	47.2	42.0	43.6
Uncertain	25.0	15.6	19.8	22.6	20.2	20.9
Disagree	38.9	43.0	41.2	30.2	37.8	35.5
(N)	(108)	(135)	(243)	(53)	(119)	(172)

Chi square = 3.394
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = .932
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 40

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX, WHEN CONTROLLING FOR MATERNAL EDUCATIONAL ATTAINMENT

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	37.9	42.9	41.1	40.7	36.8	38.5
Uncertain	26.2	19.2	21.8	22.2	17.6	19.7
Disagree	35.9	37.9	37.2	37.0	45.6	41.8
(N)	(103)	(182)	(285)	(54)	(68)	(122)

Chi square = 1.944
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = .970
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 41

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX, WHEN CONTROLLING FOR PATERNAL EDUCATIONAL ATTAINMENT

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	34.5	47.4	42.7	45.6	28.7	35.8
Uncertain	21.8	13.6	15.6	26.5	27.7	27.2
Disagree	43.7	39.0	40.7	27.9	43.6	37.0
(N)	(87)	(154)	(241)	(68)	(94)	(162)

Chi square = 4.729
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 5.773
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 42

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX, WHEN CONTROLLING FOR PATERNAL OCCUPATIONAL RANKING

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	45.5	51.1	48.7	38.7	29.2	33.0
Uncertain	15.2	18.9	17.3	29.3	16.8	21.8
Disagree	39.4	30.0	34.0	32.0	54.0	45.2
(N)	(66)	(90)	(156)	(75)	(113)	(188)

Chi square = 1.546
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 9.282
(d.f. = 2)
Statistically
significant at
 $p < .01$;
Cramer's V = .222

TABLE 43

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX, WHEN CONTROLLING FOR MATERNAL OCCUPATIONAL RANKING

Response	Lower Level			Higher Level		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	38.5	43.7	41.4	41.2	35.7	38.2
Uncertain	26.0	17.5	21.2	26.5	14.3	19.7
Disagree	35.4	38.9	37.4	32.4	50.0	42.1
(N)	(96)	(126)	(222)	(34)	(42)	(76)

Chi square = 2.414
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 2.950
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 44

"EDUCATION DETERMINES HOW SUCCESSFUL PEOPLE WILL BE IN THEIR LIFE'S WORK", BY SEX, WHEN CONTROLLING FOR YEARS OF MATERNAL INVOLVEMENT IN THE LABOUR FORCE

Response	0 to 10 Years			11 to 40 Years		
	Sex		Total	Sex		Total
	Female	Male		Female	Male	
	%	%	%	%	%	%
Agree	39.1	43.9	42.1	40.5	38.3	39.4
Uncertain	20.3	17.8	18.7	31.1	17.3	23.9
Disagree	40.6	38.3	39.2	28.4	44.4	36.8
(N)	(64)	(107)	(171)	(74)	(81)	(155)

Chi square = .419
(d.f. = 2) Not
statistically
significant at
 $p < .05$

Chi square = 5.849
(d.f. = 2) Not
statistically
significant at
 $p < .05$

TABLE 45

FACULTY OF STUDY "GENERALLY REGARDED BY STUDENTS AS GIVING THE BETTER
JOB OPPORTUNITIES", BY SEX

Leading to Better Job Opportunities	Sex		Total
	Female	Male	
	%	%	%
Humanities, e.g. languages, history	0.0	0.0	0.0
Biological Science	0.7	0.9	0.8
Social Science	0.0	0.0	0.0
Physics	0.0	0.0	0.0
Chemistry	0.0	0.9	0.5
Computer Science	45.7	38.5	41.2
Education	0.0	0.0	0.0
Commerce & Administration	37.0	30.5	33.0
Engineering	15.9	28.8	23.9
Mathematics	0.0	0.0	0.0
Other	0.7	0.4	0.5
(N)	(138)	(226)	(364)

Chi square test could not be used for this table because of cell
frequency problems.

TABLE 46

CHOSE PROGRAM OF STUDY "BECAUSE IT TRAINS ME FOR A PARTICULAR TYPE OF WORK", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	60.0	66.8	64.2
All Others*	40.0	33.2	35.8
(N)	(165)	(262)	(427)

Chi square = 2.032 (d.f. = 1) Not statistically significant at $p < .05$

*This category includes all those who didn't circle the answer for various reasons, or who answered incorrectly.

