FACTORS WHICH INFLUENCE CAREER CHOICE AND FUTURE

ORIENTATIONS OF FEMALES: IMPLICATIONS FOR CAREER EDUCATION

by

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Factors Which Influence Career Choice and Future Orientations of Females:
Implications For Career Education

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ABSTRACT

The International Women's Year of 1975 was a catalyst in generating interest and stimulating discussion on the status of women in general, but of women in the work force in particular. Despite a discernible increase of women in the job market, occupations continue to be sex-segregated and women are still clustered in certain careers. High status occupations continue to be androcentric and the salary differential between males and females is still widening.

The literature is replete with explanations on the reasons for the constricted career choices of females and the lack of planning for a future which stresses a strong career orientation. In recent years, many efforts have been directed at raising the consciousness of women and sensitizing them to the factors which inhibit their progress. Even though the statistics on the participation of women in the work force are so revealing and the centrality of work in the lives of individuals so well established, many young women continue to be myopic in their career planning. At the other end of the spectrum the influx of ill-prepared, unskilled, "re-entry" women into the work force amplifies this problem. For an increasing number of women, a productive and self-sustaining life involves a career. Others are trying to make successful integrations of the variety of roles available to them.

With these concerns in mind, the present investigator sought to discover what the future plans of Ontario high school girls were.
and to elucidate their Career Education needs.

This was an applied study, designed to identify the variables which contribute significantly to the career aspirations, expectations, educational plans and career commitment of Ontario high school girls.

The sample was comprised of 1,167 girls from Grades 11, 12 and 13, in both public and private high schools. They were selected in such a manner that the influence of such factors as rural or urban residence, ethnicity, socio-economic status and religious affiliation, could be investigated.

The study was a cross-sectional survey and the major statistical procedure employed was multiple regression analysis. This procedure facilitated the study of the impact of 33 independent variables of a social, psychological and demographic nature on the dependent variables previously mentioned. The major findings are summarized below.

1. According to daughters, almost half of their parents wanted them to attend university.

2. As a group the parents had higher educational expectations for their daughters than the daughters had for themselves.

3. Over sixty per cent of the girls did not know the occupations their parents wanted them to have. Of those who knew, there were slight differences between the expectations of the two parents. The expectations of the fathers were slightly more non-traditional than those of the mothers.
4. A higher percentage of girls felt that they resembled their mothers in terms of attitudes and expectations than felt that they resembled their fathers.

5. Both parents more often wanted their daughters to combine marriage and a career than for them to become single professionals or to be married without careers.

6. Almost half the girls aspired to upper class occupations. Two out of five aspired to non-traditional occupations.

7. Less than a third of the girls expected to have an upper class occupation. One girl in four expected to have a non-traditional occupation.

8. Only half the girls stated that they knew at least one woman in the occupation they plan to enter.

9. Just under a half of the girls planned to continue their education in a community college or other post-secondary institution. Slightly more than one-third planned to enter university.

10. Most of the girls had a moderate career commitment. Their plans for career involvement would depend on whether or not they had children. The stage of schooling at which their children were would be very important.

11. More than half of the girls stated that they did not know enough about the occupations available to them to make a well-informed, career choice. However, many felt that they knew themselves (i.e., interests and abilities) quite well.
12. Only sixteen percent of the girls had had a course in which topics related to women were discussed in detail. For the majority, such topics were mentioned but only in a general way. One girl in three had never had the opportunity to discuss such topics.

13. The sex-role ideology of girls was varied with almost an equal proportion of girls falling within the Traditional, Moderate and Liberated categories.

14. In general, the girls in the sample knew very little factual information about women in the work force. They believed many myths about women.

15. The variables which contributed significantly to the dependent variables may be summarized as follows:

   a. Career Aspiration (Socio-economic Level)
      Grade level, academic average, position in the family, sex-role ideology.

   b. Career Aspiration (Traditional, Undifferentiated Non-traditional)
      Academic average, knowing women in the career, sex-role ideology.

   c. Career Expectation (Socio-economic Level)
      Academic average, socio-economic status, occupational category of mother, sex-role ideology.

   d. Career Expectation (Traditional, Undifferentiated Non-traditional)
      Type of school, academic average, occupational category of mother, occupation of mother, knowing women in the career, sex-role ideology.
e. Educational Plans
Type of school, grade level, academic average, family situation, mother's expectation concerning daughter's education, father's expectation concerning daughter's education, sex-role ideology.

f. Career Commitment
Ethnicity, position in the family, father's education, mother's feelings about employment, parent student wishes to emulate, sex-role ideology, knowledge of women in the work force.

The results of this study will be of particular interest to counsellors, teachers, educational policy-makers and all those concerned with the career preparation of students. The implications of the major findings for Career Education are discussed and recommendations are made to address the special needs of young women. A review of curriculum models and programs related to Career Education is appended.
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CHAPTER I
INTRODUCTION

This is an applied study, the purpose of which is twofold: (1) to provide detailed information on the variables which relate to career choice and future orientations of adolescent females in Ontario, and (2) to examine the implications of these data for Career Education. In addition, there is a review of curriculum models and recommendations which address specific needs of students as they relate to the career choice process.

This chapter defines the problem and the rationale for the study. It delineates the changes which are evident in the labour force and which amplify the need for systematic career education programmes. In addition, it states the reasons for selecting adolescent females and the importance of research which elucidates their guidance needs.

Statement of the Problem

Over the last decade, various movements have attempted to eradicate many social and psychological barriers which have inhibited women's achievement in many spheres of endeavour. In the past, these barriers served to constrict career choices, to depress aspirations for higher education and to limit adult roles primarily to that of homemaker and mother.
The recognition of the special needs of women has led many institutions to generate policies and programs in an effort to improve the status of women by expanding their educational and occupational opportunities. Facilitating legislations and other changes are making it necessary for many women to redefine their roles so that the career and family-related roles are not conceived as mutually exclusive. Landsberg (1975), for example, states that in Canada eight out of ten women will work outside the home for 30 years or more. Simpson (1971) also points to the changing life styles, roles and expectations of women in response to technological and social changes and says that these new developments expand the probability of women working outside the home in a variety of occupations.

There is a current trend towards increasing dependence on female employment as a major source of labour. This radical change in the pattern of female employment is becoming evident not only in terms of the number of years in the labour force but also in the types of occupations. Adnett and Final (1974) further mention the well established fact that, traditionally, there has been a concentration of women in certain occupations: unskilled factory work, teaching, nursing and clerical work. They forecast a reduction in demand for office workers as offices become even more automated and mechanized. It would therefore seem necessary that a wider range of choices be available to women, and that they, in turn, experience fewer inhibitions and less conflict in making these choices.
Statistics on the Canadian labour force produced by the Ontario Women's Bureau (1976) will elucidate one aspect of the problem. In 1974, 64% of all female workers were still concentrated in the clerical, sales, and service sectors, contrasted with 27% of all males. Men also were more evenly distributed throughout the occupational structure, with no more than 12% of all male workers in any one occupational cluster. Conversely, there were 3% of all women in managerial and administrative categories compared with 8% of all men. Women were also over-represented in the professional/technical area (47%). Upon close scrutiny however, one will notice that the majority of these women are in the teaching and nursing professions. These data for 1974 are not atypical of previous years, nor have they changed dramatically since then.

The number of women working outside the home has drastically increased over the past 20 years. In 1954, the participation rate of females over 15 years of age in Ontario was 27%; in 1964, 34%; in 1974, 43%; in 1976, 49% and in 1979, 52%.

The statistics on the participation rate of married women are also suggestive. A number of women are choosing to remain in employment after marriage or to re-enter the labour force after a period of absence. In 1951, only 15% of married women in Ontario worked outside the home. In 1974, 42% worked and in 1979, 51% work full time. Since 1966, all categories of women have increased their labour force participation but the greatest increase was for married women when compared with women who were single, divorced, separated or widowed.
The reasons for the increased participation of married women are many and varied; for the majority however, the decision is based on sheer financial need.

The foregoing data suggest that (a) it is necessary for females to be oriented towards the notion of work outside the home regardless of whether or not they plan to marry and (b) there is a need to remove the barriers which restrict their career choices to traditionally feminine occupations, particularly those for which there will be a reduction in demand. This is particularly important if these choices were made based on the internalization of notions of sex-appropriate occupations. The removal of psychological and social barriers may predispose women to expand their career choices, and the sex-segregation inherent in the occupational structure may become less apparent. The basis for occupational decisions may then be individual preference rather than social expectations, particularly when they are incongruent.

Other recent developments magnify the problem and demonstrate the need for preventative measures. These include: the number of ill-prepared "re-entry" women who are thrust into the workforce after rearing children, after divorce or the death of their spouse; the limitations now being placed on alimony and the decision of many women to remain single. All these factors place inordinate responsibility on families and institutions to prepare young girls for future contingencies. This may mean helping females to contemplate and plan for successful integrations of the variety of roles available to them.
Unfortunately, societal acceptance and reinforcement of the role of women as homemakers is so deeply entrenched that the expectation is evident in girls at a very early age. Women have been ignored in pursuits directed at vocational development. In fact, Career Education, with its emphasis on the preparation for and strategies to cope with the world of work, has not been emphasized in the education of students in general. The relationship between learning and earning is not readily apparent to many young people.

In its broadest sense, Career Education refers to:

Those gradual, cumulative educational activities and experiences which are necessary to enable a student to achieve increasing knowledge and personal competence in order to achieve a satisfying, self-sustaining role in society with regard to career choice, social responsibility, leisure time activity and personal development. (Kennedy, 1974, p. 1)

There is therefore great need for educators and counsellors to give increased attention to the education of women in an effort to help them make well-informed, career decisions. Only systematic education can erase some of the false notions about women and their status in the workforce, or can instil new values and raise expectations particularly when choices result from insufficient exposure and ignorance of alternatives.

In studying career choices, the rationale for selecting grades 11, 12 and 13 females is premised on the theory of Ginsberg, Ginsberg, Alexrad and Herman (1951). In essence, this is a developmental theory which describes the process of career decision-making. The three major periods are entitled Fantasy, Tentative and Realistic stages.
Grades 11, 12 and 13 students, who would most often fall within the 16–18 age range, would be at the point at which there is a transition from the Tentative to the Realistic stage of the career choice process.

In addition, support for studying this general age group can be gleaned from the research of Amisef (1973) who studied 3,059 grade 12 students in Ontario schools. He states:

Grade 12 students in Ontario were selected for the study because they are at a "critical" juncture of their life cycle. At this stage, these adolescents must decide whether to remain in high school and to complete grade 13, enter the labour force or select some form of post-secondary education that will prepare them for the vocational market place. (p. 2)

Of particular relevance to females, Anderson and Herman (1967) highlight the special needs of adolescent girls:

One outcome of the growing manpower needs of the nation and the expanding role of women in the labour market has been to produce a complex of problems for the young female who is entering early stages of vocational planning. In addition to her need for occupational information, decision-making experiences, and a setting in which to examine her feelings and needs, the adolescent girl is also faced with such problems as her emerging life plans of marriage and/or career, cultural biases against women in some occupations regarded as not feminine, and an understanding of herself in relation to these forces. (p. 191)

The data generated by this study will be very useful at the institutional level specifically in the area of Career Education. Research has demonstrated that the school is a training ground for sex-role stereotyping and for funnelling students into sex-appropriate activities and career choices. Whereas one admits that the schools' efforts may not be panacean, their mandate places them in a very
influential position to change attitudes and aspirations, and to
instil work-related values. Hoffman (1974) states that "the
precursors of the underachieving woman can be seen in the female
child" (p. 129). This statement emphasizes the special needs of
females in preparation for the future. Accountability, therefore,
rests jointly with the school and the home.

**Purpose and Importance of the Study**

The present study is an investigation of variables which are related
to the career choices and future orientations of Grades 11, 12 and
13 female students from rural and urban Ontario. Career choice refers
to aspirations or preferences and expectations, and "future orientations"
include educational plans and career commitment. The study incorporates
33 independent variables and six dependent variables (See Appendix B).

The increasing focus on issues related to women, has created unprece-
dented interest in both academics and practitioners, for research on women.
Breton, McDonald and Richer (1972) admit that there is a scarcity in
sociological literature of studies which concentrate on the factors which
predispose girls towards a career. The study of Breton et al., and also
that of Porter, Porter and Blishen (1973) stressed the importance of
increasing research in Ontario and throughout Canada. The vast majority
of studies on this topic have been conducted in the United States.

A number of the variables assessed in the present study are replica-
tions and extensions of previous findings as there is clear value in
replicating studies cross-culturally and at different historical periods.
Studies conducted in one geographical area are often not generalizable in different social milieux.

Hoffman (1975), in discussing this problem of generalizing results obtained with one population to another states that:

Furthermore, most empirical generalizations hold only within certain contexts. Variations in social class, family structure and ethnicity, as well as changes over time may make the generalizations inapplicable. (p. 131)

The fact that the present study is conducted in Canada is an important consideration as there are many differences between Canada and the United States. In addition to differences in the areas which Hoffman identifies, there are historical and economic differences between these two countries, which may invalidate generalizations.

It is therefore highly appropriate to conduct replications of studies done in North America, or at earlier time periods, on Canadian samples. The consideration of "time" is an important one in research in general, but particularly in research pertaining to women. Over the past decade, many definite efforts have been made to raise their consciousness and to improve their status. In Canada, the Royal Commission on the Status of Women which began in 1967, and their initial publication in 1970, helped to raise the level of public awareness on the status of women and their economic participation in the workforce. The International Women's Year in 1975 was also a catalyst in generating new programs and laws governing the employment and other conditions of women. Many schools and agencies, for example, developed guidance-related programs and materials aimed at raising the aspirations of girls and expanding their career choices. Although the impact of these
efforts and laws is not being tested directly, ongoing research on women is necessary to determine if there are new trends and changes in attitudes and career plans.

It is particularly important to discover what changes, if any, are taking place at the high school level in order to make clear statements on potential ameliorative measures which schools may adopt in their efforts to educate female students for a productive and rewarding role in society. The literature is replete with suggestions that females are ill-prepared for adult roles which emphasize a strong career orientation.

Results of a number of questions in this study will yield original data on girls in Ontario, Canada. For example, the incorporation of variables such as sex-role ideology, knowledge of the status of women in the workforce, occupational category of mother and exposure to a women's studies course have not been studied previously in rural and urban Ontario. In addition, a similar number of Ontario females (N = 1,167) have not been studied with respect to the combination of variables in this study. Even Breton et al. (1972) who to date have conducted the most extensive study on the career decisions of Canadian youth, admitted that he gave the topic of girls and their future orientations "scant attention" (p. 279). Other researchers such as Anisef (1973, 1974, 1975) and Porter et al. (1973) have conducted very impressive studies with some focus on women. The present study includes many of the variables they examined, while adding a number of other variables in an effort to form a more complete picture of the factors related to career choice and future orientations.
of females. In this regard, this study will further clarify the needs of high school girls vis-a-vis Career Education.

In addition to contributing to the pool of research in this area in the late seventies, a period of transition for many women, a concern of the present investigator, as an educational practitioner, is to contribute to educational practice by focusing on the implications of the study for the career education of females. Existing curriculum models are reviewed and concrete suggestions are made for career education programs at both the elementary and high school levels.

There is no doubt that the area of Career Education in general needs revitalization. Anisef (1974), after extensive research on the topic of vocational and educational planning of Ontario youth, is very qualified to comment on the apparent needs of the area. He suggests research which would:

Provide types of information from which detailed recommendations concerning guidance and future educational policies could be made. In the absence of such information, guidance programs and policy decisions would evolve largely from ignorance rather than a knowledge of the factors that explain the educational and vocational decisions of youth. (p. 132)

The subsequent review of literature identifies many factors which, in previous studies, have influenced the career aspirations, expectations and future planning of females. By combining all these variables, the present study seeks to find their relative importance to the career and educational plans of Ontario high school girls.
CHAPTER II

REVIEW OF THE LITERATURE

Factors Which Influence Career Choice and Future Orientations of Females

1. Sex-Role Ideology

Sex-role ideology is conceived as a system of sex-role beliefs forming a dimension with a traditional and a liberated pole. It consists of prescriptive beliefs which specify norms of behaviours and characteristics for men and women. This concept ought not be confused with "gender stereotypes" which consists of descriptive beliefs concerning the nature of men and women (Kalin and Tilby, 1978).

Kalin and Tilby contend that traditional ideologies are premised on the notion that there are basic differences between the sexes. Women are viewed as weak, vulnerable, in need of protection, deserving of a special respect, and are relegated to the roles of housewife and mother. Conversely, men are viewed as actors, providers and the sources of final authority. A liberated ideology is essentially androgynous, suggesting that the roles of men and women should be essentially the same and that psychological sex differences are primarily socially determined.

The antecedents of sex-role beliefs are inherent in the differential socializations of boys and girls; by the family (Bem & Bem, 1970; Berens, 1973; Hoffman, 1975; Maccoby and Jacklin, 1974; and Serbin & O'Leary, 1975), the school (Bernstein, 1972; Rowe, 1971;
Tibbets, 1975; Trecker, 1973; and Tressemer and Pleck, 1974) and the media (Cheda, 1971; Feminist on Children’s Literature, 1971; and Galloway, 1977).

Child rearing experiences clearly delineate and reinforce sex-appropriate behaviours and expectations. Girls are expected to be passive, dependent, cooperative and nurturant while boys are expected to be aggressive, independent, competitive and physically active. Conformity to ascribed sex roles is rewarded by parents and the overstepping of these boundaries can result in punishment. Individuals therefore strive to avoid behaviours which are incongruent with their sex-role expectations.

Schools have also been accused of reinforcing sex-role stereotypes. A sexist orientation is evident in the curriculum and activities of the kindergarten classroom, and throughout the school system. The textbooks exhibit clear demonstrations of sex-prejudice, as the images presented of men and women differ significantly. Trecker discovered the lack of female mathematicians and scientists in texts; problem solving materials consistently portrayed boys in diverse activities while girls were confined to sewing, cooking, and child care. Males demonstrate the use of scientific equipment in science textbooks. She states that:

Considering the large numbers of female students with scientific and mathematical potential who do not pursue careers in these areas, it seems unfortunate that texts and materials do not present young girls with positive female images and role models. (p. 110)

She concludes that women are excluded from pictorial materials and those who do appear are presented stereotypically.
A pernicious effect of such sex-role stereotyping is that it reinforces the attitudes which later translate themselves into the sex-segregation of occupations. Tibbets (1975) tested boys and girls (grades 1-4) on sex-role attitudes. She demonstrated that young children think in sex-oriented terms. Both sexes made stereotyped responses as a general rule, with the majority agreeing that men should be lawyers, presidents, astronauts, pilots, judges, farmers, clowns, taxi drivers, veterinarians, engineers, etc., while women should be nurses, secretaries, cooks, babysitters, and house cleaners, to name a few. It is worth noting that activities were sex typed except in the case of the woman bus-driver. This could be as a result of role models as children have had direct exposure to female bus drivers. She suggests that, although the evidence is not conclusive, the implications are obvious—if men or women are visible in non-stereotyped roles, children will be able to accept such circumstances as natural and will begin to think of themselves in these non-traditional roles. Shepherd and Hess (1975) also concluded that "the extreme conservatism of kindergarten children suggests that parents are continuing to convey and/or model traditional role divisions" (p. 32).

It is also well documented that sex-role stereotypes have a definite impact on perceptions, expectations and career choice of females (Cecil, Paul, & Olins, 1973; Crowley, Levitin, & Quinn, 1973; Rosen & Jerdee, 1973; Schlossberg & Goodman, 1972; Shepherd & Hess, 1975; and Young, 1973).
Other studies have attested to the limited career planning of female students and more importantly, the predictability of their choices (Fortner, 1970; Olive, 1973; Patterson, 1973; Rand, 1972). As traditions and popular beliefs are integral to individual and group decision-making, it is not surprising, therefore, that girls will choose in greater frequency those courses and jobs socially defined as appropriate for women (Kievit, 1976). Undoubtedly, the division of labour that exists in our society has a strong sexual component; the higher status occupations tend to be held by males. Societal sex-role definitions involve assumptions about sex appropriate occupations (Feather & Simon, 1976). It is therefore not difficult to predict that the majority of females will choose traditionally feminine occupations.

U'Ren (1971) states that the unequal education of males and females is a reflection of the roles society ultimately intends that they occupy. She amplifies the point by stating:

Quite simply, education should direct and inspire the individual to make the highest use of his or her particular abilities. Yet, in the case of women, we seem to forget this obvious fact. No one becomes a professional without encouragement; in a world that encourages that few women do so. Girls are not so much told that they cannot do something as not told that they can. And, if in spite of all, a girl does decide to tackle a traditionally male profession, others are more likely to discourage her than to offer support. (p. 225)

Gaskel (1978) studied the sex-role ideologies of 243 grade 12 girls in a predominantly white, working-class suburb in Boston. Her study indicated that girls aspiring to a college education are more
likely than girls not aspiring to go to college to have a more
"modern" score on sex-role ideology. Regarding occupational
aspirations, girls aspiring to professional occupations had less
traditional sex-role beliefs. She concludes:

Sex role ideology is consistently related to aspirations and
can be seen as an important variable intervening between
other background factors, especially academic achievement
and social class, and actual plans. (p. 50)

She further states that:

The conclusion that beliefs about women's place in the world
influence the way women plan their futures may seem
unexciting, but very little research has taken into account
the impact of these beliefs especially at the high school
level. Girls who grow up in a society permeated with tradi-
tional sex role attitudes will incorporate these attitudes
into their own life planning. (p. 52)

Tangri (1975) and Almquist and Angrist (1970) confirm that
unconventional career choosers are definite products of social
learning. In Tangri's research, girls of more educated working
mothers were low in sex-role stereotyping and consequently,
developed more "masculine" interests. Angrist and Almquist concluded
that the values of an unconventional occupational orientation were
transmitted by role models, whether mothers, teachers or professors.

If sex-role ideology affects career choice, it is important for
educators to know what the beliefs of students are since this has clear
implications for Career Education. Whereas the process of formal
education is not a panacea, yet schools can attempt, through special-
ized programs, to eradicate sex-role ideologies which have their
basis in sex-role stereotypes.
The discernible increase in female participation in the labour force will also make it necessary for female students to question the traditional and almost universally acknowledged belief that a woman's place is in the home. Despite certain changes in social attitudes and expectations of women, misconceptions and ideologies based on traditional stereotypes still prevail. In addition to socialization experiences, these ideologies may also be attributed to ignorance of factual data and lack of exposure to women in non-traditional arenas.

**Summary**

The research confirms the presence of sex role stereotyping in the socialization experiences of young children. The school, teachers and the curriculum, in addition to the child-rearing practices of parents, all exert a major influence in the formation of sex-role attitudes. At the higher levels, vocational and extra curricular activities reflect the appropriateness of masculine and feminine roles. In textbooks widely used in schools, women are conspicuous by their absence as important contributors or influential figures. The curriculum, therefore, gives a biased message as its standards are still masculine and provides very few role models for girls. Teachers unwittingly convey their biases and expectations which lead to differential treatment of the sexes. The school, therefore, greatly influences small children, reinforces what they have already learned from various experiences outside the classroom and teaches new ideas on the expectations of
their sex roles. That males and females receive differential sex-role education is therefore well documented. This education reveals itself in the sex-role ideology and the career choices of students.

2. Role Models

There is convincing evidence in the literature that "significant others", such as family, friends and teachers, exert a lasting influence on the lives of young children. More specifically, the influence of working mothers on daughters' career orientation is well established (Almquist & Angrist, 1970; Baruch, 1972; Bem & Bem, 1970; Burlin, 1976; Risch & Beymer, 1967; Tangri, 1975). Females learn their role through identification with significant others, therefore a career-oriented mother acts as a viable model for her daughter.