TABLE 47

CHOSE PROGRAM OF STUDY "BECAUSE IT LEADS TO FURTHER EDUCATION AFTER GRADUATING FROM UNIVERSITY", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	40.6	46.6	44.3
All Others*	59.4	53.4	55.7
(N)	(165)	(262)	(427)

Chi square = 1.457 (d.f. = 1) Not statistically significant at $p < .05$

*This category includes all those who didn't circle the answer for various reasons, or who answered incorrectly.

TABLE 48

CHOSE PROGRAM OF STUDY "BECAUSE OF INTEREST", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Yes	78.2	75.6	76.6
All Others*	21.8	24.4	23.4
(N)	(165)	(262)	(427)

Chi square = .384 (d.f. = 1) Not statistically significant at $p < .05$

*This category includes all those who didn't circle the answer for various reasons, or who answered incorrectly.

TABLE 49

HOW IMPORTANT IS IT TO YOUR DEFINITION OF A SATISFACTORY ADULT LIFE "TO DO COMMUNITY WORK...?", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Major Importance	5.6	10.0	8.3
Moderate Importance	49.4	39.0	43.0
Low Importance	32.7	37.5	35.6
No Importance	6.8	7.7	7.4
No Opinion	5.6	5.8	5.7
(N)	(162)	(259)	(421)

Chi. square = 5.665 (d.f. = 4) Not statistically significant at $p < .05$

TABLE 50

HOW IMPORTANT IS IT TO YOUR DEFINITION OF A SATISFACTORY ADULT LIFE "TO RAISE AND CARE FOR A CHILD OR CHILDREN?", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Major Importance	54.9	58.8	67.3
Moderate Importance	28.7	24.2	25.9
Low Importance	11.0	7.7	9.0
No Importance	3.7	4.6	4.2
No Opinion	1.8	4.6	3.5
(N)	(164)	(260)	(424)

Chi square = 4.669 (d.f. = 4) Not statistically significant at $p < .05$.

TABLE 51

HOW IMPORTANT IS IT TO YOUR DEFINITION OF A SATISFACTORY ADULT LIFE "TO HAVE A CAREER... TO DEVELOP SKILLS AND CAPACITIES... THAT WOULD BE REWARDING?", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Major Importance	78.7	74.3	76.0
Moderate Importance	17.7	21.5	20.0
Low Importance	3.0	2.3	2.6
No Importance	0.6	0.8	0.7
No Opinion	0.0	1.1	0.7
(N)	(164)	(261)	(425)

Chi square test could not be used for this table because of cell frequency problems.

TABLE 52

HOW IMPORTANT IS IT TO YOUR DEFINITION OF A SATISFACTORY ADULT LIFE "TO HAVE A MUTUALLY REWARDING RELATIONSHIP WITH A MAN/WOMAN?", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Major Importance	72.0	74.2	73.4
Moderate Importance	22.4	15.8	18.3
Low Importance	5.0	5.0	5.0
No Importance	0.0	1.9	1.2
No Opinion	1.6	3.1	2.1
(N)	(161)	(260)	(421)

Chi square test could not be used for this table because of cell frequency problems.

TABLE 53

HOW IMPORTANT IS IT TO YOUR DEFINITION OF A SATISFACTORY ADULT LIFE "TO HAVE SKILLS... (FOR) INDEPENDENCE...?", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Major Importance	82.1	73.7	77.0
Moderate Importance	16.0	22.7	20.1
Low Importance	0.6	2.0	1.4
No Importance	0.6	0.8	0.7
No Opinion	0.6	0.8	0.7
(N)	(162)	(255)	(417)

Chi square test could not be used for this table because of cell frequency problems.

TABLE 54

"MEN ARE MORE AGGRESSIVE THAN WOMEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	22.9	55.9	42.7
Uncertain	18.5	17.4	17.8
Disagree	58.6	26.7	39.4
(N)	(157)	(236)	(393)

Chi square = 48.416 (d.f. = 2) Statistically significant at $p < .0001$;
Cramer's V = .351

TABLE 55

"WOMEN ARE MORE SYMPATHETIC THAN MEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	31.9	46.8	40.7
Uncertain	18.1	22.5	20.7
Disagree	50.0	30.7	38.6
(N)	(160)	(231)	(391)

Chi square = 15.107 (d.f. = 2) Statistically significant at $p < .001$;
Cramer's V = .197

TABLE 56

"WOMEN ARE MORE MORAL THAN MEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	23.2	28.6	26.4
Uncertain	18.7	26.4	23.3
Disagree	58.1	44.9	50.3
(N)	(155)	(227)	(382)

Chi square = 6.536 (d.f. = 2) Statistically significant at $p < .05$;
Cramer's V = .131

TABLE 57

"WOMEN ARE MORE ARTISTICALLY INCLINED THAN MEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	8.5	26.1	19.0
Uncertain	20.3	19.9	20.1
Disagree	71.2	54.0	60.9
(N)	(153)	(226)	(379)

Chi square = 19.357 (d.f. = 2) Statistically significant at $p < .0001$;
Cramer's V = .226

TABLE 58

"WOMEN ARE MORE EMOTIONAL THAN MEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	36.2	53.6	46.6
Uncertain	15.0	14.6	14.8
Disagree	48.7	31.8	38.7
(N)	(160)	(233)	(393)

Chi square = 13.257 (d.f. = 2) Statistically significant at $p < .01$;
 Cramer's V = .184

TABLE 59

"MEN ARE BETTER LEADERS THAN WOMEN", BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Agree	8.2	38.6	26.3
Uncertain	11.9	21.0	17.3
Disagree	79.9	40.3	56.4
(N)	(159)	(233)	(392)

Chi square = 64.039 (d.f. = 2) Statistically significant at $p < .0001$;
 Cramer's V = .404

TABLE 60

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN BIOLOGICAL SCIENCE, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	17.0	11.6	13.6
Easy	61.2	63.2	62.5
No Opinion	21.8	25.2	23.9
(N)	(147)	(242)	(389)

Chi square = 2.494 (d.f. = 2) Not statistically significant at $p < .05$

TABLE 61

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN SOCIAL SCIENCE, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	2.8	6.7	5.2
Easy	79.2	72.7	75.1
No Opinion	18.1	20.6	19.6
(N)	(144)	(238)	(382)

Chi square = 3.461 (d.f. = 2) Not statistically significant at $p < .05$

TABLE 62

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN PHYSICS, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	50.3	36.3	41.8
Easy	30.2	38.5	35.2
No Opinion	19.5	25.2	23.0
(N)	(149)	(234)	(383)

Chi square = 7.350 (d.f. = 2) Statistically significant at $p < .05$;
Cramer's V = .139

TABLE 63

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN CHEMISTRY, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	42.5	26.4	32.5
Easy	39.0	50.2	45.9
No Opinion	18.5	23.4	21.5
(N)	(146)	(235)	(381)

Chi square = 10.613 (d.f. = 2) Statistically significant at $p < .01$;
Cramer's V = .167

TABLE 64

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN COMPUTER SCIENCE, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	32.9	32.2	32.5
Easy	47.3	49.0	48.3
No Opinion	19.9	18.8	19.2
(N)	(146)	(239)	(385)

Chi square = .116 (d.f. = 2) Not statistically significant at $p < .05$

TABLE 65

"HOW DIFFICULT OR EASY IS IT FOR FEMALE STUDENTS TO COMPETE WITH MALE STUDENTS" IN MATHEMATICS, BY SEX

Response	Sex		Total
	Female	Male	
	%	%	%
Difficult	38.5	37.2	37.7
Easy	42.7	41.6	42.0
No Opinion	18.9	21.2	20.3
(N)	(143)	(231)	(374)

Chi square = .297 (d.f. = 2) Not statistically significant at $p < .05$

APPENDIX B

QUESTIONNAIRE

Dear Student:

The purpose of this questionnaire is to learn as much as possible about the interests and ambitions of university students so that this information can be related to providing satisfactory career opportunities for Canadians when they finish their education. The questionnaire is part of a research study being carried out by the Concordia education department and is a sociology master's degree research thesis topic for a graduate student at Concordia. This is not a test, and your name or I.D. are not wanted on this form. We assure you that all your answers are anonymous, and will be used only for statistical purposes. You can help us by answering the questions that follow as carefully and accurately as possible.