Maccoby and Jacklin (1974) state that, because of their availability, power and nurturance, parents are the most likely models to be copied in the acquisition of the sex-typed behaviours, particularly in the preschool years; that children are more frequently exposed to models of their own sex than to cross-sex models; that the likelihood is greater that same-sex models will be imitated more than opposite sex ones because of the children's tendency to imitate models whom they perceive as similar to themselves. In later development, selective imitation may occur: the prestige of the model can override sex-appropriateness of activities. Sex-typing therefore may become a product of direct reinforcement for sex-appropriate behaviours.

Consistent research findings in this area are: the career-orientation of women is determined by their exposure to a broad range of
people, experiences, and options, and that aspirations are dictated by the life styles of mothers, teachers, peers and work contacts (Angrist & Almquist, 1970; Angrist & Almquist, 1975); that more educated working mothers particularly those in non-traditional occupations act as role models for their daughters (Tangri, 1975); that non-traditional career choosers have been exposed to models in non-traditional careers (Burlin, 1976; Kriger, 1972) and that women whose mothers have not worked devalue feminine competence and define as "masculine", career-related achievements (Baruch, 1972).

In terms of marriage orientation and career commitment as they relate to socio-economic status, Birnbaum's (1975) research led to the establishment of a typology of the homemaker, the married professional and the single professional. The homemaker, she states, comes from a traditionally successful middle class background, with well-educated parents and a non-working mother who provides a family-oriented model. The married professional is a product of highly educated parents from a successful middle or upper class background whose mother presents an ideal "role innovative" (that is, non-traditional) and work-oriented model. The single professional is a bright woman from a lower-middle or lower class background.

A caveat seems appropriate at this point. Despite the fact that these profiles are drawn up on the basis of research findings, it is important that one be aware of the potential for stereotyping girls from particular backgrounds. At best, these typologies should be seen as crude descriptions rather than as absolute representations of girls from particular socio-economic backgrounds.
Summary

The research supports the hypothesis that mothers exert a strong influence on the career orientation of daughters. Unconventional choosers are definite products of social learning experience; role models, whether mothers, teachers, or professors, transmit the values of an occupational orientation. On the other hand, conventional career choosers and girls who lack a career orientation have also been exposed to women in traditional career roles or to women who model a non-working orientation.

3. Socioeconomic Status

Socioeconomic status as a variable influences many facets of human existence. Class structure in most societies is inextricably intertwined with the occupational order. Forcensee (1975) states that social class membership produces attitudinal expectations regarding educational and occupational success. He further states that research in Canada has confirmed that aspirations are principally a function of the social class level of one's family and rural versus urban residence, factors which are not totally unrelated.

Thus one is more likely to aspire and expect to achieve a university degree if one comes from a middle or upper class family as opposed to a lower class family. Conversely, one is more likely to wish and expect to drop out of the educational system before completing high school, or immediately upon completion, if one comes from a lower class family as opposed to a middle class family. Reflecting educational aspirations, middle class youth are more likely to aim for high status occupations such as medical doctor or lawyer. (p. 68)

Forcensee reports studies which demonstrate that even when I.Q. is controlled there is a persistence of class bias. His conclusions
are that in Canada the educational system is not providing sufficient opportunities to overcome ascribed social class membership; that there is an underrepresentation of lower class children in universities; and that by region, ethnic group and social class, the probability of academic success and occupational entree varies (p. 81).

In a very impressive study of 150,000 secondary school students across Canada, Breton (1968) found that lower class students with high intelligence were less likely to aspire to post secondary education than were middle and upper class students. The lower class children in his sample also aspired to lower status occupations. Breton et al. (1972) concluded:

The existence of a relationship between socio-economic background and educational intentions is so strong and well established in research literature that any study which did not yield it would probably a priori be considered methodologically deficient. (p. 137)

Porter, Porter and Blishen (1973) and Anisef (1973) also confirm the relationship between class and educational and occupational aspirations. Porter et al. refer to the situation of girls in general but of lower class girls in particular:

As much as class, sex determines a young person's expectations. For lower class girls, there is a double jeopardy. (p. 19)

It is obvious that the most deprived group in Ontario as far as educational opportunity is concerned are lower class girls particularly those with high mental ability. It seems very likely that the reason must be financial. (p. 124)

They further state that girls of a high socio-economic status have similar expectations to boys; that is to graduate from university. Expectations, they observed, decrease with socio-economic status. They
continue to amplify the plight of lower class girls:

But the .32 percent in Grade 12 of lower class girls with high mental ability who expected to go directly to work is evidence that large numbers of bright girls in the lower classes do not have the opportunity to develop their talents. It seems likely that when a family's financial resources are scare it is less likely to use them for girls than for boys. The reason that so few lower class girls aspire to university is probably because it would be unrealistic for them to do so. (p. 124)

Geller's (1973) investigation of role aspiration and life style orientations of 241 Grades 9 and 13 high school girls in Toronto confirm the above findings. Lower class females planned to complete their education in Grade 12 or 13 or possibly to continue in a specialized course. Upper class students expected to attend university and to enter a career. Middle class girls had varied expectations: many had plans for a university education while others planned to complete their education at the end of high school. More specifically, females from a lower class background selected traditional, low status occupations more than did any other group. Students from the upper class and private schools had the greatest tendency to select high status occupations, particularly innovative high status and traditional high status occupations. The choice of middle class females was very traditional and more positively oriented towards marriage and motherhood. She concludes that:

There is some possibility that a number of women from the upper class school will pursue an innovative occupation, will not marry and will not have children. It seems however, that to a very large extent except for the fact that a number of women in our sample expect to add an occupational role to their lives for a somewhat longer period of time than women did in the past, that women in high school today expect to live similar kinds of lives to those their mothers are living. (p. 146)
Clark (1967) investigated the impact of sex and social class on occupational preference and perception. Lower class girls preferred white collar and professional occupations more than did middle class girls. The majority of lower and middle class girls, however, opted for the traditional-fields of teaching and nursing.

Gaskell (1973) contends that the primary focus of research has been on college and professional women. Her study was designed specifically to provide data on working class women. Her main focus was on role definitions; among the conclusions was that in the working class, more women are in paid employment and the division of labour between the sexes is clear. The implications of this would therefore be that working class mothers modelled a work role for their daughters. Tangri (1975) also found that daughters of less-educated, working mothers demonstrated greater autonomy and less role stereotyping regarding acceptability of women working. These factors contributed to the development of achievement motivation. Although the mother's work may not be prestigious, undertaken more for financial reasons than personal satisfaction, the daughter will develop mobility aspirations. Daughters of less-educated, non-working mothers are reared in a very conventional mold both in terms of values and autonomy. Upward mobility may be sought through conventional channels, that is, through a husband, and the choice of traditional occupations seems consistent with these aspirations. The daughters of more-educated, non-working mothers shared traditional values and more stereotypic ideas about sex roles.
Summary

Consistent findings exist in the literature that socio-economic status (SES) and educational expectations are closely associated. Whereas students from upper class backgrounds do not necessarily have higher aspirations; they will more often have higher educational expectations. Educational plans therefore, decrease with socio-economic status to the extent that lower class girls with ability may aspire to but do not frequently expect a university education.

Socio-economic status also impinges on career orientation. Class differences and educational levels of mothers play a major role in determining the typicality or atypicality of these choices. Discrepant findings mainly concern lower class girls. The literature suggests that they may either choose careers which foster upward mobility or they may, through lack of exposure to males as providers, opt not to marry and to pursue careers. More often though, lower class girls have been found to be job oriented rather than career oriented. This may be a result of financial pressures to work at an early age or aspirations based on mother's occupation. There are, on the other hand, consistent findings that middle class girls will very often choose traditional careers and that a proportion of upper middle or upper class girls with highly-educated, working mothers will be likely choosers of non-traditional occupations.
4. Knowledge of the Status of Women in the Work Force

Although the participation of women in the labour force has been steadily increasing, many misconceptions of their status prevail. In Ontario, for example, 29% of the total work force were women in 1963; by 1973, this figure had increased to 35%. Today, almost 1.6 million women work outside the home; that is, almost 52% of the adult female population are labour force participants (Women's Bureau of Ontario, 1979).

Vetter and Sethney (1972) attest to the fact that girls are ill-prepared to deal with expanding opportunities, have unrealistic educational and vocational plans and exhibit incomplete knowledge of important facts about the world of work. The high school girls in their study were "relatively uninformed about women's labour force participation and the extent of women's role in the labour force" (p. 8). Therefore, it is not surprising that:

Many of the expressed attitudes and plans of high school senior girls are based on a very restricted view of the possibilities open to them as adult women. Although nine out of ten females will be gainfully employed at some time in their lives, high school senior girls have relatively little information about women in the labour force. This, in turn, affects the attitudes they hold and the plans they make. (p. 3)

In addition to limited career choices, ignorance of women's participation in the work force may further reinforce stereotypic attitudes towards women and work. Lack of relevant and up-to-date information may not only have an impact on the choice per se but on the decision of whether or not to have a career. A decision to have a
career, particularly those of a non-traditional nature, would be greatly reinforced by an awareness of the present status of women in the work force. Because of the potency of modelling, it may be that if girls knew, for example, the statistics on women and work or that many women are entering non-traditional careers, they might be encouraged to emulate these behaviours.

It would therefore be important to find out how much students know about women in the work force. Results demonstrating a lack of knowledge concerning women in the work force would have important implications for Career Education and women's studies in the schools. These assumptions are based on the fact that schools are preparing students to lead productive, satisfying and self-sustaining roles in society. Whereas some women do achieve this state through marriage and family life, one cannot ignore the statistics cited earlier and the trend towards the increasing participation of both single and married women in the work force.

5. **Family Characteristics**

The basic orientation of individuals towards life, the values they espouse and the way they cope with life problems are acquired in the family. The family environment is linked to achievement values, self-esteem, levels of anxiety, rebelliousness, dependency, and passivity (Breton *et al.*, 1972). The foregoing review of literature also suggests that there are other social and psychological factors within a family structure which predispose individuals towards certain choices and life decisions.
Career development theories also highlight family factors in general, but specifically the influence of parents on children's vocational choice (Osipow, 1973).

The family characteristics which are germane to this study are: family situation, education of parents, occupation of parents, mother's employment history and feelings about employment and parental expectations.

a) Family situation. Breton et al. emphasize the effect of a broken family on the psychological well-being and performance of adolescents. A broken family, which may be caused by divorce, separation or death, is often compared with intact families, which are families in which both parents are present.

Breton concludes that parental absences have little impact on the formulation of a girl's career goal. The absence of a father, however, reduces the probability of career indecision. This appears to be the case for girls of all mental abilities and socio-economic origins.

To summarize, his conclusions are that the degree of family intactness affects girls less than boys with the exception that girls with a missing father will be less indecisive. In general, however, family intactness contributes to vocational decision-making.

It will be interesting to note the career choices and life-style orientations of girls who live with mothers only, when compared to others.

b) Education of parents. Researchers have found, almost consistently, that parental education is closely associated with educational and vocational plans. This is not surprising, particularly in
the case of fathers when one considers the link between education and socio-economic status; the majority of high status occupations require a university degree.

Porter et al. (1973) remark:

The upper middle class, university-educated parent will very likely try harder to persuade his child to continue his education. He cannot conceive of his child as a garbageman. The garbageman might prefer his son to do better than he himself has, but he will not be too disconsolate if he does not. He knows that while it is not ideal, such a life is viable. (p. 78)

Breton et al. conclude:

It is not surprising that the educational attainment of the father and mother has a positive impact on the educational plans of their sons and daughters. (p. 168)

Anisef (1973) also agrees that fathers with university education were more likely to have children with similar plans.

The survey of Russell and Warrack (1976) of Grades 10, 11 and 12 students in Manitoba also revealed that students intending to go to university had better educated mothers than did other students. Concerning father's education, he states:

Thus, a general statement re the interconnection between the father's level of education and the student's aspiration is: the higher the father's level of education, the more likely the student is to go on to post-secondary education. (p. 15)

Tangri (1975) also found that the education of mother had a great impact on daughter's choice of a non-traditional career. Mothers with high education who are working in high status positions, although not necessarily of a non-traditional nature, showed the highest positive correlation to the non-traditional career choice of daughters.
Burlin (1976) and Geller (1973) corroborate these findings. In three Toronto schools, Geller found a strong relationship between mother's education and daughter's career and educational plans. The more education the mother had, the more likely daughters were to choose high status, non-traditional careers.

The findings, however, are not always as overwhelming as the foregoing research suggests. With specific reference to girls, Breton et al. (1972) found that:

Surprisingly, the educational background of the mother—in contrast with that of the father—has less effect on the career intentions of girls. In fact, when the education of both parents is considered simultaneously the education of mother makes virtually no difference, while that of the father maintains itself. (p. 282)

c) Occupation of mother. Evidence is supplied in the literature that the occupation of mother, classified as traditional or non-traditional, exerts a strong influence on the occupational choice of females.

In her study of 149 Grade 11 girls, Burlin (1976) investigated the relationship of parental education, maternal work and occupational status to the occupational aspirations of the female. Occupations were classified as Innovative, Moderate and Traditional which denoted the percentage of females in the occupations; that is, less than 30%, 30-50% and more than 50% respectively. She found a significant relationship between occupational aspiration and mother's work status (employed or not employed) and occupational status (traditional or non-traditional). She concluded:
What appears to be crucial to a daughter's aspiring to an occupation in which 50% or fewer of the workers are women is if her mother is currently employed in this occupational category. (p. 103)

Psathas (1968) postulates that working mothers, and mothers in certain types of occupations, influence the daughter's career choice. Likewise Tangri (1972) found that mothers' working and in "Role Innovative" occupations exert great influence on their daughter's choice of an 'Innovative' occupation. It seems likely that if the process of modelling is operative, mothers in both traditional and non-traditional careers will act as important models for their daughters.

d) Occupational category of mother. The job classifications employed in this study represent popular guidelines and are similar to those employed by the Manitoba Women's Bureau (1976), Cosgrave (1977) and Turner and Turner (1971). As Cosgrave states, all occupations can be classified according to the broad fields of activity or "levels" or series depending on the monetary return, intelligence and education required, time needed for learning, prestige, complexity or responsibility.

In the present study, the occupations of mothers are categorized as Executive and Professional, Other professionals, Managerial and Administrative, Clerical and Sales, Skilled, Semi-skilled and Unskilled.

The inclusion of these categories is an attempt to diversify the classification of women's occupations. Too often women's occupations are classified simply as "traditional" or "non-traditional." There is a scarcity of research which attempts to apply more interesting and varied categorizations.
These categorizations bear close resemblance to other scales, for example, the Blishen and McRoberts (1976) scale which ranges from professional to unskilled occupations. At the time of this research, Blishen had not yet published his socio-economic scale for women which categorizes women's occupations by education, income and prestige.

e) Mother's employment history. That the employment status or history of mothers affects their daughters' career choices and attitudes is well established.

Breton et al. (1972) observed that:

Girls who plan to follow a career have a family environment in which it is considered natural for a wife to work. It shows that the daughters of working mothers are 12% more likely to plan to work, both before and after marriage than those with non-working mothers. Working mothers possibly predispose their daughters to plan to follow a career themselves, since the roles of wife and mother are not defined by them in a way that ties a woman to the home. (p. 282)

Maxwell and Maxwell (1975) also add:

In addition, we found that the mother's employment status was the greatest single factor in the daughter's decision to work, confirming the findings of others that the mother is a powerful model. (p. 122)

These findings are corroborated by the research of Anisef (1973), Baruch (1974), Burlin (1976), Geller (1973), and Tangri (1975). In summary, mother's work history or status influences (a) the decision of whether or not to have a career, (b) sex-role attitudes, (c) type of career, (d) the decision to combine the role of a career woman and homemaker and (e) educational aspirations.

f) Mother's feelings about employment. The attitudes that mothers have towards work outside the home may be learnt by daughters. Whereas the majority of women work because they want to work, there
are many who work because of sheer economic necessity (Women's Bureau, 1976). The attitudes of such women would differ significantly. Whatever the feelings of mothers are toward employment, it is very likely that these feelings will be transmitted to the daughters. Breton et al. (1972) observed:

> The low probability of career plans among girls occurs only among those whose mother experiences an educational discrepancy compared with her husband and is not gainfully employed: that is, among those married women for whom the discrepancy is related to negative attitudes towards work. (p. 282)

By the same token, career-oriented mothers with positive attitudes towards work will have their impact on daughter's orientations.

Steinmann (1970) studied 51 unmarried college women between the ages of 17 and 22, from middle class backgrounds. She also interviewed the mothers and fathers regarding their experiences and feelings concerning women working. Mothers saw working after marriage as potentially burdensome both in terms of the difficulties in raising children and the husband's objections to having a working wife. Only three women did not object to women working, particularly after children had arrived. Over two-thirds felt their daughters should not work after having children. Among fathers, also, was the common attitude that women should not work after marriage, until the children are grown. Ten believed that women should not work at all. She concluded that the notions held by young women regarding work and family seem to reflect both the views and actions of their parents, and that these attitudes represent both a limitation and a direction for young women.
g) Parental expectations. The literature consistently attests to the influential nature of parental expectations on the educational and career planning of adolescents.

Kandel and Lesser (1969) studied 2327 high school students to determine sources of influence on the adolescents' educational plans. They conclude that:

Parental desires for their children are more important direct determinants of the child's educational plans than is socio-economic status, although the parents' aspirations themselves may be determined in great part by the parents' positions in society. (p. 221)

Brittain (1963) and Bennett and Gist (1964) confirm the general influence of parental expectations; the latter however, found that at the lower class levels maternal influence was more potent and effective than paternal influence, regardless of race.

Rehberg and Westby (1967) administered a precoded questionnaire to 2852 high school students in an effort to determine the relationship between parental variables such as occupation and education on adolescent educational expectations. They conclude that:

Parents who are better educated, who hold the more prestigious occupations, i.e., those who are in the middle and upper class social strata, generally display more positive values towards education, achievement and social mobility, and usually set higher career goals for their children. (p. 371)

These findings are substantiated by Maxwell and Maxwell (1975), Breton et al. (1972) and Porter et al. (1973). These researchers have found a consistent relationship between educational level and attainment expectations of parents. Breton et al. found that parental support was the most important source of encouragement for post-
secondary education. Students from low status families were less likely to receive parental support for further education.

It seems obvious that the expectations of parents must often have an economic basis. Poorer parents may not have university expectations for their children because of their inability to assist financially and also because they may be dependent on their children's contribution to the family income.

Another interesting aspect of parental expectations is the discrepancy that exists between the expectations parents have for their children and the expectations that children have for themselves. Porter et al. (1973) encountered this discrepancy:

The gap between the level of parent's aspirations and expectations were slightly greater than the gap between the children's aspirations and expectations. (p. 54)

Parents consistently had higher ambitions for their children, the majority of which were unrealistic, as Porter et al. point out. When they considered the cost of university education, the proportion of parents who had actually made plans to finance their children's university education was substantially less than the proportion who expected their children to go to university.

The expectations on education may be generalized in looking at career expectations. Based on the findings, parents will more often expect high status occupations for their children than the children expect for themselves. The expectations of each parent are examined in the present research.
Summary

There is support in the literature for the impact of many parental variables on the educational and occupational aspirations and expectations of adolescents. These variables include: family situation, that is, the presence or absence of one or both parents; the education and occupation of parents, occupational category of mother, mother's employment history or status, mother's feelings about employment and parental expectations.

6. Personal Characteristics

The personal characteristics which will be discussed are: grade levels, age, academic average, ethnicity, place of birth and number of years in Canada, position in the family, religion, knowledge of self and of occupations and exposure to a women's studies course.

a) Grade levels. There is a dearth of studies which attempt to look at the impact of grade levels on career choice and future planning of students. One can only deduce that because grades are age-related, whatever is applicable to one is applicable to the other.

Specific mention is made of grade by Anisef (1973) who justifies his decision to focus on Grade 12 students in his study. Breton et al. (1972) also investigated the impact of Grade levels and found that the intention to finish high school and to continue to postsecondary education increased from the first to the fourth year. This they attribute to a progressive selection process through which the least able, least advantaged or least highly motivated students drop out of school. They also suggest that with each successful completion of a grade, a student may become more convinced of his or her ability to complete the entire course.
To have chosen Grade 13 students alone for examination in the present research would have been foolhardy as this represents a very select sample. Grade 11, 12 and 13 provide interesting comparisons. At lower grades, career choices may, at best, be tentative.

b) **Age.** The foregoing discussion is also applicable to a discussion of age and career orientations. Ginsberg and associates (1951) postulate that individuals progress through a series of age-related developmental stages. These three major periods as previously mentioned are entitled the Fantasy, Tentative and Realistic stages. The realistic stage begins at approximately age 17. It has also been found that women express more varied and non-traditional occupational preferences during the adolescent period than when they enter college (Rohfeld, 1977). If this holds true and more support and encouragement are given during this developmental phase a greater diversity in career choices may result.

c) **Academic average.** Despite the various measures used to determine ability, ideas converge on the notion that ability affects educational and vocational planning. One has only to consider the importance of marks if one wants to be considered for certain occupations: notably the high status occupations.

Anisef (1973) stresses the importance of good grades within an educational system:

Success or failure in a school system is measured in large part, by how well or poorly adolescents perform in courses. Grades offer teachers and administrators a means of processing students within a school and placing these students into a larger society. Grades are no less important to students in that they provide "benchmarks" for self placement and aid in clarifying (or shaping) educational and vocational horizons. (p. 68)
Both Porter et al. and Breton et al. (1972) confirm the strong relationships among mental ability and aspirations, expectations and occupational choice. In Breton's study, students who rank high in mental ability are more likely to prefer high status occupations than those in the lower ranges of mental ability.

Concerning educational plans, Porter et al. comment:

In looking at aspirations and expectations of the bright students after high school we found they were very much related to social class, with almost twice as many higher class students as lower class students in grade 12 expecting to go to university (68 percent to 35 percent). (p. 110)

The distinction Porter and associates make between high grades and high mental ability, however, is a very important one:

Students with high grades are more likely to want to go to university than those with high mental ability. This is not surprising. If a student gets high grades he has been motivated to do well. ... the prospect of studying at a university, therefore, is not likely to be displeasing. (p. 105)

For the purpose of this study, grades are considered in terms of academic averages as reported by students.

d) Ethnicity. The terms "ethnicity" and "cultural heritage" are fraught with definitional problems. In this study the terms refer to classifications of people as they may be distinguished by customs, language, a common history, values, traditions and other cultural characteristics. On this question, Anisef (1973) points out:

While cultural heritage is reflected in the country of birth or national origin of the immigrant, obviously much more than this determines cultural heritage. Religion, race and exposure to different groups of people can be of equal or greater relevance. Generally speaking, however, there is a close correspondence between country of birth and ethnic origin. (p. 124)
There is need for research on the various ethnic groups which comprise Canadian society. The vast majority of studies have been conducted in the United States and are essentially comparisons between Blacks and Whites. Despite this, there is evidence that ethnic identity affects occupational and future planning of adolescents. Anisef (1973), in referring to ethnic identity and religious affiliation concluded:

These variables relate not so much to one's place in the social structure but to cultural values. Thus, for example, the emphasis and socialization for achievement values varies significantly among different ethnic groups. (p. 9)

Rosen (1959) examined differences in motivation, values and aspirations of six racial and ethnic groups. His subjects were 954 French Canadians, Italians, Greeks, Jews, Blacks and White Protestants in the United States. He found that Jews, White Protestants and Greeks were more likely to possess achievement values and higher educational and vocational aspirations than Italians and French Canadians. The educational aspirations of Blacks are comparable to those of Jews, Greeks and Protestants, and higher than those of Italians and French Canadians. The vocational aspirations of Blacks, however, are the lowest of any group in the sample. He concluded that:

Social class and ethnicity interact in influencing motivation, values and aspirations; neither can predict an individual's score. Ethnic differences persist when social class is controlled, but some of the differences between ethnic groups in motivation, values and aspirations are probably also a function of their class composition. (p. 60)
Gist and Bennett (1963) compared the educational aspirations of 873 urban high school students, some black and some white. There were no significant differences between the aspirations or plans for education or occupation between black and white students. A more clear-cut case of higher aspirations existed with black girls when compared with black boys and white girls.

The study of Turner and Turner (1971) related sex and race to individual perceptions of the occupational opportunity structure and to reports of socialization for achievement. Socialization for achievement refers to the learning of values, attitudes and motives relevant to educational and occupational aspirations and success in the family and school. Their subjects were 303 students at a large, state university and included males as well as females, Blacks as well as Whites. In comparing black and white females they concluded:

However, the anticipated primary involvement of most white females is in a home and family rather than in an occupational career. Hence it is suggested that white females in this study perceived so little occupational discrimination against women because they do not need to "test reality" as accurately as do men and black women... white parents differentiate by sex in socialization to achievement but black parents do not. (p. 2)

They interpret these differences in socialization to be a function of the truncated achievement possibilities of black males and an accentuated demand for achievement among black females.

Occupational aspirations are clearly related to ethnic group membership. There are many socio-cultural factors which limit the perspectives of occupational aspirations, both in range of occupational choice and the desire for higher occupational status (Berman, 1972).
There are many who are wary of research which attempts to link either sex or race and ethnicity to particular career choices. A recent article by Coleman (1978) discussed the resurgence of such research on the special abilities of the sexes and whether or not they begin in the brain. He states:

People presumably select jobs requiring skills they have in good measure. The fact that women are underrepresented in certain professions could be due to differences in brain function as well as sex bias in hiring. There may be fewer female architects, engineers, and artists because such professions require the kind of thinking that may depend on spatial skills. Similar factors may account for the smaller number of female . . . musical composers. (p. 59)

In the same article, caution in the use of such information is emphasized as the data may be misinterpreted:

The real danger in this line of research is that the findings could be misinterpreted and used as a scientific justification for sexism, just as ambiguous genetic findings were often cited to provide a scientific basis for racism. (Cited in Coleman, 1978, p. 48)

The analogy between racism and sexism should be clear. Similar misinterpretations could result from the association of various ethnic groups with particular occupational choices.

e) Place of birth and number of years in Canada. To the best of the author's knowledge, there is very little documented information on place of birth and number of years in Canada as they relate to occupational choice and future orientations of either males or females.

Anisef (1975) compared the educational and vocational plans of native- or foreign-born students in a representative survey of 2,951 grade 12 Ontario students. He defined ethnicity operationally in terms of father's birthplace and adolescents's birthplace resulting in three categories: native-born, foreign-born, and "mixed."
He found that a greater proportion of foreign born students planned on enrolling in post-secondary institutions than native born students, and likewise, more foreign-born students than native-born students aspired to and expected high prestige jobs.

His analysis established a definite relationship between ethnicity and educational plans. This was true for males, but not for females. It is his view that foreign-born males receive a greater degree of encouragement to pursue post-secondary education; this was not the case for females:

This finding is congruent with our knowledge of sex-differentiated socialization. Traditionally, males have been socialized for achievement while females are socialized for domestic and marital roles. (p. 130)

His conclusions are that the foreign born and "mixed" in the survey represent a very special group. They are highly motivated in terms of educational and occupational plans, meet high standards of excellence in school and possess a great deal of confidence in their ability to succeed. What he finds even more remarkable is the fact that these adolescents "are not characterized by particularly favourable social class backgrounds" (p. 134).

Anisef's concerns for the equal opportunity in higher education for females in general, but for immigrant females in particular, so aptly concur with the author's appraisal of the problem:

Women with particular ethnic group affiliations may encounter almost insurmountable hurdles in the battle for equal educational opportunities. If schools are to contribute to the expansion of female educational and occupational roles, courses must be offered that broaden the conceptions of male and female roles and reduce prejudice towards women's full participation in all areas of life in the society. Naturally, these courses and associated guidance
programs will meet with general resistance. In particular, great sensitivity will have to be exercised where such courses involve female immigrant students from tradition bound families or groups, for these students may be pushed into a situation of intolerable conflict between the message of the school and the values of the home. If, however, these types of programs are not mounted, both native born and immigrant women will continue to be discriminated against in higher education and in most other areas of Canadian life. (p. 135)

f) **Position in the family.** There is evidence in the literature that birth order or position in the family influences future planning of individuals.

Schacter (1963) states that it has been repeatedly demonstrated that there is a tendency for the first-born or only child to be more productive, creative and more eminent than other children in multi-child families. In fact, his review of studies as early as 1874 report a clear trend for the predominance of the first born.

Although the vast majority of these studies were conducted on eminent males, it may well be possible that the uniformity of the relationship reported in the literature is also applicable to females.

Schacter's studies of 3,038 students in the Introductory Psychology course at the University of Minnesota, and of male and female graduate students in a subsequent study led him to conclude that: "Clearly, the preponderance of first borns in college is a nationwide phenomenon" (p. 761), and "It seems simply that first borns are more likely to go to college and graduate school" (p. 764).

Sampson (1962) derived information on 118 females and 147 males in a series of experiments concerning social influence and need for achievement. He obtained birth order for each subject in order to test the relationship between birth order, conformity and need for
achievement. His findings were consistent with the assumptions that first-born females are significantly involved in independence training which produced a greater need for achievement than the males demonstrated.

Breton et al. (1972) observed that "being the oldest or only child is associated with higher educational aspirations" (p. 185). Likewise Porter et al. (1973) concluded: "It seems then that the order of the child's birth does affect his expectations about university" (p. 65).

In their study a higher percentage of first-born students than later-born students expected a university education. Likewise, Amisef (1973) found that the majority of first-born students were university bound. Concerning career intentions, however, Breton et al. (1972) found no striking relationships.

Despite discrepant findings concerning career intentions, the studies which relate to birth order and educational achievement demonstrate a clear trend in favour of the pre-eminence of the oldest and only child.

g) Religion. As it is with ethnicity, there is a scarcity of data on religion and its impact on the future planning of adolescents. Maxwell and Maxwell's (1975) study support the observation that religion influences career and educational planning of girls. This dearth of studies is surprising as the influence of religion on people's behaviour is so widely discussed. Maxwell and Maxwell further observe that:

Religion has had a pervasive effect on other sectors of social systems such as the economy and polity. This pervasiveness must be attributed in part to the dominant role religion has played in both the style and content of child-rearing practices. (p. 104)
In their study conducted in private schools in Canada, they hypothesized that Protestant girls would have higher educational aspirations and occupational expectations than would Roman Catholic girls. Roman Catholics and Protestants were equally ambitious regarding plans for post-secondary education. However, Protestant girls aspired to and expected to enter higher status occupations than did Roman Catholic girls—"This would be termed more ambitious" (p. 121) they state. Protestant girls chose less traditional occupations than did Roman Catholics and seemed less prone to pressures placed on women to expect traditional occupations. More Roman Catholic girls than Protestant girls preferred traditionally feminine occupations. They conclude

... that as beliefs about the role of women change (although our findings indicate they were not doing so in enormous numbers at the time of the study), girls among the Protestant elite are more likely than Roman Catholic girls to strike out into the male world of high status occupations. Roman Catholic girls, somewhat less imbued with the elite ethos, are more likely to settle for traditional female occupations even though greater numbers of them may desire to work. (p. 123)

Anisef (1973) found that Protestant girls very often planned to enter nursing school. More Roman Catholic girls planned to enter the labour market or to study part-time. With Jewish girls, 58% were university bound.

Angrist (1975) also demonstrated that the mother and indeed the family circumstances are important factors in career choice of selected religious groups. Her findings confirm that the specific variables of maternal employment and religion are connected with
career salience. Jewish girls were more likely to plan for careers in male dominated fields. Protestants fell in between the two extremes and Catholics were unlikely to be career oriented or to choose a male-dominated occupation. This she attributes to conservatism on social issues, and less inclination towards developing high educational aspirations. In contrast, Jewish families instilled high educational and occupational aspirations in their children.

The literature suggests that Roman Catholic girls are more stereotypic in their thinking than Protestant girls or girls of other religious backgrounds. Based on social learning theory, it is to be expected that girls of all religious persuasions would learn the values inherent in their religion.

h) Knowledge of self and of occupations. In order that a career choice be made, there is the presupposition that the individual has acquired some self-knowledge and a familiarity with the occupations available, and their requirements. All efforts of Career Education, Exploration and Development have self-knowledge as a key component.

To match individual interests with the requirements of a job has been a major emphasis in counselling. It is important for individuals to aim at achieving a certain degree of congruence in their interests, abilities and job requirement as this will greatly influence performance and job satisfaction in later years.

Of course, one may argue that such a match is sometimes impossible at a time when jobs are scarce and when individuals are forced to accept jobs outside their areas of interest or training.
This phenomenon, however, is not so widespread that it should deter individuals from working at achieving the self-knowledge and the knowledge of the variety of occupations available to them.

Breton et al. (1972) suggest that:

The lack of knowledge of an individual's own interest and abilities, for instance, may produce considerable anxiety in an adolescent; among girls, this can be reduced by opting, at least temporarily, for the traditional home-making role as a future. (p. 288)

Also,

Indeed, being competent in this respect may lead a girl in the direction of a life-time career; on the other hand, it may be that having reached a decision to pursue a career, she may familiarize herself with the job opportunities accessible to her, with the qualifications required for each of them as well as with other factors involved in such a decision. (p. 289)

In his study, Breton et al. found that self-knowledge and a familiarity with occupational information were related to intention to pursue a career only among English-speaking girls when compared with French-speaking girls.

Sinnick, Gorman and Hoppock (1966), in their review of the teaching of occupational information at various educational levels conclude that:

Research indicates that early presentation of occupational information may facilitate such developmental factors as understanding of occupational concepts, identification of vocational interests, realism of self concept, appropriateness of vocational choice, and readiness to function as an effective employee. Occupational information provided early may also reach potential early school leavers and thereby reduce the dropout rate. (p. 591)

1) Exposure to women's studies course. To the best of the author's knowledge, there are no research findings published in Canada which look at the impact of the exposure to a women's studies
course on the career and future planning of adolescent girls.

In the United States, Vetter and Sethney (1972) developed a curriculum unit which they field tested on Grades 7, 9 and 11 students with the intention that the unit "would help female students to make career plans consistent with their interests and capabilities, to choose appropriate educational routes to their career goals and to develop attitudes consistent with the working world" (p. 4).

Following participation in the unit, they found "some indication of attitude change in the direction of more acceptance of employment after marriage and of more acceptance to the challenges of employment" (p. 29), and more students indicated plans to work after children begin school and after children are grown.

Besides the media coverage received by efforts such as the International Women's Year in 1975, one wonders how much is being done, in terms of courses or programs aimed at informing students in general, but high school girls in particular, about such topics as the changing roles of women, the increasing participation of women in the work force, or in general, the factors which contrive to restrict their career choices and future planning. Only systematic education can combat the misinformation and stereotypic attitudes towards women that many girls and boys have learnt. These attitudes will not disappear automatically or with age as many would hope. It is very important that boys and girls be exposed to courses which would help them make career choices and educational plans based on interest and ability rather than on gender. This is an area of special concern for researchers such as Anisef (1975).
If there are no such courses available in the schools, it may be that only girls with educated mothers and working mothers, will know very much about the status of women in the work force. Even so, one cannot count on the consistency and accuracy of the information that will be transmitted.

Summary

In this section various personal characteristics have been discussed as they relate to vocational and educational planning of females. These are: grade, age, academic average, ethnicity, place of birth and number of years in Canada, position in the family, religion, knowledge of self and of occupations and exposure to a women's studies course. All these variables exert considerable influence on future orientations of individuals.

Age and Grade, two interrelated variables, affect the nature of the choice in terms of how realistic they are. The realistic nature of careers, however, is not being measured in this study. High academic averages predispose students to select high status occupations and to be university bound. The oldest and only child and children born outside of Canada very often have aspirations towards post-secondary education and high status occupations. Because of the value orientation of various religious and ethnic groups, the type of career choices, educational plans and sex role ideology may be affected. Lastly, knowledge of self and of occupations and exposure to a course on women may facilitate expanded choices and less stereotypic attitudes towards the roles of women.
7. **School Characteristics**

It is evident that schools differ on a number of variables. In addition to physical size, number and qualifications of teachers, types of programs offered, to name a few, particular values are taught, directly or inadvertently.

Breton *et al.* (1972) observe there has been relatively little analysis on the effect of school curriculum on the plans, attitudes and achievement of students. The variety of subjects taught differ within and between schools. There are also varied expectations and attitudes on the part of teachers and principals which could either depress or enhance the student's aspirations and expectations.

Breton *et al.* examine a number of school factors in relation to educational plans. In this study, however, the focus is on type of school and location of school, that is, whether it is in a rural or urban area.

a) **School type.** Maxwell and Maxwell (1975) comment extensively on this variable based on their research in private schools:

Parents who send their children to private schools are adopting a pattern of controlled socialization, and for many children, private school experience provides a complete and total cultural milieu which extends throughout their lives in space and time. There was created a type of elite ethos. This ethos was particularly strong in Protestant schools, and while it sponsored education for activities outside the home, it tended to sponsor voluntary activities rather than occupational activities which were financially rewarded. While it sponsored leadership roles for women, it sponsored them only in cultural and philanthropic activities. Such activities, as opposed to paid employment, were seen as enhancing rather than competing with the career of a husband. Although they may appear liberated
In some ways, the women of the elite are still limited in their selection of social roles. However, from the evidence we have available, the elite ethos is changing as the private school system, and the type of guidance it formerly provided no longer exists to the same extent. Consequently, girls in the private school system experience a good deal of ambivalence as to their societal role and this must be taken into consideration in assessing their aspirations and expectations.

Geller (1973) studied 241 high school girls in three Toronto schools: a lower class school, a middle class school, and an upper class school. She found a significant relationship between occupational and educational aspirations and school type. Girls from the upper class school had higher aspirations. The vast majority of them (71%) planned to attend university, while only 2% did not have plans to continue their education beyond high school.

b) School location—rural/urban differences. Ontario researchers have pointed to the disparities of rural and urban education and the need for equality of educational opportunity (Anisef, 1973; Porter et al., 1973).

It is the conclusion of Porter and associates that:

It is clear that there were important differences between metropolitan students and rural ones with respect to their aspirations, with 42% of the former and 27% of the latter wanting to graduate from university. (p. 68)

It is clear from our analysis that urbanisation is related to educational aspirations. (p. 71)

Anisef also found that university bound students were more often from urban centres while others, that is, those who planned to enter the work force, to enrol in community colleges, to attend nursing or trade schools or who simply did not have specific plans, were more likely to reside in rural areas.
Summary

The two school characteristics discussed in this section were type of school and location of school. The socialization of certain values within private schools may create ambivalence within the girls. These girls may either be very limited in their social role definitions or may surpass girls in other types of schools in educational aspirations and expectations. Of course, there may be many other intervening variables such as education of parents, whether or not the mother works and her occupational category.

Urban schools have a definite advantage over rural schools. This is reflected in the higher aspirations and expectations of students in these schools.

8. Aspirations and Expectations

The difference between aspirations or preferences and expectations has been discussed by many educational researchers. May have attempted to offer reasons for the discrepancy which exists as they may relate to socio-economic status, gender and ethnicity.

Fifistly, Deosaran (1975) offers a definitional observation and distinction between the two concepts:

In the first place, students' aspirations have been discussed more widely and subjected to more intensive research than expectations. Technically, while "aspiration" refers to what a student would like to do, or the goal which he would like to attain, "expectation" is viewed as a more "realistic" choice of action or goal. (p. 9)

Hence, a broad definition of aspiration, which is supported by Porter et al., would refer to the desires which individuals have to attain
some future goal. Deosaran further concluded from his review of literature that, in Canada, information on the post-secondary expectations of students is relatively sparse. It is his view that aspiration is a more interesting concept because it refers to the full range of life's opportunities which an individual is capable of seeing for himself or herself.

Porter and associates confirm the existence of disparities between aspirations and expectations in general and also of the discrepancy between the aspirations and expectations of boys and girls. Not surprisingly, the discrepancy is greater for girls.

Bennett and Gist (1974) studied class differences in aspirations and actual plans. They conclude:

A tentative generalization is that high school students do not differ in occupational values or ideals (aspirations). Yet they are probably perceptive enough to perceive their relative life chances and plan accordingly. (p. 169)

Deosaran (1977) further defines university education as high educational aspirations as compared with other forms of education. This view is supported by Breton et al. (1972), Porter et al. (1973) and Anisef (1974). Support for this view stems from many factors. There is wide-societal agreement that university education traditionally has secured better income and prestige, and this still holds despite current job market trends. Likewise, if one considers indices of socio-economic status, such as the Blishen's and McRoberts' (1976) scale, one observes that the most prestigious and professional jobs require a university education.
Deosoran (1977) continues to defend his stance:

Socially valued occupations are those which require a university education. There is thus a justifiable basis for defining university expectations as high educational expectations. No doubt, the capacity of Canadian society to provide jobs for all university graduates is diminishing. But this does not seriously disrupt the links between university education and occupational prestige; if anything, it tends to increase the competition for prolonged education. (p. 10)

On the question of the discrepancy between career aspirations and expectations, Burlin (1976) found that girls aspired more frequently to non-traditional careers, but more frequently expected traditionally feminine occupations.

Turner and Turner (1974) investigated the patterns of career preferences, expectations and career involvement among females, some black and some white. The discrepancies between preferences and expectations were evident particularly in black women. They suggest that of great importance is the fact that regardless of levels of career preferences, Blacks in their sample were unlikely to expect to attain the level of career involvement they most valued.

The discrepancy between aspirations and expectations is also applicable to parents' aspirations and expectations of children, as previously discussed.

**Summary**

There are disparities between educational and vocational aspirations and expectations on the bases of social class status, gender and ethnicity. Whereas aspirations refer to the ideals individuals have for themselves, expectations refer to more realistic plans individuals make when they consider the realities of life situations.
Research Questions

The foregoing literature review examined research evidence bearing on a number of family, personal and school-related variables and their relationships to the career choices and future planning of females. These variables, which are all under investigation in the present study, may be summarized as follows:

a) Family-related Variables

Role Models
Family situation
Education of parents
Socio-economic status
Occupation of mother
Mother's occupational category
Mother's employment history
Mother's feelings about employment
Parental expectations

b) Personal Variables

Sex-role ideology
Knowledge of the status of women in the workforce
Grade
Academic average
Ethnicity
Place of birth and number of years in Canada
Position in the family
Religion
Knowledge of self and of occupations
Exposure to a women's study course

c) School-related Variables

Type of school (Public, Private Catholic, Other Private)
Location (rural or urban)

Through the method of multiple regression analysis, the present study seeks to determine the relative contribution of the foregoing independent variables to six dependent variables. These dependent variables are: career aspirations and expectations according to
socio-economic status and traditionality, educational plans and career commitment.

The majority of the independent variables under examination in the present study, have been investigated in previous research on the topic. However, they have not been examined in combination, nor have their relationship to all of the six dependent variables listed above, been reported. The independent variables which have not been assessed with regards to their relationship to females' career and life planning are: exposure to a women's studies course, the parent whose expectations students wish to emulate, the parent the student perceives she is like in terms of attitudes and expectations, and Grade levels. The dependent variable, Career Commitment, as defined and measured in the present study, has not been investigated in previous research.

In summary, the basic research question was: What is the relative contribution of each of the family, personal and school variables to the career choices and future orientations of the Grades 11, 12, and 13 female students in the present study?
CHAPTER III

METHODOLOGY

1. **Design**

   This is an applied descriptive study, designed to identify the variables which contribute to the career aspirations and expectations, educational plans and career commitment of female students from a number of social, psychological and demographic variables (see Appendix B). The purpose of the study was best served by a cross-sectional survey.

2. **The Sample**

   The research subjects were a thousand Ontario high school girls. They were selected in such a manner that the influence of such factors as rural or urban environment, age, ethnicity, socio-economic level, type of school and religious affiliation, could be investigated. Ten high schools were involved in the project, five located in Metropolitan Toronto and the others in the county of Middlesex in south-western Ontario. The rural schools ranged from approximately ten to forty kilometres from the nearest city, London. Three of the schools in Metropolitan Toronto were in the public educational system and two were private schools. All the public schools, rural as well as urban, were attended by girls as well as boys, but the private schools were sex-segregated. Students of all religious persuasions attend public school but one of the private schools was a Roman Catholic school and the other was operated by a Protestant denomination.
Permission was obtained from the Boards of Education involved and from the principals of the private schools to administer the questionnaire to Grade 12 girls during school hours. Girls from Grade 11 and Grade 13 who wished to do so and who were available at the time of questionnaire administration also participated. The Grade 12 girls who happened to be absent on the day of administration were not contacted.

The number of research subjects was 1167.

3. Construction of the Questionnaire

The questionnaire (Appendix A) is comprised of items designed to gather data on Personal Characteristics, Family and School Characteristics, a Sex Role Ideology Scale (Items 39-68) and Knowledge of Women in the Work Force (Items 69-97).

The questionnaire required forced choice answers except in the area of career aspirations and expectations. The Sex Role Ideology Scale consists of items requiring responses on a 7-point scale ranging from strongly agree to strongly disagree. Items on women in the work force employed either a true-false or a multiple choice format.

To construct the questionnaire, other inventories were consulted both for format and content. Items 16, 30, 31, 36, and 37 were used used by Breton (1968). Items 17, 18, 22, 34, and 35 are ones used by Maxwell (1976), while items 16, 20, and 21 are slight modifications of ones used by Maxwell.

The Fact Sheets published by the Ontario Women's Bureau were used extensively for the content of items on the occupational status of
women. The format and some of the items for the multiple-choice questions were adapted from Vetter and Sethney's (1972) questionnaire. They were rephrased, updated and supplemented by Canadian or Ontario data.

4. **Testing of the Questionnaire**

The questionnaire was piloted on 75 girls from Grades 11, 12 and 13 in two suburban high schools in Toronto. The original items were revised and new categories of responses were included as a result of their recommendations. The Director of Education of the Middlesex County Board of Education also made very valuable suggestions relative to the applicability of the items for the students in his county. His request that the anonymity of students be ensured obviated the need for parental permission.

5. **Administration of the Questionnaire**

The questionnaires were administered during class time, and were completed between 30 and 40 minutes. In nine schools the Principal or Guidance Counsellor introduced the Researcher to the students and the Researcher then discussed the purpose of the survey. In one school, the Principal asked that the questionnaire be left at the school and a class teacher administered the questionnaire. The students did not experience any difficulty with the items in general.

6. **Measures and Operational Definitions**

   a) **Social class.** The index of socio-economic status used in this study is that of Biishen and McRoberts (1976). In this revised scale, they use income level, educational status and prestige to rank 320 occu-
pations from the 1971 census data. In this scale the variable "income level" refers to the percentage of males who worked in an occupation in 1970 and whose income was $6,500 or over. The education variable is expressed as the percentage of males who worked in an occupation in 1970 and who had achieved at least Grade 11 or Grade 12, depending on the province. In addition to income and education they incorporated a prestige variable by utilizing the prestige scores from the Pineo-Porter (1966) scale. Regression analysis was employed and weights were applied to 320 occupations thereby producing a socioeconomic score for each. Occupations were then ranked on the basis of these values. Class intervals were then determined.