1. For the following statements, CIRCLE AS MANY NUMBERS AS APPLY TO YOU.

	<u>Full-time</u>	<u>Part-time</u>
I am presently working in the labour force.....	1 ...	... 1 ..
I intend to work in the labour force in the future ...	2 ...	... 2 ..

2. Under what circumstances would you not work in the labour force either full-time or part-time? _____

3. CIRCLE THE NUMBER THAT APPLIES TO YOU.

I am presently married	1
I am presently not married	2

4. If not married, do you intend to be married in the future? CIRCLE ONE NUMBER ONLY.

Yes	1
No	2
Don't know	3

5. Under which of the following circumstances would you work in the labour force, either full-time or part-time? CIRCLE AS MANY NUMBERS AS APPLY TO YOU.

Full-time Part-time

When married would work	1	.....	1	....
When have a child or children would work	2	.....	2	....
When child or children are grown would work	3	.....	3	....
Don't know under which of these conditions would work..	4	.....	4	....
Have not thought about it	5	.....	5	....

6. What sort of job do you prefer to have? _____

7. How likely is it that a man would be favored over a woman for this kind of job? CIRCLE ONE NUMBER ONLY.

Very likely	1
Quite likely	2
Not very likely	3
Not likely at all	4
No opinion	5

9. What do you think your salary will be compared to that of your spouse or future spouse if you get married? CIRCLE ONE NUMBER ONLY.

More	1
Less	2
About the same	3
Haven't thought about it	4

10. How important are each of the following activities to your definition of a satisfactory adult life? CIRCLE ONE NUMBER FOR EACH STATEMENT.

	Major Impor- tance	Moderate Impor- tance	Low Impor- tance	No Impor- tance	No Opin- ion
To have a career, a long-term job that requires me to develop my skills and capacities and that would be rewarding for me personally.....	1	2	3	4	5
To do community work, e.g., to help people in my community through organizations such as hospital auxiliaries, or through informal organizations such as tenants' groups, anti-pollution groups, etc.....	1	2	3	4	5
To keep a good household - to be a good cook and have other skills that go into being a good homemaker.....	1	2	3	4	5
To have skills, and the possibility of getting jobs, that will give me some independence in organizing my life as I wish.....	1	2	3	4	5
To have a mutually rewarding relationship with a man/woman.....	1	2	3	4	5
To raise and care for a child or children.....	1	2	3	4	5

11. How well informed do you think you are or were to make a good choice for your occupation?
CIRCLE ONE NUMBER ONLY

Very well informed	1
Quite well informed	2
Not too well informed	3
Not well at all informed	4
No opinion	5

12. If you have ever been to a guidance counsellor or to a teacher who has counselled you, which of the following programs did they suggest you enter? CIRCLE AS MANY NUMBERS AS APPLY TO YOU.

Humanities, e.g., languages, history, etc..... 1
 Biological Science 2
 Social Science 3
 Physics or Chemistry 4
 Computer Science 5
 Engineering 6
 Education 7
 Commerce and Administration 8
 Fine Arts 9
 Mathematics 10
 Other (specify) 11

13. Who has helped you most to decide about your education and career plans? CIRCLE ONE NUMBER FOR EDUCATION AND ONE NUMBER FOR CAREER.

Education Career

a) Parents 1 1
 b) Teachers 2 2
 c) Guidance counsellors 3 3
 d) Girlfriend/boyfriend, or spouse 4 4
 e) Friends 5 5
 f) Other relatives or adults 6 6
 g) Other (describe) 7 7
 h) No one helped 8 8

14. Thinking of your academic potential, how do you rate your chances of being successful in getting a university bachelor's degree or a university diploma? CIRCLE ONE NUMBER ONLY.

Above average 1
 Average 2
 Below average 3
 No opinion 4

15. Would you be willing to borrow money if you need it to finish your education? CIRCLE ONE NUMBER ONLY

Yes 1
 No 2
 Don't know 3

16. Which one of the following departments or faculties of study is generally regarded by students as giving the better job opportunities?
CIRCLE ONE NUMBER ONLY

Humanities, e.g., languages, history	1
Biological Science	2
Social Science	3
Physics	4
Chemistry	5
Computer Science	6
Education	7
Commerce and Administration	8
Engineering	9
Mathematics	10
Other (specify) _____	11

17. How difficult or easy is it for female students to compete with male students in the following university faculties or departments?
CIRCLE ONE NUMBER FOR EACH DEPT. OR FACULTY.