Their rationale for basing the data on male occupations and their prestige is that the social status of a family is determined by the husband even when both parents are working.

b) Sex-role ideology. The sex-role ideology scale used is that of Kalin and Tilby (1978). Their scale, which was developed and validated in Canada, is based on the notion of sex-role ideology as a system of sex-role beliefs forming a dimension with a traditional and a liberated pole. Half of the items are phrased in a liberated and half in a traditional direction. The internal consistency of the scale was shown through item total correlations and split-half reliability (median r = .79). The test-retest reliability was .87.

The items can be divided into five broad content areas: (a) work roles of men and women (6 items); (b) parental responsibilities of men and women (5 items); (c) personal relationships between men and women; friendship, courtship and sexual (7 items); (d) special role of women
and "pedestal" concept (8 items); (e) motherhood, abortion and homosexuality (4 items).

Slight modifications in wording were made because the terminology in certain items was not appropriate for the age group being studied primarily because the scale was validated on adult women.

It was obvious that slight modifications would have to be made in view of the age level of the research subjects, and the beliefs of particular religious groups on issues such as abortion and sexual relations. Sensitivity to these factors was therefore necessary.

These revisions were not done arbitrarily. A team of six graduate students agreed on the similarity of meaning between the original wording of the items and the revisions.

The modifications did not greatly alter the reliability. The scale yielded a Hoyt estimate of reliability of .80 in the present study, as compared with the reliability of .79 reported by Kalin and Tilby. The following were the changes made:

Original: A wife's activities in the community should complement her husband's position

Version used: A wife's activities in the community should help her husband's position

Original: Woman's work and man's work should not be fundamentally different in nature.

Version used: Woman's work and man's work should not be basically different in nature.
Original: Swearing by a woman is no more objectionable than swearing by a man.
Version used: Swearing by a woman is no more unacceptable than swearing by a man.

Original: A normal man should be wary of a woman who takes the initiative in courtship even though he may be very attracted to her.
Version used: A normal man should be cautious of a woman who makes the first move in courtship even though he may be very attracted to her.

Original: It should be perfectly all right for a mature woman to get involved with a young man.
Version used: It should be perfectly alright for a woman to date a man younger than herself.

Original: Homosexual relationships should be as socially acceptable as heterosexual relationships.
Version used: Relationships with others of the same sex should be as socially acceptable as relationships with people of the opposite sex.

Original: Women should be allowed the same sexual freedom as men.
Version used: Women should be allowed the same freedom in their dating behaviours as men.
Abortion should be permitted at the woman's request.

A woman should have the right to decide whether she has children or not.

For the good of the family a wife should have sexual relations with her husband whether she wants to or not.

For the good of the family a wife should be friendly and affectionate to her husband whether she wants to or not.

c) Knowledge of women in the work force. These items are, for the most part, modifications of items used by Vetter and Sethney (1972). In each case Canadian data were substituted where there were data on American women. These refer to the multiple-choice items.

The true and false items were taken from the Fact Sheets produced by the Ontario Women's Bureau (Appendix C). Although some of these items may appear to be attitudinal in nature, the Women's Bureau Fact Sheets represent a review of the literature in an effort to substantiate or refute these claims. All of these items have been proven to be true or false in a variety of studies. Unfortunately, the reliability of these items was not as high as one would have liked, only .64.

In the present study, the scale was employed only as an independent variable.
d) **Career choice.** Career choice was ascertained by data on career aspirations and expectations. Each of these variables was classified twice, (1) the socio-economic status of the career and (2) whether the careers are traditional, undifferentiated or non-traditional careers.

Traditionally feminine occupations are the occupations with 60% or more women. Undifferentiated occupations are occupations with between 40 and 59% women and non-traditional occupations are occupations with less than 40% females.

To date, there has not been any consistency or clear rationales for the points which define these categories. Tangri, for example, defined Role Innovative occupations as occupations with less than 30% women; Moderate, between 30 and 50% women and Traditional with more than 50% or more women. Fifty percent, in the present author's estimation, did not truly define a "majority" of women. By extending the middle category to 59%, Counsellors, Psychologists and physiotherapists, for example, were classified as "Undifferentiated." Data produced by the Ontario Ministry of Labour (1976) and Statistics Canada (1977) were used for the categorization of the occupations.

e) **Future orientations.** Future orientations refer to (1) educational plans and (2) career commitment or, in other words, plans for career involvement.

The question on educational plans required a choice from three categories in order to determine high, moderate, or low educational aspirations. As previously discussed, university aspirations were
considered to be high educational aspirations; post-secondary aspirations, including community colleges and business school, are defined as moderate educational plans, whereas a desire not to continue one's education after high school refers to low educational aspirations.

To determine the strength of career commitment, items b and d; c, e, f, g and i (after a content analysis of the responses in this category); and a and h were combined to constitute weak, moderate and strong career commitment, respectively:

35. Which of these statements best describes your plans for the future?

a. To have a career or occupation and not be married
b. Not have a career or job outside the home, but confine my activities generally to my home and family regardless of whether I have children or not
c. Have a job or career outside the home only if I have children
d. Limit my work outside the home to voluntary activities and not have a paid job or career
e. Have a job or career outside the home only after all my children are of elementary school age
f. Have a job or career outside the home only after my children begin high school

g. Have a job or career outside the home only after all my children have finished high school
h. Have a job or career outside the home regardless of whether I have children or not.
i. Other. Please specify. __________________________

The descriptive phase of the statistical analysis consisted of the preparation of tables, each showing the frequency distribution of the research subjects according to the 33 independent variables and the six dependent variables.
The statistical procedure known as "multiple regression" was then used to find out, for each of the dependent variables, what combination of the independent variables correlated most highly with it and the relative importance of these independent variables in the combination. Although conventional regression analysis was developed for continuous variables, the method can readily be adapted to include unordered, categorical data by a technique involving the substitution of so called "dummy" variables. This adaptation of the general method was used in the present research as such variables as "type of school" or "family situation" have no inherent order.
CHAPTER IV
RESULTS

The results of the data analysis are presented in two stages: (1) a description of the sample, in terms of the frequency distributions of questionnaire responses, and (2) results of the regression analysis. A list of the independent and dependent variables is presented in Appendix B.

Characteristics of the Sample

This section describes the sample in relation to the listed variables.

Of the ten schools which participated in the survey, five were located in rural Ontario and the others were in Metropolitan Toronto. There were eight Public schools, one Private Catholic school and a Protestant school. Tables 1 and 2 display the students by the type and location of school. Public high schools represent the majority of the sample (76%). As can be seen from Table 2, the students are about equally divided between rural and urban schools.

The grade, age and academic averages of the students are summarized in Tables 3, 4 and 5 respectively. Grade 12 students constituted the majority of the sample (60%). The modal age was 17 years with a range from 15 to 18 years. A weighting in the 17 year old age group was considered desirable as Career Development theories attribute more realistic choices to this age group than to younger age groups.
Table 1

Distribution of Students by TYPE OF SCHOOL

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>889</td>
<td>76.1</td>
</tr>
<tr>
<td>Private (Catholic)</td>
<td>178</td>
<td>15.3</td>
</tr>
<tr>
<td>Other Private</td>
<td>100</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,167</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2

Distribution of Students by LOCATION OF SCHOOL

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>534</td>
<td>45.8</td>
</tr>
<tr>
<td>Rural</td>
<td>633</td>
<td>54.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,167</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 3  
Distribution of Students by

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>244</td>
<td>20.9</td>
</tr>
<tr>
<td>12</td>
<td>695</td>
<td>59.5</td>
</tr>
<tr>
<td>13</td>
<td>220</td>
<td>18.9</td>
</tr>
<tr>
<td>Not stated</td>
<td>8</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>1,167</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4  
Distribution of Students by

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percentage**</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>44</td>
<td>3.8</td>
</tr>
<tr>
<td>16</td>
<td>289</td>
<td>25.1</td>
</tr>
<tr>
<td>17</td>
<td>598</td>
<td>51.8</td>
</tr>
<tr>
<td>18</td>
<td>222</td>
<td>19.3</td>
</tr>
<tr>
<td>Total</td>
<td>1,153</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for 14 students are missing.

**The percentages in this table as in all other tables in this study have been adjusted to take missing data into consideration.
Table 5

Distribution of Students by

<table>
<thead>
<tr>
<th>ACADEMIC AVERAGE</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 50%</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td>50 - 59</td>
<td>123</td>
<td>10.6</td>
</tr>
<tr>
<td>60 - 69</td>
<td>435</td>
<td>37.4</td>
</tr>
<tr>
<td>70 - 79</td>
<td>430</td>
<td>37.0</td>
</tr>
<tr>
<td>80 or more</td>
<td>168</td>
<td>14.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,163</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for four students are missing.
Academic averages on last examinations as reported by students are shown in Table 5. The distribution of academic averages approximated a normal curve with 37% of the students reporting averages between 60-69% and 70-79%. Approximately equal proportions of the remaining students reported averages above 80% and below 60%.

To obtain information on Ethnicity, students were asked the following question: "Even though you may describe yourself as Canadian, which of the following also describes your cultural heritage?" Table 6 represents a reclassification of groups as the majority of cells were too small to merit individual attention. The majority of students (52%) were from a British background; 15% of German and Dutch origins and 11% of Greek and Italian backgrounds. Students categorized as "Others" include: Native Canadians (5); Chinese (2); East Indians (5); French Canadians (43); Jewish (5); Polish (22); Portuguese (7); Ukrainian (23); West Indians (28) and other ethnic groups (103).

Tables 7 and 8 indicate place of birth and number of years in Canada. There was a preponderance of Canadian born students (89%) in the sample, with only 11% born outside of Canada.

The data on number of years in Canada for students born outside of Canada were further recategorized as cells for each year were too small for individual analysis. Therefore, students in Canada for six years or less constituted 5% of the sample and those in Canada for seven or more years comprised 6% of the total.

Table 9 presents information on the birth position of the students in their families. A third of the sample were first born. In subsequent
Table 6
Distribution of Students by ETHNICITY

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>British (from England, Scotland and Ireland)</td>
<td>609</td>
<td>52.4</td>
</tr>
<tr>
<td>Dutch and German</td>
<td>170</td>
<td>14.6</td>
</tr>
<tr>
<td>Greek and Italian</td>
<td>122</td>
<td>-10.5</td>
</tr>
<tr>
<td>Others</td>
<td>261</td>
<td>22.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,162</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for five students are missing.

Table 7
Distribution of Students by PLACE OF BIRTH

<table>
<thead>
<tr>
<th>Place of Birth</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born in Canada</td>
<td>1,035</td>
<td>89.1</td>
</tr>
<tr>
<td>Born outside of Canada</td>
<td>127</td>
<td>10.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,162</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for five students are missing.
Table 8
Distribution of Students by NUMBER OF YEARS IN CANADA

<table>
<thead>
<tr>
<th>Number of years in Canada</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 years of less</td>
<td>57</td>
<td>4.9</td>
</tr>
<tr>
<td>7 years or more</td>
<td>70</td>
<td>6.0</td>
</tr>
<tr>
<td>Born in Canada</td>
<td>1,035</td>
<td>89.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,162</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for five students are missing.

Table 9
Distribution of Students by POSITION IN THE FAMILY

<table>
<thead>
<tr>
<th>Position in Family</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>380</td>
<td>32.7</td>
</tr>
<tr>
<td>2nd</td>
<td>314</td>
<td>27.1</td>
</tr>
<tr>
<td>3rd</td>
<td>221</td>
<td>19.1</td>
</tr>
<tr>
<td>4th</td>
<td>123</td>
<td>10.6</td>
</tr>
<tr>
<td>5th or later</td>
<td>122</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,160</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for seven students are missing.*
analyses, all students who were born later in the family are classified as one group.

Table 10 indicates that the vast majority of the students live with both parents but one in ten lives only with her mother. The "Other" category includes those living with their fathers, relatives other than parents and foster parents. Although more detailed information was available, for example, "My mother is dead and I live with my father" or "My parents are separated or divorced and I live with my father," the categories were too small to warrant individual analysis.

Protestants and Roman Catholics comprised 48% and 38% of the sample respectively (see Table 11). Those designated as "Other" include religious groups such as Buddhist, The Dutch Reform Church (which was present in the rural schools), Hindu, Islamic, Jewish and students with no religious affiliation.

The occupation of father, as shown in Table 12, was used as the index of the socio-economic status of the subjects. This ranges from 1, which represents the lower or working class to 6, or upper class. Subsequent reference to social class will indicate a reclassification of the categories: Working or lower class will represent categories 1 and 2; middle class, categories 3 and 4 and upper class, categories 5 and 6. Almost a half of the sample are from working class backgrounds.

The work history or work status of mothers is shown in Table 13. As can be seen from this table, almost a half of the mothers are currently employed outside the home.
TABLE 10

Distribution of Students by
FAMILY SITUATION

<table>
<thead>
<tr>
<th>Family Situation</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with both parents</td>
<td>972</td>
<td>83.6</td>
</tr>
<tr>
<td>Living with mother</td>
<td>115</td>
<td>9.9</td>
</tr>
<tr>
<td>Living with others</td>
<td>76</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,163</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for four students are missing.

---

TABLE 11

Distribution of Students by
RELIGION

<table>
<thead>
<tr>
<th>Religion</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestants</td>
<td>562</td>
<td>48.4</td>
</tr>
<tr>
<td>Catholics</td>
<td>439</td>
<td>37.7</td>
</tr>
<tr>
<td>Others</td>
<td>161</td>
<td>13.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,162</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for five students are missing.
### TABLE 12

Distribution of Students by
FATHER'S OCCUPATION (SES)

<table>
<thead>
<tr>
<th>SES</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (lowest)</td>
<td>372</td>
<td>32.8</td>
</tr>
<tr>
<td>2</td>
<td>144</td>
<td>12.7</td>
</tr>
<tr>
<td>3</td>
<td>187</td>
<td>16.5</td>
</tr>
<tr>
<td>4</td>
<td>166</td>
<td>14.7</td>
</tr>
<tr>
<td>5</td>
<td>176</td>
<td>15.5</td>
</tr>
<tr>
<td>6 (highest)</td>
<td>88</td>
<td>7.8</td>
</tr>
<tr>
<td>Total</td>
<td>1,133</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for 34 students are missing.

### TABLE 13

Distribution of Students by
MOTHER'S WORK HISTORY

<table>
<thead>
<tr>
<th>Mother's Work History</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has never worked</td>
<td>176</td>
<td>15.2</td>
</tr>
<tr>
<td>Has worked, but not working now</td>
<td>406</td>
<td>35.2</td>
</tr>
<tr>
<td>Works at present</td>
<td>573</td>
<td>49.6</td>
</tr>
<tr>
<td>Total</td>
<td>1,155</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for 12 students are missing.
The occupation of mothers has been classified into traditional, undifferentiated and non-traditional occupations (see Table 14), and into occupational categories (see Table 15). The occupational categories range from executive and professional occupations to unskilled occupations.

In consonance with expectations, the majority of working mothers have traditionally feminine occupations (58%) and only a small percentage (20%) are in non-traditional careers.

Table 15 demonstrates that the largest category of mothers (22%) are in Clerical and Sales positions. This is an interesting reflection of the occupational status of women in the work force where the vast majority of women are clustered in the Clerical and Sales categories.

Table 16 presents information on the education of parents. It reveals that almost an equal percentage of mothers and fathers have a high school education. In terms of university education, however, slightly more fathers have both completed university (9%) and have done post graduate studies (6%) than is true for mothers (7% and 3% respectively).

Table 17 presents data on the mothers' attitudes towards their own employment. The largest proportion of mothers whose feelings about employment are known have always wanted to work (34%, see Table 17). Only 6% of the mothers have never wanted to work outside the home.
Table 14
Distribution of Students by
MOTHERS' OCCUPATION

<table>
<thead>
<tr>
<th>Mothers' Occupation</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>649</td>
<td>57.7</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>93</td>
<td>8.3</td>
</tr>
<tr>
<td>Non-traditional</td>
<td>222</td>
<td>19.7</td>
</tr>
<tr>
<td>Has never worked</td>
<td>161</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,125</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 42 students are missing.
Table 15

Distribution of Students by

OCCUPATIONAL CATEGORY OF MOTHER

<table>
<thead>
<tr>
<th>Occupational Category of Mother</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive and Professional</td>
<td>112</td>
<td>9.7</td>
</tr>
<tr>
<td>Other Professional</td>
<td>110</td>
<td>9.5</td>
</tr>
<tr>
<td>Managerial and Administrative</td>
<td>45</td>
<td>3.9</td>
</tr>
<tr>
<td>Clerical and Sales</td>
<td>257</td>
<td>22.2</td>
</tr>
<tr>
<td>Skilled</td>
<td>33</td>
<td>2.9</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>162</td>
<td>14.0</td>
</tr>
<tr>
<td>Unskilled</td>
<td>167</td>
<td>14.3</td>
</tr>
<tr>
<td>Does not work</td>
<td>201</td>
<td>17.4</td>
</tr>
<tr>
<td>Unknown to the student</td>
<td>70</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,157</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 10 students are missing.
<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Mother*</th>
<th>Father**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School only or no formal schooling</td>
<td>252 (21.8%)</td>
<td>327 (28.4%)</td>
</tr>
<tr>
<td>High school</td>
<td>416 (36.0%)</td>
<td>335 (29.1%)</td>
</tr>
<tr>
<td>Post-secondary, technical school, such as Institute of Technology or normal school</td>
<td>160 (13.8%)</td>
<td>145 (12.6%)</td>
</tr>
<tr>
<td>Some university or nursing school</td>
<td>96 (8.3%)</td>
<td>42 (3.6%)</td>
</tr>
<tr>
<td>Graduated from university</td>
<td>86 (7.4%)</td>
<td>98 (8.5%)</td>
</tr>
<tr>
<td>Post graduate studies</td>
<td>32 (2.8%)</td>
<td>74 (6.4%)</td>
</tr>
<tr>
<td>Unknown to the student</td>
<td>114 (9.9%)</td>
<td>132 (11.4%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,156 (100.0%)</td>
<td>1,153 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for 11 students are missing.

**The data for 14 students are missing.
Table 17

Distribution of Students by
MOTHERS' FEELINGS ABOUT EMPLOYMENT

<table>
<thead>
<tr>
<th>Mothers' Feelings about Employment</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has never wanted to be employed</td>
<td>67</td>
<td>5.8</td>
</tr>
<tr>
<td>Has always wanted to be employed</td>
<td>385</td>
<td>33.4</td>
</tr>
<tr>
<td>Wanted to be employed in the past, but not now</td>
<td>190</td>
<td>16.4</td>
</tr>
<tr>
<td>Did not want to be employed in the past but would like to now</td>
<td>127</td>
<td>11.0</td>
</tr>
<tr>
<td>Unknown to the student</td>
<td>385</td>
<td>33.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,154</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 13 students are missing.*
The educational expectations parents have for their children are displayed in Table 18. As indicated by daughters, the largest proportion of both mothers (37%) and fathers (37%) would like their daughters to attend university. Next in preference would be a post-secondary education, for example, a college of applied arts and technology is favored by 26% of the mothers and 21% of the fathers. However, almost as many mothers (14%) as fathers (13%) did not wish their daughters to be educated beyond the high school level. Post-graduate expectations were held by 9% of the mothers and 10% of the fathers. The category designated as "Other" had many examples which could be classified as post-secondary institutions. The similarity of the expectations of mothers and fathers is evident in this table.

Tables 19 and 20 indicate the careers students state that their parents would like them to have. These careers were classified in terms of their socio-economic status and whether they are traditionally feminine, undifferentiated or non-traditional careers.

The majority of students did not know what occupations their parents wanted them to have. For those who knew, upper and middle class careers predominated, with very few parents wishing their daughters to have lower class occupations.

It is interesting that slightly more fathers (15%) than mothers (12%) wanted their daughters to enter non-traditional careers. Conversely, more mothers (21%) than fathers (13%) wanted their daughters to have traditional careers. Almost an equal number of mothers and fathers favoured undifferentiated occupations.
Table 18

Distribution of Students by EDUCATIONAL EXPECTATIONS OF PARENTS

<table>
<thead>
<tr>
<th>Educational Expectation</th>
<th>Mother*</th>
<th>Father**</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>158 (13.6%)</td>
<td>147 (12.8%)</td>
</tr>
<tr>
<td>Post-secondary institution, e.g., C.A.A.T.</td>
<td>299 (25.8%)</td>
<td>240 (21.0%)</td>
</tr>
<tr>
<td>University</td>
<td>429 (37.0%)</td>
<td>422 (36.9%)</td>
</tr>
<tr>
<td>Post graduate school</td>
<td>105 (9.1%)</td>
<td>114 (10.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>59 (5.1%)</td>
<td>58 (5.1%)</td>
</tr>
<tr>
<td>Unknown to the student</td>
<td>110 (9.4%)</td>
<td>162 (14.2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,160 (100.0%)</td>
<td>1,143 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for 7 students are missing.

**The data for 24 students are missing.
Table 19

Distribution of Students by
MOTHER'S CAREER EXPECTATION

<table>
<thead>
<tr>
<th>Social Class, Number and Percentage of Mother's Career Expectation*</th>
<th>Type, Number and Percentage of Mother's Career Expectation**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower class        25 (2.2%)</td>
<td>Traditional 243 (20.9%)</td>
</tr>
<tr>
<td>Middle class       232 (20.0%)</td>
<td>Undifferentiated 72 (6.2%)</td>
</tr>
<tr>
<td>Upper class        191 (16.4%)</td>
<td>Non-traditional 136 (11.7%)</td>
</tr>
<tr>
<td>Unknown to the student 713 (61.4%)</td>
<td>Does not want me to have a career 11 (1.0%)</td>
</tr>
<tr>
<td></td>
<td>Unknown to the student 700 (60.2%)</td>
</tr>
<tr>
<td>Total              1,161 (100.0%)</td>
<td>1,162 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for six students are missing.

**The data for five students are missing.
<table>
<thead>
<tr>
<th>Social Class, Number and Percentage of Father's Career Expectation*</th>
<th>Type, Number and Percentage of Father's Career Expectation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower class 19 (1.7%)</td>
<td>Traditional 149 (13.0%)</td>
</tr>
<tr>
<td>Middle class 150 (13.1%)</td>
<td>Undifferentiated 53 (4.6%)</td>
</tr>
<tr>
<td>Upper class 200 (17.4%)</td>
<td>Non-traditional 167 (14.6%)</td>
</tr>
<tr>
<td>Unknown to the student 780 (67.8%)</td>
<td>Does not want me to have a career 11 (0.9%)</td>
</tr>
<tr>
<td></td>
<td>Unknown to the student 769 (66.9%)</td>
</tr>
<tr>
<td>Total 1,149 (100.0%)</td>
<td>1,149 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for 18 students are missing.
Students were asked whose expectations they wished to emulate. Results indicate that a large proportion of students want to live up to the expectations of both their parents. When Mother and Father are compared, however, more girls want to satisfy their mothers' wishes than their fathers': (10% and 6% respectively, see Table 21).

The following question was asked: "In terms of attitudes towards career and marriage and general expectations about life, do you think you are more like you mother or your father?" As can be seen in Table 22, almost a third of the sample felt that they were more like their mothers.

Girls were asked what each parent wanted for them in terms of marriage and a career. Parental expectations are also very similar in this regard. Table 23 demonstrates that the majority of mothers (63%) would like their daughters to combine marriage and a career. Very few mothers want their daughters to be either totally career oriented or marriage oriented. It is interesting to note that 18% of the sample do not know what mothers' expectations are.

Fathers also, would like their daughters to combine marriage and a career (56%). Like mothers, they are not favourably disposed to the idea of their daughters becoming career women or housewives. A sizeable proportion of girls also (26%) do not know what their fathers wish for them.

To ascertain career aspirations or preferences and career expectations, students were asked: "What is the occupation or career you would most like to have if there was nothing to limit or prevent you?"
Table 21  
Distribution of Students by  
EXPECTATIONS THEY WISH TO EMULATE  

<table>
<thead>
<tr>
<th>Expectations Students Wish to Emulate</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Her mother's</td>
<td>115</td>
<td>9.9</td>
</tr>
<tr>
<td>Her father's</td>
<td>74</td>
<td>6.4</td>
</tr>
<tr>
<td>Neither of her parents</td>
<td>153</td>
<td>13.1</td>
</tr>
<tr>
<td>Both her parents</td>
<td>421</td>
<td>36.2</td>
</tr>
<tr>
<td>Her own</td>
<td>339</td>
<td>29.1</td>
</tr>
<tr>
<td>Other</td>
<td>62</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,164</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for three students are missing.
Table 22

Distribution of Students by PARENT THEY PERCEIVE THEY ARE LIKE
IN TERMS OF ATTITUDES AND EXPECTATIONS

<table>
<thead>
<tr>
<th>Person with Similar Attitudes and Expectations</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Her mother</td>
<td>346</td>
<td>29.7</td>
</tr>
<tr>
<td>Her father</td>
<td>212</td>
<td>18.2</td>
</tr>
<tr>
<td>Neither of her parents</td>
<td>206</td>
<td>17.7</td>
</tr>
<tr>
<td>Both her parents</td>
<td>262</td>
<td>22.5</td>
</tr>
<tr>
<td>Unknown to the student</td>
<td>111</td>
<td>9.5</td>
</tr>
<tr>
<td>Not applicable</td>
<td>28</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>1,165</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for two students are missing.
Table 23
Distribution of Students by
PARENTS' EXPECTATIONS CONCERNING
MARRIAGE AND A CAREER

<table>
<thead>
<tr>
<th>Expectation</th>
<th>Mother*</th>
<th>Father**</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be married and not work</td>
<td>54 (4.7%)</td>
<td>47 (4.1%)</td>
</tr>
<tr>
<td>To have a career and not be married</td>
<td>41 (3.5%)</td>
<td>39 (3.4%)</td>
</tr>
<tr>
<td>To combine marriage and a career</td>
<td>736 (63.3%)</td>
<td>645 (56.1%)</td>
</tr>
<tr>
<td>Unknown to the student</td>
<td>209 (18.0%)</td>
<td><strong>209 (26.1%)</strong></td>
</tr>
<tr>
<td>Other</td>
<td>122 (10.5%)</td>
<td>119 (10.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>1,162 (100.0%)</td>
<td>1,150 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for five students are missing.

**The data for 17 students are missing.
and "What occupation or career do you actually expect to have?", respectively (see Tables 24 and 25).

Career choices were categorized by the social class status of the occupations and the degree of traditionalism. Tables 24 and 25 reveal an interesting discrepancy between aspirations and expectations. Whereas the largest category of girls aspired to upper class and non-traditional careers, the largest category expected middle class and traditional occupations. In comparing aspirations and expectations therefore, one can conclude that despite the preference for nontraditional careers, girls will more often enter traditionally feminine occupations. This conclusion is based on the notion that expectations are more realistic than aspirations or preferences (Deosaran, 1977; Porter et al., 1973).

Table 26 records the responses to the question, "Do you know any women in the career you plan to enter?" Almost a half of the sample do not know any women in the career they plan to enter. It is also interesting to note that only 4% of the girls would like careers similar to their mothers'.

The educational plans of students are summarized in Table 27: The majority of students (48%) have moderate educational aspirations, that is, they are planning to continue their education at a community college or other post-secondary institution. A large proportion also (39%) have high educational aspirations, that is, they are planning to attend university, and 12% have low educational aspirations and are planning not to study beyond high school.
Table 24

Distribution of Students by CAREER ASPIRATIONS

<table>
<thead>
<tr>
<th>Social Class, Number and Percentage of Career Aspirations*</th>
<th>Type, Number and Percentage of Career Aspirations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower class 53 (4.6%)</td>
<td>Traditional 259 (23.3%)</td>
</tr>
<tr>
<td>Middle class 330 (28.5%)</td>
<td>Undifferentiated 207 (17.9%)</td>
</tr>
<tr>
<td>Upper class 560 (48.3%)</td>
<td>Non-traditional 480 (41.4%)</td>
</tr>
<tr>
<td>No particular career choice 216 (18.6%)</td>
<td>No particular career choice 128 (11.0%)</td>
</tr>
<tr>
<td></td>
<td>Never thought about it 82 (7.1%)</td>
</tr>
<tr>
<td></td>
<td>Do not intend to work 3 (0.3%)</td>
</tr>
<tr>
<td>Total 1,159 (100.0%)</td>
<td>1,159 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for eight students are missing.
Table 25

Distribution of Students by

CAREER EXPECTATIONS

<table>
<thead>
<tr>
<th>Social Class, Number and Percentage of Career Expectations*</th>
<th>Type, Number and Percentage of Career Expectations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower class 86 (7.4%)</td>
<td>Traditional 386 (33.4%)</td>
</tr>
<tr>
<td>Middle class 418 (36.2%)</td>
<td>Undifferentiated 187 (16.2%)</td>
</tr>
<tr>
<td>Upper class 364 (31.5%)</td>
<td>Non-traditional 295 (25.5%)</td>
</tr>
<tr>
<td>No particular choice 288 (24.9%)</td>
<td>No particular choice 200 (17.3%)</td>
</tr>
<tr>
<td></td>
<td>Never thought about it 84 (7.3%)</td>
</tr>
<tr>
<td></td>
<td>Do not intend to work 4 (0.3%)</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Total 1,156 (100.0%)</td>
<td>1,156 (100.0%)</td>
</tr>
</tbody>
</table>

*The data for 11 students are missing.
Table 26

Distribution of Students by KNOWLEDGE OF WOMEN IN THE CAREERS THEY PLAN TO ENTER

<table>
<thead>
<tr>
<th>Women in Careers</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>43</td>
<td>3.7</td>
</tr>
<tr>
<td>Relative</td>
<td>140</td>
<td>12.1</td>
</tr>
<tr>
<td>Friend</td>
<td>314</td>
<td>27.2</td>
</tr>
<tr>
<td>Other</td>
<td>108</td>
<td>9.4</td>
</tr>
<tr>
<td>Do not know any women in the career</td>
<td>535</td>
<td>46.4</td>
</tr>
<tr>
<td>Do not plan to have a career</td>
<td>14</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,154</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*The data for 13 students are missing.
Table 27
Distribution of Students by
EDUCATIONAL PLANS

<table>
<thead>
<tr>
<th>Educational Plans</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not wish to study after high school (low educational aspirations)</td>
<td>143</td>
<td>12.4</td>
</tr>
<tr>
<td>Community college or other post-secondary institution (moderate educational aspirations)</td>
<td>559</td>
<td>48.3</td>
</tr>
<tr>
<td>University (high educational aspirations)</td>
<td>454</td>
<td>39.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,156</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 11 subjects are missing.*
Students were asked what their plans for the future were, in terms of marriage, children and career, and in general, their plans for career commitment. Results are displayed in Tables 28 and 29. Almost a third of the sample would like to have a career outside the home regardless of whether they have children or not. To determine the degree of career commitment, items 2 and 4 were combined to describe "weak" career commitment; items 3, 5, 6, 7 and 9 describe girls with "moderate" career commitment; and items 1 and 8 were combined to describe girls with a strong career commitment. The majority of the girls (59%) have a moderate career commitment, wishing to have a career only when their children are at various stages in their schooling.

Most girls felt they did not know enough about the variety of jobs they could get to make a good choice about their future careers (see Table 30). Only 9% felt that they had an adequate knowledge of occupations to make well-informed choices.

On the other hand, students felt that they were more knowledgeable about their own interests and abilities (see Table 30). The majority of girls reported that they had a very good self knowledge with 47% knowing themselves quite well.

Students were asked the following questions: "Have you had any classes in which you have discussed topics like, 'The Changing Role of Women in Society' or 'Women in the Work Force' or anything about women at work?" The responses are summarized in Table 31. The vast majority of girls have not had much exposure to courses in women's studies.
Table 28

Distribution of Students by PLANS FOR THE FUTURE

<table>
<thead>
<tr>
<th>Plans for the Future</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To have a career or occupation and not be married</td>
<td>78</td>
<td>6.8</td>
</tr>
<tr>
<td>2. Not have a career or job outside the home, but confine my activities generally to my home and family regardless of whether I have children or not</td>
<td>36</td>
<td>3.1</td>
</tr>
<tr>
<td>3. Have a job or career outside the home only if I have no children</td>
<td>197</td>
<td>17.1</td>
</tr>
<tr>
<td>4. Limit my work outside the home to voluntary activities and not have a paid job or career</td>
<td>14</td>
<td>1.2</td>
</tr>
<tr>
<td>5. Have a job or career outside the home only after all my children are of elementary school age</td>
<td>310</td>
<td>26.8</td>
</tr>
<tr>
<td>6. Have a job or career outside the home only after all my children begin high school</td>
<td>56</td>
<td>4.9</td>
</tr>
<tr>
<td>7. Have a job or career outside the home only after all my children have finished high school</td>
<td>11</td>
<td>1.0</td>
</tr>
<tr>
<td>8. Have a job or career outside the home regardless of whether I have children or not.</td>
<td>343</td>
<td>29.7</td>
</tr>
<tr>
<td>9. Other</td>
<td>108</td>
<td>9.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,153</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 14 students are missing.*
Table 29

Distribution of Students by CAREER COMMITMENT

<table>
<thead>
<tr>
<th>Career Commitment</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak</td>
<td>50</td>
<td>4.4</td>
</tr>
<tr>
<td>Moderate</td>
<td>682</td>
<td>59.1</td>
</tr>
<tr>
<td>Strong</td>
<td>421</td>
<td>36.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,153</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 14 students are missing.*
Table 30
Distribution of Students by
KNOWLEDGE OF CAREERS (OCCUPATIONS)
AND OF SELF (INTERESTS AND ABILITIES)

<table>
<thead>
<tr>
<th>Degree of Knowledge</th>
<th>Careers* (Number and Percentage)</th>
<th>Self** (Number and Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well</td>
<td>103 (8.9%)</td>
<td>250 (21.6%)</td>
</tr>
<tr>
<td>Quite well</td>
<td>428 (37.2%)</td>
<td>543 (47.0%)</td>
</tr>
<tr>
<td>Not too well</td>
<td>512 (44.4%)</td>
<td>321 (27.8%)</td>
</tr>
<tr>
<td>Not well at all</td>
<td>109 (9.5%)</td>
<td>41 (3.5%)</td>
</tr>
</tbody>
</table>

Total 1,152 (100.0%) 1,155 (100.0%)

*The data for 15 students are missing.
**The data for 12 students are missing.
### Table 31

Distribution of Students by EXPOSURE TO A WOMEN'S STUDIES COURSE

<table>
<thead>
<tr>
<th>Exposure to course on Women</th>
<th>Number*</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women's studies-related topics mentioned, but not in any detail</td>
<td>592</td>
<td>51.3</td>
</tr>
<tr>
<td>Yes, topics dealt with in detail</td>
<td>180</td>
<td>15.6</td>
</tr>
<tr>
<td>Never had the opportunity to discuss such topics</td>
<td>381</td>
<td>33.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,153</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*The data for 14 students are missing.*
Table 32 reports the sex role ideology of the girls. There is almost an equal distribution of girls in the Traditional, Moderate and Liberated attitudinal categories.

For the most part, the girls in the sample were not knowledgeable about women in the work force (see Table 33). Of a total of 25 items, 33% of the girls had 15 or more correct items. These results indicate that the girls in the sample were not at all familiar with the facts and figures relating to women and work.

Summary

The major findings related to the characteristics of the sample may be summarized as follows:

Parental Expectations

1. The largest category of parents wanted their daughters to attend university. (See Table 18.)

2. Parents had slightly higher educational expectations for their daughters than the daughters had for themselves. (See Tables 18 and 27.)

3. The majority of girls did not know the occupations their parents wanted them to have. Of those who knew, the girls reported slight differences in the expectations of their parents. The expectations of the fathers were slightly more nontraditional than those of the mothers. (See Tables 19 and 20.)

4. Slightly more girls perceived that they were more like their mothers in terms of attitudes and expectations than like their fathers. (See Table 22.)
Table 32
Distribution of Students by
SEX-ROLE IDEOLOGY

<table>
<thead>
<tr>
<th>Sex-Role Ideology</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>390</td>
<td>33.4</td>
</tr>
<tr>
<td>Moderate</td>
<td>397</td>
<td>34.0</td>
</tr>
<tr>
<td>Liberated</td>
<td>380</td>
<td>32.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,167</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 33
Distribution of Students by
KNOWLEDGE ABOUT WOMEN IN THE WORK FORCE

<table>
<thead>
<tr>
<th>Knowledge About Women in the Work Force</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little (0-11)</td>
<td>383</td>
<td>32.8</td>
</tr>
<tr>
<td>Borderline (12-14)</td>
<td>404</td>
<td>34.6</td>
</tr>
<tr>
<td>Fair (15-25)</td>
<td>380</td>
<td>32.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,167</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
5. Both parents more often wanted their daughters to combine marriage
and a career than to become single professionals or married with-
out careers. (See Table 23.)

Career Aspirations and Expectations

1. The largest category of girls aspired to upper class and non-
traditional occupations. (See Table 24.)

2. Concerning expectations more girls chose the traditional and middle
class careers than the other categorizations. (See Table 25.)

Knowledge of Women in the Careers Students Plan to Enter

Girls stated most frequently that they did not know women in the
careers to which they aspired. (See Table 26.)

Educational Plans

A large proportion of girls had moderate educational aspirations with
almost half of the sample planning to attend a Community College or
other post-secondary institution. Slightly more than one-third had
high educational aspirations, that is, a university education.

(See Table 27.)

Career Commitment

The largest category of girls had a moderate career commitment. Their
decisions to be involved in a career would depend on whether or not
they have children and on the stage of schooling at which their
children are. (See Tables 28 and 29.)

Knowledge of Self and of Occupations

Almost one-half of the sample stated that they did not know very
much about the occupations available to them in order to make a well-
informed career choice. Conversely, many felt that they knew themselves (i.e., interests and abilities) quite well. (See Table 30.)

Exposure to a Women's Studies Course

Only 16% of the girls had had a course in which topics related to the study of the status of women are discussed in detail. For the majority, such topics were mentioned but not in any detail. One-third of the sample have never had the opportunity to discuss such topics. (See Table 31.)

Sex-role Ideology

Almost an equal proportion of girls fell within the Traditional, Moderate and Liberated categories.

Knowledge of Women in the Workforce

In general, the girls in the sample knew very little about women in the workforce.

Multiple Regression

Multiple regression analysis was used to determine what combination of the independent variables correlated most highly with each of the dependent variables. "Dummy" variables were substituted for those which had no inherent order for example, type of school or family situation. Tables 35, 37, 39, 41 and 43 report the combined effects of the dummy variables. Only those independent variables which contribute significantly to the dependent measures (i.e., probability level of .05 or lower), are reported.
1. Career Aspiration (SES Level)

Table 34 reveals that the variables which contribute most significantly to career aspirations are: grade level, academic average, position in the family and sexrole ideology. To elaborate, higher grade level, academic average or a liberated ideology are associated with high status occupational aspirations. Likewise, first borns are more likely to aspire to high status occupations than those born later.

The regression equation accounted for only 11% of the variance which indicated that career aspirations could not be predicted with great accuracy from the combination of variables included in the analysis.

Table 35 shows that the total effect of type of school is not significant.

2. Career Aspirations (Traditional, Undifferentiated, Non-traditional)

The variables which contribute most significantly to the type of careers to which girls aspire in terms of traditionality are: academic average, knowing women in the career and sexrole ideology (see Table 36). The results of the variable "Knowing women in the career" demonstrate that non-traditional career choices are associated with knowing women in the career whereas if girls do not know women in the career to which they aspire, their choices would tend to be more traditional.

Although the overall effect of type of school was not related significantly to career aspirations, attendance at a public school bears a more negative relationship to the non-traditionality of career aspirations than attendance at a private Catholic or other
### Table 34

Multiple Regression

CAREER ASPIRATION

(SES LEVEL)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proportion</th>
<th>Degree and</th>
<th>F</th>
<th>Level of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Explained</td>
<td>Direction of Influence</td>
<td></td>
<td>Significance</td>
</tr>
<tr>
<td>Type of school (Public)</td>
<td>0.0088</td>
<td>-0.1114</td>
<td>3.28</td>
<td></td>
</tr>
<tr>
<td>Type of school (Catholic)</td>
<td>0.0167</td>
<td>-0.0959</td>
<td>2.82</td>
<td></td>
</tr>
<tr>
<td>Grade level</td>
<td>0.0398</td>
<td>0.1159</td>
<td>10.77</td>
<td>.01</td>
</tr>
<tr>
<td>Academic average</td>
<td>0.0705</td>
<td>0.1619</td>
<td>21.21</td>
<td>.001</td>
</tr>
<tr>
<td>Position in the family</td>
<td>0.0784</td>
<td>0.0384</td>
<td>5.77</td>
<td>.05</td>
</tr>
<tr>
<td>SES</td>
<td>0.0819</td>
<td>0.0610</td>
<td>2.40</td>
<td></td>
</tr>
<tr>
<td>Occupational category of mother</td>
<td>0.0833</td>
<td>-0.0300</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>Occupation of mother (Traditional, etc.)</td>
<td>0.0835</td>
<td>-0.0206</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>Knowing women in the career</td>
<td>0.0840</td>
<td>-0.0030</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Sex role ideology</td>
<td>0.1054</td>
<td>0.1475</td>
<td>16.96</td>
<td>.001</td>
</tr>
<tr>
<td>Knowledge of women in the workforce</td>
<td>0.1056</td>
<td>0.0159</td>
<td>0.20</td>
<td></td>
</tr>
</tbody>
</table>

### Table 35

Analysis of Variance

CAREER ASPIRATION

(SES LEVEL)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>11</td>
<td>29.0551</td>
<td>2.6414</td>
<td>8.06</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>750</td>
<td>245.9278</td>
<td>0.3279</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school</td>
<td>2</td>
<td>1.1362</td>
<td>0.6056</td>
<td>1.85</td>
<td></td>
</tr>
</tbody>
</table>
Table 36

Multiple Regression

CAREER ASPIRATION

(TRADITIONAL, UNDIFFERENTIATED, NON-TRADITIONAL)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proportion of Variance Explained</th>
<th>Degree and Direction of Influence</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of school (Public)</td>
<td>0.063</td>
<td>-0.1520</td>
<td>6.23</td>
<td>.05</td>
</tr>
<tr>
<td>Type of school (Catholic)</td>
<td>0.0233</td>
<td>-0.0784</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>Grade level</td>
<td>0.0282</td>
<td>0.0269</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>Academic average</td>
<td>0.0559</td>
<td>0.1414</td>
<td>16.52</td>
<td>.001</td>
</tr>
<tr>
<td>Position in the family</td>
<td>0.0601</td>
<td>0.0543</td>
<td>2.49</td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>0.0622</td>
<td>0.0418</td>
<td>1.14</td>
<td></td>
</tr>
<tr>
<td>Occupational category of mother</td>
<td>0.0629</td>
<td>-0.0489</td>
<td>1.60</td>
<td></td>
</tr>
<tr>
<td>Occupation of mother (Traditional, etc.)</td>
<td>0.0671</td>
<td>0.0528</td>
<td>1.94</td>
<td></td>
</tr>
<tr>
<td>Knowing women in the career</td>
<td>0.0896</td>
<td>0.1272</td>
<td>13.49</td>
<td>.001</td>
</tr>
<tr>
<td>Sex role ideology</td>
<td>0.1199</td>
<td>0.1687</td>
<td>22.65</td>
<td>.001</td>
</tr>
<tr>
<td>Knowledge of women in the workforce</td>
<td>0.1233</td>
<td>0.0608</td>
<td>2.95</td>
<td></td>
</tr>
</tbody>
</table>

Table 37

Analysis of Variance

CAREER ASPIRATION

(TRADITIONAL, UNDIFFERENTIATED, NON-TRADITIONAL)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>11</td>
<td>67.7091</td>
<td>6.1554</td>
<td>9.58</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>750</td>
<td>481.3999</td>
<td>0.6419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school</td>
<td>2</td>
<td>4.5149</td>
<td>2.2575</td>
<td>3.52</td>
<td></td>
</tr>
</tbody>
</table>
private school.

The variance which is accounted for in this analysis is low (12%).

3. Career Expectation (SES Level)

Table 38 reveals that the variables which were significant in relation to the socio-economic level of career expectations are: academic average, socio-economic status, occupational category of mother and sex role ideology. To elaborate on the variables "socio-economic status" and "occupational category of mother", girls with upper class or professional mothers are more likely to expect high status occupations than girls with lower class mother or mother in the semi-skilled or unskilled occupational categories.

Thirteen percent of the variance is accounted for by this analysis.

4. Career Expectation (Traditional, Undifferentiated, Non-traditional)

The type of school, academic average, occupational category of mother, occupation of mother, knowing women in the career and sex role ideology all contribute significantly to the type of careers in terms of traditionality, that the girls in this sample expect to enter (see Table 40). The variable "knowing women in the career" indicates that the girls' choices would tend to be more traditional if their mothers, friends or relatives were in those careers.
Table 38
Multiple Regression
CAREER EXPECTATION

(SES LEVEL)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proportion of Variance Explained</th>
<th>Degree and Direction of Influence</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of school (Public)</td>
<td>0.0325</td>
<td>-0.1829</td>
<td>9.07</td>
<td>.01</td>
</tr>
<tr>
<td>Type of school (Catholic)</td>
<td>0.0431</td>
<td>-0.0998</td>
<td>3.13</td>
<td></td>
</tr>
<tr>
<td>Grade level</td>
<td>0.0529</td>
<td>0.0618</td>
<td>3.13</td>
<td></td>
</tr>
<tr>
<td>Academic average</td>
<td>0.0925</td>
<td>0.1804</td>
<td>27.02</td>
<td>.001</td>
</tr>
<tr>
<td>Position in the family</td>
<td>0.0981</td>
<td>0.0670</td>
<td>3.81</td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>0.1082</td>
<td>0.1024</td>
<td>6.92</td>
<td>.01</td>
</tr>
<tr>
<td>Occupational category of mother</td>
<td>0.1143</td>
<td>0.0818</td>
<td>4.50</td>
<td>.05</td>
</tr>
<tr>
<td>Occupation of mother (Traditional, etc.)</td>
<td>0.1144</td>
<td>0.0020</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Knowing women in the career</td>
<td>0.1163</td>
<td>0.0311</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Sex role ideology</td>
<td>0.1257</td>
<td>0.0927</td>
<td>6.87</td>
<td>.01</td>
</tr>
<tr>
<td>Knowledge of women in the workforce</td>
<td>0.1274</td>
<td>0.0428</td>
<td>1.47</td>
<td></td>
</tr>
</tbody>
</table>

Table 39
Analysis of Variance
CAREER EXPECTATION

(SES LEVEL)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9</td>
<td>37.5365</td>
<td>4.1707</td>
<td>10.95</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>752</td>
<td>286.3795</td>
<td>0.3805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school</td>
<td>2</td>
<td>1.0996</td>
<td>.5498</td>
<td>1.46</td>
<td></td>
</tr>
</tbody>
</table>
Table 40

Multiple Regression

CAREER EXPECTATION

(TRADITIONAL, UNDIFFERENTIATED, NON-TRADITIONAL)

<table>
<thead>
<tr>
<th>Variable,</th>
<th>Proportion of Variance Explained</th>
<th>Degree and Direction of Influence</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of school (Public)</td>
<td>0.0363</td>
<td>-0.1754</td>
<td>8.68</td>
<td>.001</td>
</tr>
<tr>
<td>Type of school (Catholic)</td>
<td>0.0410</td>
<td>-0.0459</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Grade level</td>
<td>0.0410</td>
<td>-0.0350</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Academic average</td>
<td>0.0781</td>
<td>0.1658</td>
<td>23.75</td>
<td>.001</td>
</tr>
<tr>
<td>Position in the family</td>
<td>0.0790</td>
<td>0.0184</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>0.0835</td>
<td>0.0621</td>
<td>2.64</td>
<td></td>
</tr>
<tr>
<td>Occupational category of mother</td>
<td>0.0857</td>
<td>-0.0778</td>
<td>4.24</td>
<td>.05</td>
</tr>
<tr>
<td>Occupation of mother</td>
<td>0.0933</td>
<td>0.0782</td>
<td>4.47</td>
<td>.05</td>
</tr>
<tr>
<td>(Traditional, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowing women in the career</td>
<td>0.1324</td>
<td>-0.1762</td>
<td>27.08</td>
<td>.001</td>
</tr>
<tr>
<td>Sex role ideology</td>
<td>0.1609</td>
<td>0.1676</td>
<td>23.40</td>
<td>.001</td>
</tr>
<tr>
<td>Knowledge of women in the workforce</td>
<td>0.1618</td>
<td>0.0313</td>
<td>0.81</td>
<td></td>
</tr>
</tbody>
</table>

Table 41

Analysis of Variance

CAREER EXPECTATION

(TRADITIONAL, UNDIFFERENTIATED, NON-TRADITIONAL)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>11</td>
<td>94.5380</td>
<td>8.5944</td>
<td>13.16</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>750</td>
<td>489.6353</td>
<td>0.6529</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school</td>
<td>2</td>
<td>9.2599</td>
<td>4.6299</td>
<td>7.09</td>
<td>.001</td>
</tr>
</tbody>
</table>
Table 41 indicates that the variable "type of school" was significant in the analysis. The girls attending public schools were more likely to choose traditional careers than were the girls in either of the private schools. Girls in the private school were the most likely to choose a non-traditional career.