	<u>Very</u> <u>Diff-</u> <u>icult</u>	<u>Diff-</u> <u>icult</u>	<u>Easy</u>	<u>Very</u> <u>Easy</u>	<u>No</u> <u>Opin-</u> <u>ion</u>
Humanities, e.g., languages, history	1	2	3	4	5
Biological Science	1	2	3	4	5
Social Science	1	2	3	4	5
Physics	1	2	3	4	5
Chemistry	1	2	3	4	5
Computer Science	1	2	3	4	5
Education	1	2	3	4	5
Commerce and Administration	1	2	3	4	5
Engineering	1	2	3	4	5
Mathematics	1	2	3	4	5
Specify any other you wish to include	1	2	3	4	5

18. What is your opinion about each of the following statements about education? CIRCLE ONLY ONE NUMBER FOR EACH STATEMENT.

	<u>Stron- gly Agree</u>	<u>Un- cer- tain Agree</u>	<u>Dis- agree</u>	<u>Str- ongly Dis- agree</u>	<u>No Opin- ion</u>	
Education determines how successful people will be in their life's work.....	1	2	3	4	5	6
Higher education for females lessens the chance for having a family life.....	1	2	3	4	5	6
University education is important for high earnings.....	1	2	3	4	5	6
University education is more important for males than for females.....	1	2	3	4	5	6
University education is a waste of time for most males.....	1	2	3	4	5	6
University education is a waste of time for most females.....	1	2	3	4	5	6

How do you feel about each of the following statements?

19. Women should play a greater role than they now do in making decisions about education. CIRCLE ONE NUMBER ONLY.

- Strongly agree..... 1
 Agree..... 2
 Disagree..... 3
 Strongly disagree..... 4
 No opinion..... 5

20. A university education gives males and females equal opportunity on the job market. CIRCLE ONE NUMBER ONLY.

Strongly agree..... 1
Agree..... 2
Disagree..... 3
Strongly disagree..... 4
No opinion..... 5

21. Women have to have better qualifications than men in order to compete for jobs. CIRCLE ONE NUMBER ONLY.

Strongly agree..... 1
Agree..... 2
Disagree..... 3
Strongly disagree..... 4
No opinion..... 5

22. Universities should somehow be involved in making people aware of their educational opportunities for women. CIRCLE ONE NUMBER ONLY.

Strongly agree..... 1
Agree..... 2
Disagree..... 3
Strongly disagree..... 4
No opinion..... 5

23. Universities should somehow be involved in making people aware of job opportunities for women. CIRCLE ONE NUMBER ONLY.

Strongly agree..... 1
Agree..... 2
Disagree..... 3
Strongly disagree..... 4
No opinion..... 5

24. Women's Studies programs in universities have not changed people's attitudes about the kinds of work women can do. CIRCLE ONE NUMBER ONLY.

Strongly agree..... 1
Agree..... 2
Disagree..... 3
Strongly disagree..... 4
No opinion..... 5

25. Men and women should both take some Women's Studies courses.
CIRCLE ONE NUMBER ONLY.

- Strongly agree..... 1
- Agree..... 2
- Disagree..... 3
- Strongly disagree..... 4
- No opinion..... 5

26. Why did you choose your program of study? CIRCLE AS MANY NUMBERS
AS APPLY TO YOU.

- a) Because it trains me for a particular type of work..... 1
- b) Because it leads to further education after graduating
from university..... 2
- c) Because it enables me to get a job with high income..... 3
- d) Because of interest..... 4
- e) Reasons other than the above (specify) _____ 5

27. Before you entered this program of study, had you decided what
kind of occupation you would like to have when you finished your
schooling? CIRCLE ONE NUMBER ONLY.

- Yes, I had definitely decided..... 1
- Yes, I had some idea, but was not definite..... 2
- No, I still had not made up my mind..... 3

28. If you are likely to leave university before graduating, indicate
the main reason for leaving. CIRCLE ONE NUMBER ONLY.