The variance explained by this analysis is 16%.

5. Educational Plans

The variables which contribute most significantly to educational plans are: type of school, grade level, academic average, family situation, mother's and father's expectations concerning their daughter's education, and sex-role ideology (see Table 42). These results indicate that girls attending private school would tend to have higher educational plans than public school girls. Likewise girls living with both parents have higher educational aspirations than girls living with mothers, or others, which included fathers, foster parents and relatives. If both mother and father had university expectations for their daughters, the daughters were more likely to have university educational plans than were the girls whose parents expected them not to continue their education after high school.

The amount of variance accounted for in this analysis is the highest among the dependent variables (50%). This indicates that the educational plans of the girls can be predicted with some degree of accuracy from the independent variables assessed in the present study.
Table 42

Multiple Regression

EDUCATIONAL PLANS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proportion of Variance Explained</th>
<th>Degree and Direction of Influence</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of school (Public)</td>
<td>.1025</td>
<td>-.2176</td>
<td>36.37</td>
<td>.001</td>
</tr>
<tr>
<td>Type of school (Catholic)</td>
<td>.1220</td>
<td>-.1048</td>
<td>9.65</td>
<td>.01</td>
</tr>
<tr>
<td>Grade level</td>
<td>.1475</td>
<td>.0510</td>
<td>5.52</td>
<td>.05</td>
</tr>
<tr>
<td>Academic average</td>
<td>.2768</td>
<td>.2188</td>
<td>92.54</td>
<td>.001</td>
</tr>
<tr>
<td>Family situation (Both parents)</td>
<td>.2768</td>
<td>.0799</td>
<td>6.34</td>
<td>.05</td>
</tr>
<tr>
<td>Family situation (With mother)</td>
<td>.2796</td>
<td>.0488</td>
<td>2.32</td>
<td></td>
</tr>
<tr>
<td>Education of father</td>
<td>.2914</td>
<td>.0446</td>
<td>2.62</td>
<td></td>
</tr>
<tr>
<td>Education of father (Unknown)</td>
<td>.3024</td>
<td>.0414</td>
<td>2.73</td>
<td></td>
</tr>
<tr>
<td>Mother's expectation re education</td>
<td>.4134</td>
<td>.4005</td>
<td>78.67</td>
<td>.001</td>
</tr>
<tr>
<td>Mother's expectation re education (Unknown)</td>
<td>.4718</td>
<td>.2376</td>
<td>36.27</td>
<td>.001</td>
</tr>
<tr>
<td>Father's expectation re education</td>
<td>.4859</td>
<td>.3014</td>
<td>34.73</td>
<td>.001</td>
</tr>
<tr>
<td>Father's expectation re education (Unknown)</td>
<td>.4902</td>
<td>.1450</td>
<td>10.26</td>
<td></td>
</tr>
<tr>
<td>Parent students perceive they are like (Mother)</td>
<td>.4916</td>
<td>-.0620</td>
<td>3.48</td>
<td></td>
</tr>
<tr>
<td>Parent students perceive they are like (Father)</td>
<td>.4930</td>
<td>-.0493</td>
<td>2.56</td>
<td></td>
</tr>
<tr>
<td>Parent students perceive they are like (Neither)</td>
<td>.4931</td>
<td>-.0137</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Parent students perceive they are like (Both)</td>
<td>.4935</td>
<td>-.0187</td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td>Sex-role ideology</td>
<td>.4983</td>
<td>.0712</td>
<td>10.19</td>
<td>.01</td>
</tr>
<tr>
<td>Knowledge of women in the work force</td>
<td>.4985</td>
<td>.0123</td>
<td>0.31</td>
<td></td>
</tr>
</tbody>
</table>

Table 43

Analysis of Variance

EDUCATIONAL PLANS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>18</td>
<td>251.4146</td>
<td>13.9675</td>
<td>62.40</td>
<td>.001</td>
</tr>
<tr>
<td>Residual</td>
<td>1130</td>
<td>252.9475</td>
<td>0.2238</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of school</td>
<td>2</td>
<td>9.4368</td>
<td>4.7187</td>
<td>21.08</td>
<td>.001</td>
</tr>
<tr>
<td>Family situation</td>
<td>4</td>
<td>1.4531</td>
<td>0.3633</td>
<td>3.25</td>
<td>.05</td>
</tr>
<tr>
<td>Parent students perceive they are like</td>
<td>2</td>
<td>1.3408</td>
<td>0.3352</td>
<td>1.51</td>
<td></td>
</tr>
</tbody>
</table>
6. **Career Commitment**

Table 44 demonstrates that the variables which contribute most significantly to career commitment are: ethnicity, position in the family, father's education, mother's expectations about employment, the parent the student wished to emulate, sex-role ideology and knowledge of women in the work force.

To elaborate, concerning ethnicity, the girls designated as "Other" (i.e., Native Canadians, Chinese, East Indians, French Canadians, Jewish, Polish, Portuguese, Ukrainians, West Indians and unspecified others), have a higher score on career commitment than the other groups. Concerning the variable "position in the family", the first born has a stronger career commitment than those born later. The daughter's career commitment was greater if mother had always wanted to be employed. The parent whose expectations the student wished to emulate was most frequently the mother. Both parents had a positive influence on daughters but the mother was the more potent role model. Wishing to emulate neither parent is related to a lower career commitment. The results of the variable "whether or not mother works" indicate that the mothers who have never worked contribute negatively to their daughters' career commitment. Conversely, working mothers have a positive influence on daughters' career commitment.

Fourteen percent of the variance was accounted for in this analysis.
### Table 44

**Multiple Regression**

**Career Commitment**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proportion of Variance Explained</th>
<th>Degree and Direction of Influence</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of school (Public)</td>
<td>0.0005</td>
<td>-0.0975</td>
<td>4.12</td>
<td>.05</td>
</tr>
<tr>
<td>Type of school (Catholic)</td>
<td>0.0017</td>
<td>-0.0815</td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td>Ethnicity (British)</td>
<td>0.0064</td>
<td>-0.1123</td>
<td>10.08</td>
<td>.01</td>
</tr>
<tr>
<td>Ethnicity (Dutch and German)</td>
<td>0.0273</td>
<td>-0.1328</td>
<td>15.45</td>
<td>.001</td>
</tr>
<tr>
<td>Ethnicity (Greek and Italian)</td>
<td>0.0274</td>
<td>-0.0080</td>
<td>0.06</td>
<td></td>
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<tr>
<td>Position in the family</td>
<td>0.0333</td>
<td>0.0624</td>
<td>4.94</td>
<td>.05</td>
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<tr>
<td>Father's education</td>
<td>0.0382</td>
<td>0.0721</td>
<td>4.09</td>
<td>.05</td>
</tr>
<tr>
<td>Whether or not mother works (Never)</td>
<td>0.0430</td>
<td>-0.0242</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>Whether or not mother works (Past, not at present)</td>
<td>0.0577</td>
<td>0.0730</td>
<td>5.22</td>
<td>.05</td>
</tr>
<tr>
<td>Mother's feelings about employment</td>
<td>0.0696</td>
<td>0.0961</td>
<td>9.54</td>
<td>.01</td>
</tr>
<tr>
<td>Parent students wish to emulate (Mother)</td>
<td>0.0742</td>
<td>0.0693</td>
<td>5.22</td>
<td>.05</td>
</tr>
<tr>
<td>Parent students wish to emulate (Father)</td>
<td>0.0762</td>
<td>0.0332</td>
<td>1.28</td>
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</tr>
<tr>
<td>Parent students wish to emulate (Neither)</td>
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<td>-0.0877</td>
<td>8.09</td>
<td>.01</td>
</tr>
<tr>
<td>Parent students wish to emulate (Both)</td>
<td>0.0825</td>
<td>-0.0048</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Knowledge of interest 1</td>
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<td>0.0442</td>
<td>1.88</td>
<td></td>
</tr>
<tr>
<td>Knowledge of interest 2</td>
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<td>5.48</td>
<td></td>
</tr>
<tr>
<td>Sex role ideology</td>
<td>0.1313</td>
<td>0.2060</td>
<td>51.04</td>
<td>.001</td>
</tr>
<tr>
<td>Knowledge of women in the workforce</td>
<td>0.1352</td>
<td>0.0642</td>
<td>4.88</td>
<td>.05</td>
</tr>
</tbody>
</table>

### Table 45

**Analysis of Variance**

**Career Commitment**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Df</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Level of Significance</th>
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<tbody>
<tr>
<td>Regression</td>
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<td>- 46,709.99</td>
<td>2.4582</td>
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<td>.001</td>
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<td>Residual</td>
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<td>298,9057</td>
<td>0.2664</td>
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<td></td>
</tr>
<tr>
<td>Type of school</td>
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<td>1.1347</td>
<td>.5674</td>
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</tr>
<tr>
<td>Ethnicity</td>
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<td>5.2806</td>
<td>1.7602</td>
<td>6.61</td>
<td>.001</td>
</tr>
<tr>
<td>Whether or not mother</td>
<td>2</td>
<td>1.4056</td>
<td>.07028</td>
<td>2.64</td>
<td></td>
</tr>
<tr>
<td>works</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent students wish to</td>
<td>4</td>
<td>5.1448</td>
<td>1.2862</td>
<td>4.83</td>
<td>.001</td>
</tr>
<tr>
<td>emulate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of interest</td>
<td>2</td>
<td>1.4764</td>
<td>.7382</td>
<td>2.77</td>
<td></td>
</tr>
<tr>
<td>1</td>
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<td></td>
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<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Summary

The 17 independent variables which contributed significantly to the six dependent measures, in descending order were:

Sex role ideology: The traditionality and socio-economic status of career aspirations and expectations, educational plans and career commitment.

Academic average: The traditionality and socio-economic status of career aspirations and expectations and educational plans.

Grade level Career aspirations (SES) and educational plans.

Knowing women in the career: Career aspirations (Traditionality) Career expectations (Traditionality)

Occupational category of mother: Career expectations (SES and Traditionality)

Position in the family: Career expectations (Traditionality) and career commitment

Type of school: Career expectations (Traditionality) and educational plans.

Socio-economic status Career expectation (SES)

Occupation of mother: Career expectations (Traditionality)

Family situation: Educational plans

Mother's expectation concerning daughter's education: Educational plans

Father's expectation concerning daughter's education: Educational plans

Ethnicity: Career commitment

Father's education: Career commitment

Mother's feelings about employment: Career commitment

Parent students wish to emulate: Career commitment

Knowledge of women in the work force: Career commitment
CHAPTER V
DISCUSSION AND CONCLUSIONS

1. Discussion of Results and Integration with Related Research

The characteristics of the research subjects will be discussed first and then the findings from the multiple regression analysis. The independent variables will be considered in descending order, according to their relative contribution to the six dependent measures.

The research revealed that almost half the girls aspired to upper class careers and two out of five aspired to non-traditional careers. Less than a third expected to have an upper class occupation and one in four expected to have a non-traditional career. The majority of the girls had a moderate career commitment. Having a career was just as important to them as was marriage and child bearing. The vast majority expressed intentions to be involved in a career but they also indicated that the extent of the involvement would be dependent on the stage of schooling at which their children were. The majority of the girls planned to continue their education after high school. In general, however, their educational plans were moderate, with almost a half of the sample planning to enter community colleges or other post secondary institutions and slightly more than one-third planning to attend university.

The initial section of the results established the nature of parental expectations for their daughters' career and educational future. Mothers and fathers both had high educational expectations for their daughters with just under a half wanting their daughters to
attend university. The next largest category expected their daughters to attend some other post-secondary institution. Parents' occupational expectations for their daughters were not as clearly communicated; the majority of students did not know what occupations their parents wanted them to have. Of those who did know, upper class careers predominated. It was interesting to note, also, that slightly more fathers than mothers wanted their daughters to enter non-traditional occupations.

Parents of both sexes wanted their daughters to combine marriage and a career rather than to become an unmarried woman in a profession or to be married without a career. In general, parental expectations were similar to the educational plans of the students themselves except for the fact that more parents than daughters opted for a university education rather than some other form of post-secondary education. The girls were more likely to plan a community college education than a university education.

When both parents were compared, it seemed more likely that girls would emulate their mothers rather than their fathers. The research subjects perceived themselves to be more like their mothers in terms of attitudes and expectations. This may be one possible explanation for their tendency to expect the more traditional occupations, as more than half the mothers were themselves in traditional occupations. Of girls who reported their mother's career expectation for them, the largest proportion of expectations fell in the traditional category. Fathers, on the other hand, had slightly more non-traditional
expectations for their daughters than the girls had for themselves.

The impact of parental expectations on their children's plans in general, but educational plans specifically, has been documented by other researchers (Bennett & Gist, 1964; Breton, 1972; Brittain, 1963; Kendel & Lesser, 1969; Maxwell & Maxwell, 1975; Porter et al., 1973). The present study confirmed a highly significant relationship between parental expectations and the educational plans of students.

The impact of modelling as demonstrated by the mother acting as an important role model for her daughter was also a consistent finding in the present study. Researchers such as Angrist and Almquist (1970, 1975), Baruch (1972), Burlin (1976), Kriger (1972), and Tangri (1975), reported similar findings. They all concluded that females learn their role through identification with significant others, specifically the mother and, consequently, exposure to a career-oriented mother, a mother in a professional occupation or a mother in some non-traditional career increased the aspirations of her daughters towards more non-traditional career choices.

An interesting finding was the discrepancy between the students' career aspirations and their own expectations. The present research replicated the findings of Burlin (1976) and Turner (1974). Though girls tended to aspire to upper class and non-traditional occupations, they expected the more middle class and traditional careers. The aspiration-expectation discrepancy may be interpreted from different perspectives. If one interprets aspirations as Deosaran (1975) does, that aspiration is a more interesting concept than expectation because
it refers to the full range of life's opportunities which individuals are capable of seeing for themselves, then the results are encouraging with regard to the range of these girls' career options. If on the contrary, one recognizes that expectations represent a more realistic choice of action when individuals appraise their personal circumstances, then the results are discouraging. From this perspective, the discrepancy suggests that the girls in the sample would not be able to enter the careers they would most like to enter. It also indicates that in terms of aspirations, girls are contemplating non-traditional occupations. Specific examples of the occupations to which some of the research subjects aspired are architect, lawyer or physician but they expected to be interior designers, legal secretaries or nurses.

More than half the girls stated that they did not know enough about the occupations available to them to make a well-informed career choice. A familiarity with occupational information is a necessity in the career-choice process. The importance of the implications of this finding cannot be over-emphasized, particularly when one considers the narrow range of occupations to which girls are exposed and the few they are encouraged to pursue.

Breton (1972) documented a positive relationship among the degree of self knowledge, vocational competence and career intentions, but only among English speaking girls. Those who knew their interests well and were prepared for vocational decision-making, in terms of their knowledge about occupations, were more likely to plan to enter a career
than those who had inadequate self knowledge or knowledge about occupations. The present study, however, did not replicate this relationship.

The majority of the research subjects have not had a forum for the discussion of topics related to women in a detailed and systematic way. It is suggested that if girls are to learn of the effects of sex-role stereotyping or of the myths which prevail concerning women and their place in the work force, a "de-conditioning" process must be involved to dispel these myths. It was also apparent in this study that the girls knew very little about the employment status of women.

Vetter and Sethney (1972) established that increased knowledge of women in the work force influenced the career plans of the girls in their study. Whereas in the present study this variable did not relate significantly to either career aspirations, expectations or educational plans it related significantly to career commitment. This in itself is an interesting finding. It suggests that if a course was available to sensitize girls to factors relating to the status of women in the work force, their commitment to pursuing careers might increase.

Almost equal numbers of girls fell within the traditional, moderate and liberated categories of the sex-role ideology scale. The results of this study corroborate previous findings (Gaskel, 1973, 1978) concerning the strong influence of sex-role ideology on career and educational plans. The implications of this finding are clear; if girls are to have high career aspirations and educational plans, and
if they are to demonstrate stronger commitment to a career, then it is necessary for them to have a more liberated ideology.

In general, the results of the multiple regression analysis indicated that, of the six dependent variables, educational plans was the variable which can best be predicted from the combination of variables investigated in this research. This was made obvious by the amount of variance accounted for by the analysis. The amount of variance explained in the multiple regression analysis of the other dependent measures was overall, quite low. Thus the results of the present study must be interpreted with caution. Other researchers such as Gaskel (1973), have also recognized the difficulty in attempting to predict the career aspirations and expectations of high school girls. Only a small proportion of the variance was explained in her analysis of girls' career aspirations.

The relationship between sex-role ideology and career and educational plans was clearly established in this research with regards to all of the dependent variables. Girls with a liberated ideology had higher educational and occupational aspirations, chose more non-traditional occupations and had a stronger career commitment. Stated conversely, a traditional ideology was associated with lower educational and occupational plans. This finding is indeed not surprising as it seems axiomatic that beliefs about one's sex-role will affect important decisions such as those related to occupation and education.
Academic average was significant in its relationship to five of the dependent measures. Breton (1972) and Porter et al. (1973) also confirmed that there was a strong relationship between mental ability and aspirations, expectations and occupational choice. Academic achievement is a prerequisite for entry into many high status occupations and indeed for post secondary education. Future plans are therefore often closely related to school achievement. It was not surprising that academic average was not related to career commitment as there are many bright women for whom career-related endeavours are not a primary concern.

The type of school the girls attended was another important variable in this study, in terms of its relationship to the traditionality of career expectations and educational plans. Girls from the non-Catholic, private school expected more non-traditional careers and had higher educational aspirations than did girls from the other types of schools. The public school girls in the sample chose more traditional occupations and had lower educational aspirations. It is noteworthy that the type of school the girls attended did not have a significant effect on either career aspirations or commitment. The results related to school type must, however, be interpreted with caution, as the girls in private schools are, for the most part, upper class homes, with educated parents. Whereas one recognizes that, according to Maxwell (1975), there is a special "elite ethos" among other conditions within these schools, one cannot attribute non-traditional career choices or high educational aspirations simply to
the attendance at a private school. The present study has, therefore, partially replicated the findings of Geller (1973) and Maxwell (1975) who found a significant relationship between type of school and career and educational plans.

The grade level of students was related to career aspirations and educational plans. The latter, which indicated that Grade 13 students had higher educational plans is not surprising as attendance in this grade presupposes university or other post-secondary aspirations. It is reasonable to conclude that the occupational and educational plans of Grade 11 students would be less clearly defined than those of Grade 13 students.

The results of the variable "knowing women in the career" indicated that if girls knew women in typically feminine occupations they were more likely to aspire to and expect traditionally feminine careers. This finding also amplifies the importance of role models in the lives of young girls. The implication is also clear that if girls are to aspire to and expect non-traditional careers, it is necessary that they be exposed to women in non-traditional occupations. This conclusion appears in the literature with distinct regularity.

Position in the family had a significant relationship to both career aspiration (SES) and career commitment in that the first born child had higher career aspirations and a stronger career commitment than those born later. The finding that the first born child has higher aspirations than later borns was consistent with findings of other researchers (Breton, 1972; Porter et al., 1973; Sampson, 1962;
This variable did not have a significant effect on either educational plans or career expectations.

Family situation influenced educational plans. The students who lived with both parents had the highest educational plans. Those who lived with mothers were second and those who lived with "others" (which included fathers, foster parents and relatives) were third. It must be pointed out, however, that those who lived with both parents comprised 84% of the sample. Concerning career choice, the findings of the present study concurred with that of Breton (1972), who concluded that family situation did not have a significant impact on the career aspirations of girls.

Anisef (1973), Breton (1972) and Porter et al. (1973) all studied the impact of socioeconomic status on career and educational plans. The present study corroborated their findings relating to the impact of socioeconomic status on career plans but were not consistent with the findings relating to educational plans. The failure to replicate the latter is indeed puzzling as career plans and educational plans are closely related. A possible explanation may be that with the increased availability of student loans, socioeconomic status is not the barrier toward further education that it was in the past. The fact that socioeconomic status consistently relates to career plans may mean that the type of career is the issue rather than whether or not to have a career. It is also necessary to point out that there was a weighting of the sample in the lowest socioeconomic status group, with almost a half of the sample from working class backgrounds. The
variable related to the background of students which had a significant relationship to educational plans was the mother's and father's expectations concerning their daughter's education. The comparison of the results of these two variables, socioeconomic status and parental expectations vis-a-vis educational plans affords the speculation that, depending on parental expectations, students from lower class backgrounds would be encouraged to pursue post-secondary studies. Of the two variables, parental expectations seems to be the more important.

The occupational category of the mother has a strong influence on career expectations. The girls in the study whose mothers were in professional occupations had higher and more non-traditional career expectations. These expectations decreased with the occupational status of the mother. This finding may be compared with the finding on socioeconomic status, even though this was measured by the occupation of the father. Expectations also decreased with socioeconomic status.

There is no doubt that both parents influence a daughter's career and educational plans. There was a consistent similarity between the expectations of the two parents.

There were several independent variables which related to only one or two of the dependent measures. The education of father has emerged as one of the important variables in the present study. The consistent finding in the literature that education of parents has a powerful influence on career and educational plans as documented by
Anisef (1973), Breton (1972) and Porter et al. (1973) has not been replicated in the present study. The single finding in the present study related to parental education was a significant relationship between the education of father specifically and daughter's career commitment.

The parent students wish to emulate was another variable which contributed significantly to career commitment. A desire to adhere to the expectations of mother contributed more significantly to career commitment than a desire to emulate father's expectations, even though both parents had a positive effect on career commitment. It must be pointed out that a desire not to emulate either parent or to emulate both parents decreased the relationship of this variable on career commitment.

The only dependent variable to which ethnicity related was career commitment. The category designated "Other", which included Native Canadians, Chinese, East Indians, French Canadians, Jewish, Polish, Portuguese, Ukrainians and West Indians, had the strongest career commitment. Next were Greek and Italian girls then girls from a British background and lastly Dutch and German girls. These findings, like other findings in this study, must be interpreted with caution. One cannot conclude that girls from particular backgrounds are not at all committed to the idea of a career as the majority of girls in the sample wanted to have careers, the only distinction is the degree to which their desires were dependent on children and their stage of schooling. Another consideration is the fact that Dutch and
German girls, for example, were concentrated in the rural sample. There was also an imbalance of girls from a British background, who comprised more than half of the sample.

Researchers such as Anisef (1973), Bennett and Gist (1963), Berman (1972), Rosen (1959), and Turner (1972) concluded that ethnic group membership affected occupational and future planning of adolescents. In the present study, ethnicity did not affect career aspirations, expectations or educational plans significantly. As the researchers mentioned did not measure career commitment specifically, this is an important finding.

The occupation of mother—that is whether mother is in a traditional, undifferentiated or non-traditional occupation—contributed significantly to the type of careers girls expected. This was not an unexpected finding as the impact of modelling is so clearly established in the literature. Girls with mothers in non-traditional careers would have learned that it is quite legitimate for women to enter such careers and that they are not inaccessible. These findings are consistent with those of Tangri (1972) and Burlin (1976).

Mother’s feelings about employment also contributed significantly to daughter’s career commitment. Mothers who had always wanted to work, transmit a strong career commitment, whereas mothers who had never wanted to work, instill a weak career commitment. These findings concurred with those of Breton (1972) and Steinman (1970).

The knowledge that girls had about women in the work force also contributed significantly to career commitment. The implication is that
if girls knew, for example, that women make up more than one-third of the labour force, that women are capable of successfully combining the roles of wife, mother and worker, that more than 50% of married women in Ontario are employed—or indeed, the facts concerning items 69-97 of the questionnaire—then their career commitment would increase.

The findings of previous researchers on the number of variables were not replicated in this study. These include Anisef (1973) and Porter et al. (1973) on the question of rural-urban residence and Anisef (1973) on the variable "place of birth and number of years in Canada". The sample would not have been suitable in the latter instance as 89% of the girls were born in Canada and an additional 6% of those born outside Canada had spent seven years or more in Canada. Only 5% could be described as recent immigrants.

The findings of Angrist (1975), Anisef (1973) and Maxwell (1975), that religious affiliation had a strong relationship to career and educational plans were not replicated in this study. In contrast also with the strong relationship reported by Anisef (1973), Baruch (1973), Breton (1972), Maxwell (1975) and Tangri (1975) between mother's work history and girls' career and educational planning, the present study did not yield similar findings. The other variables which did not relate significantly to any of the dependent measures were, mother's education, the parent students perceive they are like in terms of attitudes and expectations, the expectations of parents concerning marriage and a career, knowledge of self and of occupations
and exposure to a women's studies course.

Concerning a women's studies course, Vetter and Sethney (1972) found some indication of attitude change in the direction of more acceptance of employment after marriage as a result of a course on women. It must be emphasized, however, that only 15% of the girls in the present study stated that they had discussed topics related to women's studies. This variable did not relate significantly to any of the dependent variables under investigation.

Summary

The results of the multiple regression analysis examined the relative contribution of 33 independent variables to the six dependent variables of the traditionality and socioeconomic status of career aspirations and expectations, educational plans and career commitment. Seventeen of the independent variables related significantly to at least one dependent measure. Of these, sex-role ideology and academic average appeared most frequently in terms of their contribution to the dependent measures. Concerning the dependent measures, educational plans is the variable which can best be predicted from the combination of independent variables in the present study. This conclusion is based on the amount of variance explained by the analysis.

2. Limitations of the Study

The major limitation of the present study concerns the small amount of variance accounted for in predicting the dependent variables. The conclusion from the study is that the only dependent variable which can be predicted with any degree of accuracy, is educational plans. Fifty
per cent of the variance was explained in the analysis. The other variables relating to career plans accounted for a very low proportion of the variance. The difficulty in attempting to predict career choices and psychological variables has been mentioned in the educational literature. As a result of her research on the topic, Gaskel (1977-78) observed:

The amount of variance explained in the models predicting occupational commitment is barely significant; perhaps either the girls are unsure in answering this question and are fairly random in their responses, or perhaps the usual background variables are not as relevant in predicting commitment to an occupation as they are in predicting the level of educational... aspirations. (p. 52)

It was also necessary in the data analysis to combine ethnic groups as some categories were too small to warrant individual attention. The rationale for combining the groups was based on geographical origins. One recognizes that ethnic groups ought to be identified separately as cultural differences may persist despite similarities in geographical backgrounds. This would have required the involvement of multiethnic schools.

3. Future Research

There are many areas related to the future planning of women which need further elucidation. It is still not sufficient to study the career choices of females without a clearer understanding of the process of their career decision-making. Data on the early career socialization of women are needed particularly regarding the critical experiences both in the home and at school, which predispose girls towards certain careers. The variables which stimulate or inhibit
career development need to be more clearly defined.

Future research is needed on the sex-role ideology of high school girls. The scale which was used in this study was developed for use with adults. Even though it yielded very significant results, it is suggested that a scale be developed for use in high schools. It would be interesting to note if the focus would be on similar areas of sex-role attitudes. Another research question could be the identification of the educational experiences which can alter sex-role ideology. Also, the girls with a liberated ideology could be studied intensively in order to determine the sources of influences which predispose them towards such beliefs.

The development of a scale which could measure students' awareness of the status of women may also contribute to the literature. In addition, a comprehensive women's studies course for use at the high school level could facilitate the assessment of the impact of a course on dependent variables such as those investigated.

Specific variables such as ethnicity, religion, rural/urban differences, birthplace and knowledge of self and occupations need further investigation regarding their relationship to the career and educational plans of high school girls.
CHAPTER VI
IMPLICATIONS AND RECOMMENDATIONS

In this section, specific recommendations will be made, based on the findings of the present study. As an extension to this section, Appendix B, which reviews curriculum models, programs and recommendations, has been included for the benefit of practitioners who may be concerned with practical ways of implementing the recommendations.

Implications for Career Education

The major findings of this study highlighted the need for systematic Career Education programs which would address the special needs of women as they prepare for their adult roles. Appendix B discusses the major components of a systematic Career Education program as proposed by Battenschlag (1974), Bottoms and O'Kelly (1971), Holstein (1971), Kennedy (1974), Pointer (1972) and Tuckman (1972).

The influence of sex role ideology on both career and educational plans highlights the necessity for programs to identify the beliefs of girls, to help them determine their sources and to evaluate them vis-a-vis their future needs and goals. Areas such as sex role stereotyping, self concept and values clarification in relation to careers, need to be explored. Further suggestions for the implementation of these recommendations may be found in Appendix B. Dewey (1974), Feminist Northwest (1975) and Smith (1976) discuss models to stamp out sex role stereotyping; Thoni, Hansen, Klaurens and Tennyson (1972) suggest objectives in the area of values clarification; Benson (1973), Harway and
Austin (1977), O'Dell, Abbey, Clermonte and DeMark (1975), and Putman and Hansen (1972) discuss the self concept component.

A large proportion of girls in the study were from working class backgrounds. The Career Education needs of these girls cannot be over-emphasized. These girls need occupational information, role models from diverse careers and specific guidance concerning the availability of financial assistance for further education. This recommendation is further reinforced by the findings of this study, that confirms the impact of socioeconomic status on career expectations. Further information may be gleaned from the curriculum models developed by Findlay (1977), Ganschow, Hellwell, Hamilton, Jones and Tiedman (1973), Green (ED 107 571) and Sarno (1976).

The study also demonstrated the impact of many parental variables on their daughters' aspirations and expectations. It is necessary for both girls and their parents to be aware of these influences. In this regard, Parent Education in the area of Career Education is recommended. They should be aware of the factors which influence career and educational decisions, job market trends, non-traditional career choices and also the possible discrepancy between the expectations they have for their children and the expectations children have for themselves. The awareness of the potential effects of this phenomenon on the part of parents may reduce conflict and anxiety in students. Mothers in particular need to be aware of their special influence on their daughters and that they may inadvertently transmit negative attitudes towards employment to their daughters. The present study demonstrated the effect
of mother's feelings about employment on the career commitment of their daughters.

Colby (1976) and McLure and Bruan (1973) make interesting suggestions in the area of Parent Education. The models of Antholz, Hansen, Klaurens and Tennyson (1973) and Steinmann (1970) were developed to create an awareness within students, of the impact of significant others on their career and life decisions.

Recommendations which suggest exposure to non-traditional role models or to women successful in varied and combined roles have appeared with regularity in the literature on women. It is however necessary to reaffirm support of this recommendation based on the findings of this study. Girls revealed that they did not know women in the careers to which they aspired. These careers were for the most part, non-traditional careers. A prerequisite to this recommendation is the necessity for girls to choose subjects in the area of science as these are basic to many non-traditional careers. McLure and Piel (1978) and Neujahr (1974) discuss this problem. The Hermon School Department (1972) and Thoni, Hansen, Klaurens and Tennyson (1972) developed innovative packages designed to heighten girls' sensitivity to the many factors which influence career choice and life style orientations. These packages also have the potential to motivate girls to consider non-traditional roles.

Group counselling techniques are recommended for classrooms consisting of both boys and girls. Such a forum may encourage the discussion of sex role attitudes and students may learn from and
about the differing ideologies of their classmates.

Consciousness raising and an introduction to the major components of Career Education programs may help classroom teachers to assist girls in career planning vis-a-vis their subject areas. Science teachers, for example, may discuss their subject area in relation to careers. Such discussions may, inadvertently, encourage girls to expand their choices and to consider non-traditional careers which have the sciences as a prerequisite. The fact that the girls in this study aspired to non-traditional careers does suggest that the desire exists. Girls do, however, need counselling to help them encourage and maintain this interest. Awarding course credits for work experience in general, but specifically for experience in non-traditional careers may also be beneficial.

The fact that the girls in this study expected the traditionally feminine occupations point to the need for education on the changing nature of the job market, which Thetford (1973) discusses. It is necessary for girls to realize that many of the traditionally feminine occupations are now over-subscribed and that the situation may very well be the same when they enter the work force. The fact that government financial restraints and declining school enrolment affect the nursing and teaching professions, and that offices and banks are becoming increasingly more automated does suggest that girls need to re-examine their career choices and consider multiple careers in their planning. Introduction to the concept of career clusters in counselling may benefit high school girls.
The need for intense pre-high school counselling also seems necessary. The careers to which girls aspire may be related to the programs in which they find themselves at the grade 11, 12 or 13 level. The present study revealed a significant relationship among grade level, career aspirations and educational plans. An integrated Career Education program (K-13) with objectives for specific grade levels may be helpful. Models suggested by Antholz, Hansen, Klaurens and Tennyson (1972), Kennedy (1974), Klaurens, Hansen and Tennyson (1972) and Ryan (1972) discuss age and grade-related needs of students vis-a-vis Career Education from Kindergarten to Grade 13.

The fact that aspirations and career planning increases with grade level as demonstrated by the study, the early school leavers and the non-college bound girls may also benefit from such programs. They may be encouraged earlier in their schooling on a career path.

A general recommendation is in-service training for counsellors, one of the purposes of which would be to update their knowledge on new trends, resources and research findings and their implications in the area of Career Education. In these sessions, information relating to financial aid, training programs, job market trends among other areas, could be discussed. Counsellors may also be encouraged to conduct research on the career trends and related needs of students in their schools. Further suggestions are made by Colby (1974).

To conclude, it is important that young women view education and careers not as a contingency in case they do not marry but as necessary tools for the future. It is also necessary for girls to be aware of
the many discontinuities in the life and work patterns of the majority of women in order that they may incorporate this knowledge into their career planning.
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Landsberg, M. Exploring high school girls marriage fantasies. Chatelaine, 1975 (September), 53-56.


Maxwell, M. P. *Questionnaire.* Ontario: Queen's University, Department of Sociology, 1976.


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APPENDIX A

QUESTIONNAIRE
QUESTIONNAIRE

Indicate your answer by circling one letter only.

1. Name of school __________________________

2. What type of school do you attend?
   a. Public high school
   b. Private (Catholic) school
   c. Other private school
   d. Other. Please specify __________________________

3. Where is your school located?
   a. Metropolitan Toronto
   b. Middlesex County
   c. Other. Please specify __________________________

4. In what grade are you?
   a. Grade 11
   b. Grade 12
   c. Grade 13
   d. Other. Please specify __________________________

5. What was your age last birthday?
   a. 15 years
   b. 16 years
   c. 17 years
   d. 18 years
   e. Other. Please specify __________________________

6. What was your academic average last exams?
   a. Under 50%
   b. 50 - 59%
   c. 60 - 69%
   d. 70 - 79%
   e. 80% or more

7. Even though you may describe yourself as Canadian, which of the following also describes your cultural heritage?
   a. British (from England, Scotland, Ireland)
   b. Canadian Indian
   c. Chinese
   d. Dutch
   e. East Indian
   f. French Canadian
   g. German
   h. Greek
   i. Italian
   j. Jewish
   k. Polish
   l. Portuguese
   m. Ukrainian
   n. West Indian
   o. Other __________________________
9. Were you born in Canada?
   a. Yes
   b. No

10. If you were born in another country indicate the number of years you have lived in Canada.
   a. Less than one year
   b. 1 or 2 years
   c. 3 or 4 years
   d. 5 or 6 years
   e. 7 or more years
   f. I was born in Canada

11. How many brothers do you have? _____

12. How many sisters do you have? _____

13. What is your position in your family (e.g., first, second, or last child, etc.)

14. Which of the following statements best describes your family situation?
   a. I live with both my parents
   b. My father is dead and I live with my mother
   c. My mother is dead and I live with my father
   d. Both my parents are dead and I live with relatives
   e. Both my parents are dead and I live with foster parents
   f. My parents are separated or divorced and I live with my father
   g. My parents are separated or divorced and I live with my mother
   h. Other. Please specify

15. What is your religious affiliation?
   a. Buddhist
   b. Dutch Reformed Church
   c. Hindu
   d. Islamic
   e. Jewish
   f. Protestant (e.g., Anglican, United Church, Baptist, Lutheran, Presbyterian, Methodist)
   g. Roman Catholic
   h. Other. Please specify
   i. I have no religious affiliation.

16. What is your father's occupation? Indicate it as accurately as possible; for example, write "shoe salesman" instead of "salesman" or write "electrical engineer" instead of "engineer." Give name of position also; for example, "Vice President." If he is retired or dead, (or temporarily unemployed) say what his occupation was.
   Please state occupation:
17. Does your mother now or has she ever worked (for money) outside the home?

   a. No, she has never worked outside the home
   b. Yes, but she does not work outside the home at present
   c. Yes, she works outside the home at the present time

18. If your mother now works or has ever worked outside the home at any time in her life (i.e., for money), please state her present or past occupation. (Indicate as accurately as you indicated your father's occupation, stating the position as well.)

   Please specify:  

   b. She has never worked outside the home (for money)

19. In which of the following categories would your mother's occupation be?

   a. EXECUTIVE AND PROFESSIONAL
      (Occupations requiring university or equivalent education
e.g., teachers, doctors, lawyers, or senior executives who require
advanced education)

   b. OTHER PROFESSIONALS
      (Occupations not requiring a university degree but which require post
secondary education, e.g., community college or equivalent education)
e.g., nurses)

   c. MANAGERIAL AND ADMINISTRATIVE
      (e.g., people who own or manage businesses or who occupy administrative
positions in companies)

   d. CLERICAL AND SALES
      (e.g., secretaries, tellers, cashiers, insurance saleswoman, bookkeepers, etc.)

   e. SKILLED
      (Occupations requiring journeyman's or equivalent certification, e.g., trades
people.)

   f. SEMI-SKILLED
      (Jobs requiring "on the job" training, e.g., machine operators)

   g. UNSKILLED
      (Jobs requiring very little, if any, training, e.g., waitresses, domestic)

   h. She does not work outside the home.

   i. I do not know.
20/21. How far did your parents go in school? Mark the last school that each of them attended.

20. Mother 21. Father

   a. Elementary school only or no formal schooling
   b. High school
   c. Post-secondary, technical school, such as institute of technology or normal school
   d. Some university or nursing school
   e. Graduated from university
   f. Post graduate study (that is, Master's or Ph.D.)
   g. I do not know

22. Which of the following statements best describes your mother's feelings about employment?

   a. My mother has never wanted to be employed (paid work)
   b. My mother has always wanted to be employed
   c. My mother wanted to be employed in the past but does not want to now
   d. My mother did not want to be employed in the past but wants/would like to be employed now or in the future
   e. I do not know

23/24. How far do your parents want you to go in school?

23. Mother 24. Father

   a. High school
   b. Post secondary institution, such as college of Applied Arts
   c. University
   d. Post graduate school (e.g., Masters or Ph.D.)
   e. Other. Please specify __________________________
   f. I do not know

25. What career or occupation does your mother want you to have?

   a. Please specify __________________________
   b. She does not want me to have a career or occupation
   c. I do not know

26. What career or occupation does your father want you to have?

   a. Please specify __________________________
   b. He does not want me to have a career or occupation
   c. I do not know
27. Concerning career and educational plans, whose expectations do you most want to live up to?
   a. Mother's
   b. Father's
   c. Neither
   d. Both
   e. My own
   f. Other. Please specify

28. In terms of attitudes towards career and marriage and general expectations about life, do you think you are more like your mother or your father?
   a. More like my mother
   b. More like my father
   c. Neither has my attitudes and expectations
   d. Both have the attitudes and expectations I have
   e. I do not know
   f. Not applicable

29/30. What does each of your parents want you to do in the future?
   29. Mother
   30. Father
   a. a. To be married and not work
   b. b. To have a career and not be married
   c. c. To combine marriage and a career
   d. d. I do not know
   e. e. Other. Please specify

31. What is the occupation or career you would most like to have if there was nothing to limit or prevent you?
   a. Please specify
   b. I do not have a particular choice
   c. I never thought about it
   d. I do not intend to work

32. What occupation do you actually expect to have in the future?
   a. Please specify
   b. I do not have a particular choice
   c. I never thought about it
   d. I do not intend to work

33. Do you know any women in the career you plan to enter?
   a. My mother
   b. A relative
   c. A friend
   d. Other. Please specify
   e. I do not know any female in the career I plan to enter
   f. I do not plan to enter a career
34. What are your educational plans?
   a. I do not plan to study after high school
   b. To go to community college, business school or other post secondary institution
   c. To go to university
   d. Other. Please specify

35. Which of these statements best describes your plans for the future?
   a. To have a career or occupation and not be married
   b. Not have a career or job outside the home, but confine my activities generally to my home and family regardless of whether I have children or not
   c. Have a job or career outside the home only if I have no children
   d. Limit my work outside the home to voluntary activities and not have a paid job or career
   e. Have a job or career outside the home only after all my children are of elementary school age
   f. Have a job or career outside the home only after my children begin high school
   g. Have a job or career outside the home only after all my children have finished high school
   h. Have a job of career outside the home regardless of whether I have children or not
   i. Other. Please specify

36. How well informed do you feel you are about the different kinds of jobs you could get, to make a good choice about your future career?
   a. Very well
   b. Quite well
   c. Not too well
   d. Not well at all

37. How well do you feel you know your own interests and abilities in connection with your decision about your future career?
   a. Very well
   b. Quite well
   c. Not too well
   d. Not well at all

38. Have you had any classes in which you have discussed topics like "The Changing Role of Women in Society" or "Women in the Work Force" or anything about women and work?
   a. Yes, I have had classes which touch on these topics but not in any detail
   b. Yes, I have had classes which deal with these topics in detail
   c. No. I have never had the opportunity to discuss such topics in class
Circle the number which best expresses your opinion.

<table>
<thead>
<tr>
<th></th>
<th>Disagree strongly</th>
<th>Disagree</th>
<th>Disagree slightly</th>
<th>No opinion, undecided</th>
<th>Agree slightly</th>
<th>Agree</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.</td>
<td>The husband should be regarded as the legal representative of the family group in all matters of law.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<td>40.</td>
<td>A wife's activities in the community should help her husband's position.</td>
<td>1 2 3 4 5 6 7</td>
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<td>41.</td>
<td>A woman should have exactly the same freedom of action as a man.</td>
<td>1 2 3 4 5 6 7</td>
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<td>42.</td>
<td>The best thing a mother can teach her daughter is what it means to be a girl.</td>
<td>1 2 3 4 5 6 7</td>
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<td>43.</td>
<td>A married woman should feel free to have men as friends.</td>
<td>1 2 3 4 5 6 7</td>
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<td>44.</td>
<td>Woman's work and man's work should not be basically different in nature.</td>
<td>1 2 3 4 5 6 7</td>
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<td>45.</td>
<td>Swearing by a woman is no more unacceptable than swearing by a man.</td>
<td>1 2 3 4 5 6 7</td>
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<td>46.</td>
<td>A woman is not truly fulfilled until she has been a mother.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>47.</td>
<td>When a man and woman are married she should do the housework and he should do the heavier chores.</td>
<td>1 2 3 4 5 6 7</td>
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<td>48.</td>
<td>A normal man should be cautious of a woman who makes the first move in courtship even though he may be very attracted to her.</td>
<td>1 2 3 4 5 6 7</td>
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<td>49.</td>
<td>It is an outdated custom for a woman to take her husband's name when she marries.</td>
<td>1 2 3 4 5 6 7</td>
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<td>50.</td>
<td>Women should be paid a salary by the state for the work they perform as mothers and home-makers.</td>
<td>1 2 3 4 5 6 7</td>
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<td>51.</td>
<td>Women should be much less concerned about make-up, clothing and body care.</td>
<td>1 2 3 4 5 6 7</td>
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</tbody>
</table>
52. Every child should be taught from an early age to feel a special honour and respect for Motherhood.

53. A woman should be appreciative of the glances and looks she receives as she walks down the street.

54. It should be perfectly all right for a woman to date a man younger than herself.

55. Marriage should not interfere with a woman's career any more than it does with a man's.

56. A man's main responsibility to his children is to provide them with the necessities of life and discipline.

57. A woman should be careful how she looks, for it influences what people think of her husband.

58. A woman who dislikes children is abnormal.

59. Relationships with others of the same sex should be as socially accepted as relationships with people of the opposite sex.

60. More day care centres should be available to free mothers from the constant caring for their children.

61. Women should be allowed the same freedom in their dating behaviours as men.

62. A man's job is too important for him to get bogged down with household chores.

63. A woman should be no more concerned with her physical appearance on the job than a man.

64. A woman should have the right to decide whether she wants to have children or not.

65. The first duty of a woman with young children is to home and family.
66. For the good of the family, a wife should be friendly and affectionate to her husband whether she wants to or not.

67. A woman should be more concerned with helping her husband's career than having a career herself.

68. Women should not expect men to offer them seats in buses.

Circle a (true), b (False) or c (don't know).