- a) To get a job..... 1
- b) Poor grades..... 2
- c) To get married..... 3
- d) Because of financial problems..... 4
- e) Dislike school work..... 5
- f) Don't know why plan to leave..... 6
- g) Other (specify) _____ 7

29. Do you plan to go on to graduate school? CIRCLE ONE NUMBER ONLY.

- Yes..... 1
- No..... 2
- Don't know..... 3

30. If no or don't know to the above, - How important is each of the following reasons to you for not going to or being uncertain about going to graduate school? CIRCLE ONE NUMBER BESIDE EACH STATEMENT.

	Very Impor- tant	Fairly Impor- tant	Not Very Impor- tant	Not Impor- tant At All	No Opin- ion
I want to get a job and start earning money as soon as possible.....	1	2	3	4	5
My immediate family and/or best friend do not want me to continue.....	1	2	3	4	5
I find schoolwork boring and uninteresting.....	1	2	3	4	5
I don't have the proper courses or credits to continue.....	1	2	3	4	5
I don't have the right grades to continue.....	1	2	3	4	5
I want to get married as soon as possible.....	1	2	3	4	5
It is expensive and I don't think it is worth the expense.....	1	2	3	4	5
Other reasons _____	1	2	3	4	5

Could you now please give us the following information about yourself.....

31. Age _____ 32. Sex _____ 33. CIRCLE ONE NUMBER ONLY
 Full-time student..... 1
 Part-time student..... 2

34. What degree or diploma program are you in? CIRCLE ONE NUMBER ONLY or describe the program you are in.

Arts..... 1
 Science..... 2
 Commerce and Administration..... 3
 Engineering..... 4
 Fine Arts..... 5
 Other (describe) _____ 6

35. What is your major or its equivalent? (describe) _____

36. What level of university are you in this year? CIRCLE ONE NUMBER ONLY.

First year..... 1
 Second year..... 2
 Third year..... 3
 Last year..... 4

37. What language do you usually speak when you are at home with your family? CIRCLE ONE NUMBER ONLY.

English..... 1
 French..... 2
 Both equally..... 3
 Other than English or French.... 4

38. What were your mother's and father's highest educational attainments? CIRCLE ONE NUMBER FOR THE HIGHEST LEVEL YOUR MOTHER ATTAINED AND ONE NUMBER FOR THE HIGHEST LEVEL YOUR FATHER ATTAINED.

Mother Father

None.....	1	.....	1	...
Elementary school.....	2	.....	2	...
Some high school.....	3	.....	3	...
Finished high school.....	4	.....	4	...
Some Cegep.....	5	.....	5	...
Finished Cegep.....	6	.....	6	...
Some university.....	7	.....	7	...
Finished university.....	8	.....	8	...
Other (describe) _____	9	.....	9	...
Don't know.....	0	.....	0	...

39. What is your father's occupation? (Describe in as much detail as possible, including the sort of place in which he works).

40. If your mother has ever been part of the labour force, describe her job in detail.

41. Approximately how many years altogether did your mother work in the labour force? _____

42. How do you feel about each of the following statements?
CIRCLE ONE NUMBER BESIDE EACH STATEMENT.

	Stron- gly Agree	Agree	Un- cer- tain	Dis- Agree	Stron- gly Dis- Agree	No opin- ion
a)						
In marriage, the major responsibility of the wife is to keep her husband and children happy.....	1	2	3	4	5	6
One of the most important things a mother can do for her daughter is to prepare her for the duties of being a wife.....	1	2	3	4	5	6
In marriage, the husband should make the major decisions.....	1	2	3	4	5	6
For a university woman, social poise is more important than grade-point average.....	1	2	3	4	5	6
English is a better major for a university woman than economics.....	1	2	3	4	5	6

42. (Cont.)

b)	Strongly Agree	Agree	Un- cer- tain	Dis- Agree	Strongly Dis- Agree	No opin- ion
Women are more emotional than men.....	1	2	3	4	5	6
Men are better leaders than women.....	1	2	3	4	5	6
Men are more aggressive than women.....	1	2	3	4	5	6
Women are more sympathetic than men.....	1	2	3	4	5	6
Women are more moral than men.....	1	2	3	4	5	6
Men are better able to reason logically than women.....	1	2	3	4	5	6
Women are more artistically inclined than men.....	1	2	3	4	5	6
Men are more inclined toward intellectualism than women.....	1	2	3	4	5	6

43. Most women in university take subjects like History, English, or Social Science, while Medicine, Law, and Engineering are studied mainly by men. What do you think is the reason for this?