69. Women would not work if economic reasons did not force them to.

70. Married women take jobs away from men.

71. Women make up more than one-third of the total work force in Ontario.

72. Women do not want responsibility or promotion in a job.

73. Women workers are absent from their jobs more often than are men.

74. One cannot hire a young woman in a responsible position: She will get pregnant and leave within two years.

75. Women are more likely than men to work in jobs not adequately covered by Social Security benefits.

76. Women in the paid labour force have the same desires for recognition, achievement, and advancement as do men.
<table>
<thead>
<tr>
<th>Question</th>
<th>True</th>
<th>False</th>
<th>Don't know</th>
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</thead>
<tbody>
<tr>
<td>77. Most women are capable of successfully combining the roles of wife, mother and worker.</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>78. Approximately 40% of Canadian women who hold a college degree never marry.</td>
<td>a</td>
<td>b</td>
<td>c</td>
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<tr>
<td>79. According to present estimates, 90% of the women in Canada can be expected to work some time in their lives.</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>80. Divorce is more common among career women than among housewives.</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>81. Many companies make fringe benefits available to both men and women.</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>82. In the Canadian census, women who are homemakers are considered as not in the labour force.</td>
<td>a</td>
<td>b</td>
<td>c</td>
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<tr>
<td>83. In Canada today there are few jobs that cannot be performed equally well by men and women.</td>
<td>a</td>
<td>b</td>
<td>c</td>
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<tr>
<td>84. Approximately 40% of the married women in Ontario today are employed.</td>
<td>a</td>
<td>b</td>
<td>c</td>
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<tr>
<td>85. The more education a woman has the more likely she is to work.</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td>86. Men do not like to work for women supervisors.</td>
<td>a</td>
<td>b</td>
<td>c</td>
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<tr>
<td>87. Children of working mothers are more likely to become juvenile delinquents than children of non-working mothers.</td>
<td>a</td>
<td>b</td>
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<tr>
<td>88. Approximately what percentage of all women are employed now full time in Ontario?</td>
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<tr>
<td>a. 20%</td>
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<td>b. 35%</td>
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<td></td>
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<td>c. 50%</td>
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<td></td>
<td></td>
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<tr>
<td>d. 65%</td>
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<td></td>
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<tr>
<td>e. I do not know</td>
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<tr>
<td>89. In 1974, the annual earnings of full time male workers in Canada was $11,613. What do you think the average income for female workers was in that same year?</td>
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<tr>
<td>a. Almost $6,500</td>
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<tr>
<td>b. Almost $8,500</td>
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<td>c. Almost $10,000</td>
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<tr>
<td>d. Almost $11,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. I do not know</td>
<td></td>
<td></td>
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</tbody>
</table>
90. About how many women would you estimate were in the Ontario labour force in 1976?
   a. 250,000
   b. 550,000
   c. 1,500,000
   d. 5,000,000
   e. I do not know

91. Of the five groups below, indicate which educational group has the largest percentage of women in that group employed full time.
   a. 0-8 years education
   b. Some high school/no post secondary
   c. Some post secondary
   d. Post secondary certificate or diploma
   e. University degree
   f. I do not know

92. Of the five age groups below, indicate which group has the largest percentage of women employed full time in Canada (both now and in projections for the late 1970's).
   a. 14-19
   b. 20-24
   c. 25-44
   d. 45-64
   e. 65+
   f. I do not know

93. What is the average number of years that a woman can expect to spend in the labour force?
   a. 4-6 years
   b. 8-10 years
   c. 14-17 years
   d. 20-25 years
   e. I do not know

94. The number of women working outside the home has increased considerably since the 1960's. In which of the following has there been the greatest increase?
   a. Single women (never married)
   b. Married women
   c. Other (divorced, separated, widowed)
   d. I do not know

95. How many girls today will work for money at some time during their lives?
   a. About 1 of 3
   b. About half
   c. About 3 of 4
   d. About 9 of 10
   e. I do not know
96. In which of the following occupational group did women represent over 50% of total employment in 1974?
   a. Managerial
   b. Professional technical
   c. Sales
   d. Clerical
   e. I do not know

97. In professions such as architecture, engineering or dentistry, what percentage of the 1973-74 class do you think were women?
   a. Less than 15%
   b. 20%
   c. 50%
   d. 90%
   e. I do not know
APPENDIX B

LIST OF VARIABLES
APPENDIX B

LIST OF VARIABLES

Dependent Variables

Career aspirations (SES)
Career aspirations (Traditional, Undifferentiated, Non-traditional)
Career expectations (SES)
Career expectations (Traditional, Undifferentiated, Non-traditional)
Educational plans
Career commitment

Independent Variables

School type
School location (Rural or urban)
Grade level
Age
Academic average
Ethnicity
Number of years in Canada
Position in the family
Family situation
Religion
Socio-economic status
Mother's work history
Mothers occupation
Occupational category of mother
Education of mother
Education of father
Mother's feelings about employment
Educational expectations of mother
Educational expectations of father
Mother's career expectations (SES)
Mother's career expectations (Traditional, Undifferentiated, Non-traditional)
Father's career expectations (SES)
Father's career expectations (Traditional, Undifferentiated, Non-traditional)
Expectations students wish to emulate
Parent students perceive they are like
Mother's expectations concerning marriage and career
Father's expectations concerning marriage and career
Knowing women in the careers they plan to enter
Knowledge of careers
Knowledge of self
Exposure to a women's studies course
Sex-role ideology
Knowledge of women in the work force
APPENDIX C

FACTS AND FIGURES: WOMEN'S BUREAU, ONTARIO

MINISTRY OF LABOUR
The number and proportion of women in the Ontario labour force has increased considerably in the past decade. In 1963, women made up 29% of the total work force; by 1973, this figure had jumped to over 35%. In Ontario today, almost 1.4 million women work outside the home, that is almost 44% of the adult female population.

Although the participation rate of women has increased, many misconceptions about working women persist. Such beliefs must be corrected if women are to receive equal treatment in the labour force. The following pages present some of the more common stereotypes about working women and offer evidence which combats these myths.

(1) WOMEN WORKERS ARE NOT DISADVANTAGED. . . FALSE

In 1972, 62.4% of Canadian women in the labour force were clustered in clerical, sales and service occupations, compared with only 20.4% of the men. Women worked in fields numerically dominated by women. Thus, 74% of clerical workers and 51% of service workers are women.

In the professions, women are again concentrated in "female" low-paying areas. Women are 72% of health professionals, but within that classification they are segregated. They are 3% of dentists, 9% of physicians and surgeons, but 99% of all occupational therapists, nurses and dental hygienists.

In addition to working in job ghettos, women are financially disadvantaged. In 1973, women full-time workers in Canada earned an average of $5,527 and men $10,072. Women earned only 54.9% of men's earnings and this was reflected across occupational groups.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>As % of Men's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>56.6%</td>
</tr>
<tr>
<td>Professional/Technical</td>
<td>57.6%</td>
</tr>
<tr>
<td>Clerical</td>
<td>65.8%</td>
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<tr>
<td>Sales</td>
<td>38.7%</td>
</tr>
<tr>
<td>Service/Recreation</td>
<td>43.2%</td>
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<tr>
<td>TOTAL</td>
<td>54.9%</td>
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</tbody>
</table>

Sylvia Ostry's analysis of the 1961 Canadian Census showed the ratio of female to male earnings as .55. That is women's average incomes were 55% of men's. She then adjusted for human capital differences (i.e. age, job level and seniority) and found this raised the ratio to .80 (women's incomes 80% of men's). She concluded that "even after accounting for differences in the work year, occupational deployment and 'quality' of labour between the sexes, there remained fairly sizeable pay gaps between male and female workers in Canada."(11)

(2) WOMEN WORK ONLY FOR FRILLS . . . FALSE

In Ontario, 36.8% of the female labour force in March, 1975 were single, divorced or widowed. Self-supporting women such as these work out of necessity, not for pin money.

Female family heads are one of the most disadvantaged groups in our society. In Ontario, the average income of a male-headed family is $11,905; of a female-headed family, $6,016 (1971 Census.) Although 15.8% of Canadian families are classified as low income, 43.7% of those with a female head fall in this category. To expand on that point, 7.4% of all families but 20.4% of low income families are headed by a woman.

Many married women work because their husbands are not paid enough to support another adult and two or three children. These women must work to supplement their husband's income. According to the 1971 Census, 23% of Canadian husband-wife families with only one wage earner had incomes of less than $5,000. Only 17.6% of those with husband and wife wage earners were in this category. Economic necessity such as this is a major factor in the increased participation rate of married women in the labour force (from 40.4% in 1973 to 43% in 1974.)
(3) WOMEN WOULDN'T WORK IF ECONOMIC REASONS DIDN'T FORCE THEM TO... FALSE
An American study done in 1972, asked the following question of a nationwide probability sample of working men and women: "If you were to get enough money to live as comfortably as you would like for the rest of your life, would you continue to work?" 74% of the men and 57% of the women said yes. Most of the sex difference was a result of the response of married women who were less likely to continue to work if economic pressure was relieved.\(^{2}\)

Many women in Canada work for their personal fulfillment and emotional well-being. Their right to employment must not be denied in a free society.

(4) WOMEN DON'T QUALIFY FOR BETTER PAYING JOBS ... FALSE
The decade 1961-1971 showed a dramatic increase in the level of education of Ontario's total labour force. Women workers, however, remained somewhat better educated than the men. In 1971, 19% of the women in the labour force and 27% of the men had less than grade 9 education.

On a Canada-wide basis, in 1972, 26% of women in the labour force and 18.3% of the men had completed high school. An additional 10.1% of women and 4.6% of men had post-secondary, non-university training and 6.9% of women and 9.1% of men had completed university.

The more educated a Canadian woman is, the more likely she is to work. Unfortunately, the academic qualifications of women are alone insufficient in enabling them to obtain non-stereotyped jobs.

(5) WOMEN SHOULD STICK TO "WOMEN'S JOBS" AND NOT "COMPETE" FOR "MEN'S JOBS" ... FALSE
The idea of men's jobs and women's jobs is a culturally defined one, based on tradition and not fact or inherent ability. A survey of almost 400 cultures found jobs were classified according to sex in virtually all cases.\(^{3}\) It was also discovered, however, that all jobs were performed by men in some societies and women in others. Thus, agriculture is a "male" occupation in North America but a "female" occupation among the Kalahari bushpeople.

During World War II, women performed many jobs in areas now considered predominantly male. They were welders, riveters and truck drivers to cite only a few occupations. Our attitudes concerning sex typing of jobs must be changed in recognition that such attitudes are not rooted in fact. The belief that a particular job is the domain of one sex or another must be eliminated.

One reason for the labelling of jobs as male or female is the North American concept of women as being passive. All psychiatrists in the United States were polled as to whether they felt women were passive and nurturant by nature. 71% of the respondents believed that this description was a social stereotype and not a natural state for women. Yet women are encouraged to choose nurturant jobs such as nursing because such jobs are supposed to fit their nature.

(6) FEMALE HORMONES HAMPER JOB PERFORMANCE ... FALSE
Little scientific evidence supports the idea that women's physiology adversely affects job performance. A study by Margaret Mead showed that in a South Sea island culture where women were not taught to expect emotional change, none was noticed. Research has shown that men also have hormonal cycles. A trucking company in Japan actually reduced its accident rate significantly by charting its male drivers' cycles.\(^{4}\)

Research has shown that men and women engaged in stimulating occupations suffer minimal effects during menopause and other cycles.

(7) MARRIED WOMEN TAKE JOBS AWAY FROM MEN: THEY OUGHT TO QUIT THESE JOBS AND LEAVE THE LABOUR FORCE ... FALSE
In March, 1975, there were 866,000 married women in the Ontario labour force. At the same time, there were 176,000 unemployed men. If all the married women left the labour force and their jobs were taken by the unemployed men, 690,000 jobs would remain empty. In addition, most unemployed men do not have the education or the skills to fill many of the jobs held by married women, e.g., teachers, secretaries, nurses and the democratic right to work is guaranteed to all citizens in our society, not just to men.

(8) WORKING MOTHERS HARM CHILDREN ... FALSE
Researchers have found no significant differences between the children of mothers who work and children of mothers who stay home. In some cases, the former group of children has been found to be more self-reliant.

A European study of people raised by nannies indicated a stronger moral influence of parents because the latter were not involved in day to day physical care.
Studies looking at causes of juvenile delinquency do not show employment of mothers to be a determining factor.

(9) WOMEN DON'T WANT RESPONSIBILITY OR PROMOTION . . . FALSE
Some men don't want increased responsibility or promotion either but they are at least given the choice. In the U.S. a nationwide survey found 64% of men and 48% of women answered positively when asked if they wanted promotion. Furthermore, the lack of desire in many of the remaining people was a direct result of expectations. The apparent lack of ambition was often a result of being in a dead-end job. Two-thirds of the women surveyed, never expected to be promoted. (8)

(10) WOMEN WORKERS HAVE HIGHER RATES OF ABSENTEEISM AND TURNOVER THAN MEN . . . FALSE
Charges that women are absent more often than men and that they have higher rates of turnover have proven unfounded through research in Canada.

Canadian figures on absenteeism rates show that in 1972, 1.76% of full-time women workers were absent for the whole of a particular week as opposed to 1.95% of the men. Males, however, had fewer short term absences (less than 1 week), .87% as opposed to 1.43%. Kay Archibald's study on the Federal Public Service found that women take only 1.24 more days leave per year than men. (6)

In Archibald's study, women's separation rates, that is their job leaving rates, were higher than men's. Three factors must be considered, however:

(1) Occupational level—Women's separation rates are lower in the higher level occupations. High separation rates for men and women are found in low level jobs. Since this is where the majority of women are found, women therefore "appear" to be less stable employees.

(2) Income—Separation rates are higher for both sexes in low income groups. Here again, proportionately more women are found in these groups.

(3) Age—Separation rates are higher amongst younger employees and a greater proportion of female public servants are in the younger age groups.

If one controls for the above factors, that is if you compare men and women of similar occupational level, income and age, women are found to be no less stable in their employment patterns than their male counterparts.

(11) NO ONE LIKES TO WORK FOR A FEMALE BOSS . . . FALSE
In late 1974, a Gallup Poll was done questioning a representative sample of 1,000 Canadians on their preference for a male or female boss. Although many, more people preferred a male boss to a female boss (41.5% versus 6%), the largest group of respondents said the sex of their boss was irrelevant (47.5%). When the same question was asked of the Canadian public in 1954 and 1964, only 18% and 25% respectively of those answering had no preference and the majority expressed a strong desire to work for a man. An age breakdown of the 1974 results shows the 18-29 year-old age group to be the least concerned about the sex of their superior.

A study undertaken by the Ontario Ministry of Revenue in 1975 found that over half of the respondents would feel comfortable working for a woman. Broken down by sex, 70.2% of women and 48.2% of men said they would be comfortable in such a position. An additional 11.8% of the women and 22.3% of the men were undecided. An interesting result was that many more people believe that men are uncomfortable working for a woman than men indicated by their responses.

(12) WOMEN ARE MORE CONCERNED THAN MEN ABOUT THE SOCIO-EMOTIONAL ASPECTS OF THEIR JOBS . . . FALSE
An American study done in 1972 asked a nationwide probability sample of 539 working women and 933 working men to assess the importance of four facets of job satisfaction:

(1) my co-workers are friendly and helpful
(2) my supervisor is very concerned about the welfare of those under him
(3) I am given lots of chances to make friends
(4) my supervisor is competent doing his job

Response to the above showed only one sex difference. More women (68%) than men (61%) indicated it was important to them that co-workers be friendly and helpful. Other statements were rated as equally important by men and women. (7)

(13) YOU CAN'T HIRE A YOUNG WOMAN IN A RESPONSIBLE POSITION; SHE'LL GET PREGNANT AND LEAVE YOU WITHIN TWO YEARS . . . FALSE
The chief childbearing and childrearing years are those from 20-44. In Ontario, these are the years of highest participation of women in the labour force.

-67.2% of women 20-24 are in the labour force
-53.7% of women 25-34 are in the labour force
-54.9% of women 35-44 are in the labour force
Women are working at this time of their lives either because they want to or out of economic necessity. In 1970, 33% of Ontario's employed women had children under 16 and 11% under 6.

Although many women do leave the labour force for a number of years to raise their children, an increasing number either do not or cannot. Ontario's new pregnancy leave regulations allow 17 weeks flexible leave and permit women to return to work following the birth of a child with no loss of seniority or benefits nor a drop in salary.

(14) WOMEN ARE NOT AS MOBILE AS MEN: YOU CAN'T TRANSFER A WOMAN BECAUSE HER HUSBAND'S JOB MUST COME FIRST... FALSE

36.8% of the working women in Ontario are single, widowed or divorced. Such women are able to relocate with no difficulty attributable to their sex.

With respect to married women workers, two facts must be remembered:

1. Many couples no longer relocate according to the husband's career needs only. The employment status of both partners is considered when a question of transfer arises.

2. Many men are now refusing relocation. They are unwilling to move their families on a regular basis.

The purpose of both of the above points is to illustrate that it is a faulty assumption to suppose that women cannot or will not relocate according to job demands. Staffing decisions must not be based on outmoded sex stereotypes.

(15) YOU CAN'T HIRE A WOMAN IN A JOB WHERE SHE WILL HAVE TO TRAVEL WITH MALE EMPLOYEES. THE WIVES OF THE LATTER WILL COMPLAIN... FALSE

A staffing decision based on the above assumption is discriminatory. A woman employee should be considered as a professional in the same way as a male employee would be.

(16) YOU CAN'T HIRE A MARRIED WOMAN IN A JOB WHERE SHE WILL HAVE TO TRAVEL BECAUSE SHE HAS TOO MANY RESPONSIBILITIES TO FULFILL AT HOME... FALSE

An employer should not make decisions based on traditional role stereotypes. If a woman applies for a job requiring her to travel it should be assumed that she is aware that she will be on the road and can make alternate household arrangements in her absence.

(17) WOMEN IN THE PAID LABOUR FORCE HAVE THE SAME DESIRES FOR RECOGNITION, ACHIEVEMENT AND ADVANCEMENT AS DO THEIR MALE COUNTERPARTS... TRUE

REFERENCES


4. E. Ramey, "Men's Cycles (They Have Them Too, You Know)", Ms. Magazine, Spring 1972 (Preview)

5. J. E. Crowley, T. Levitin, R. Quinn, op. cit., P.96.


INTRODUCTION

Canadian women have always worked to provide for themselves and their families. Whereas historically they worked in the home to produce necessary goods, many now work in the external labour force, earning money to purchase such items.

In the past twenty years, Ontario has undergone dramatic social change as more and more women have entered the paid work force. This must be evaluated not only on the societal level shown in the statistics and trends documented here but also in light of the personal change for those involved: Women who have entered the labour force have altered their own self image and affected the ultimate image of all women today.

This fact sheet looks at the status of women in the Ontario labour force, using the most recent information available. To assist the reader in understanding the material presented, an historical perspective will often be given.

Throughout the fact sheet a number of technical terms will be used. Any such terms are defined in the notes at the end.

LABOUR FORCE ACTIVITY

The number of women working in Ontario has increased dramatically in the past twenty years. At the same time women’s participation rate (that is the percentage who work) has also steadily increased.

<table>
<thead>
<tr>
<th>TABLE ONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women in the Ontario Labour Force and Their Participation Rates (1)</td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>496,000</td>
</tr>
<tr>
<td>776,000</td>
</tr>
<tr>
<td>1,319,000</td>
</tr>
</tbody>
</table>

To better understand the marked increase in labour force activity of women, one can examine the increase in size of the male/female population and the comparative increase of the male/female labour force.

<table>
<thead>
<tr>
<th>TABLE TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Labour Force by Sex, Ontario 1964 and 1974</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Population</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Labour</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

In ten years, the male labour force increased by 32.2%, slightly less than the increase in size of the male population. At the same time, the female labour force increased by 70%, that is at approximately twice the rate of the female population.

This rise in participation has increased women’s share of the total work force. In 1964, 30.4% of all workers were women. By 1974, this figure had increased to 35.9%.

PART-TIME WORK

According to Statistics Canada, and for the purposes of their data only, a part-time worker is one who regularly works less than 35 hours a week. This should not be confused with other definitions of part-time work in selected jurisdictions. In 1974, 25.2% of all women in the labour force, that is 797,000 women, were classified as part-time workers.

Many writers have pointed to the increasing percentage of women working part-time as evidence of their lower level of commitment to the work force. In fact, during the past decade, although a considerably higher percentage of women have been part-time workers, the tendency to work less than 35 hours a week has increased for both men and women.
TABLE THREE
Number and Percentage of Labour Force Working Part-time—Canada

<table>
<thead>
<tr>
<th></th>
<th>1964 no.</th>
<th>1969 % all workers</th>
<th>1974 no.</th>
<th>1974 % all workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>part-time</td>
<td></td>
<td>part-time</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>197,000</td>
<td>4.2%</td>
<td>293,000</td>
<td>5.6%</td>
</tr>
<tr>
<td>Women</td>
<td>398,000</td>
<td>20.9%</td>
<td>607,000</td>
<td>24.2%</td>
</tr>
<tr>
<td>Total</td>
<td>595,000</td>
<td>9.0%</td>
<td>890,000</td>
<td>11.6%</td>
</tr>
</tbody>
</table>

The percentage of all workers who work part-time has increased from 9% in 1964 to 12.8% in 1974.

At the time of the 1971 census, it was found that in Ontario approximately the same percentage of married women and single women were part-time employees, 30.3% and 31.4% respectively. Widowed or divorced women were less likely to work less than 35 hours a week and only 24.3% of them were in this category. For Canada as a whole, the situation was slightly different. Married women were the most likely to work part-time (30.6%) whereas single and divorced women did so less often (26.7% and 24.7% respectively).

As the number of women in the labour force has increased in recent years, so has the percentage of women who are unemployed. In 1964, 25.3% of the unemployed labour force in Ontario were women. By 1974, this figure had increased to 37.5%.

Historically, in Canada and Ontario, the unemployment rate for women has been lower than for men. In 1974, however, this trend was reversed in Ontario. For the first time, a slightly higher percentage of women were unemployed, than were men.

TABLE FOUR
Unemployment Rates by Sex—Canada and Ontario

<table>
<thead>
<tr>
<th></th>
<th>1964</th>
<th>1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Unemployment</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>CANADA</td>
<td>5.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>ONTARIO</td>
<td>6.6%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

The age group with the highest rate of unemployment for men and women is the youngest group, 14 — 24 years old. 7.2% of the females and 8.2% of the males are unemployed in this age range.

As would be predicted, the highest participation of women in both Ontario and Canada is in the 20 — 24 years group. Less expected perhaps is the fact that over half of all women in the 25 — 44 year range are in the labour force. These years, commonly called the chief childbearing and childrearing years, are often associated with mothers staying at home. As shown in Table Five, this is no longer necessarily the case.

TABLE FIVE
Participation Rates by Age, 1974

<table>
<thead>
<tr>
<th>Age</th>
<th>Canada</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 — 19</td>
<td>36.7%</td>
<td>39.7%</td>
</tr>
<tr>
<td>20 — 24</td>
<td>63.0%</td>
<td>66.5%</td>
</tr>
<tr>
<td>25 — 44</td>
<td>46.6%</td>
<td>51.0%</td>
</tr>
<tr>
<td>45 — 64</td>
<td>37.4%</td>
<td>42.6%</td>
</tr>
<tr>
<td>65+</td>
<td>4.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>All ages</td>
<td>39.7%</td>
<td>43.0%</td>
</tr>
</tbody>
</table>

In every age group, except sixty-five plus, Ontario women have a much higher rate of participation in the work force than do Canadian women as a whole. Table Six documents the dramatic increase in levels of participation for women of all ages during the past 20 years.

TABLE SIX
Participation Rates—Canada

<table>
<thead>
<tr>
<th>Age</th>
<th>1953*</th>
<th>1964</th>
<th>1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 — 19</td>
<td>33%</td>
<td>29.9%</td>
<td>36.7%</td>
</tr>
<tr>
<td>20 — 24</td>
<td>47%</td>
<td>51.0%</td>
<td>63.0%</td>
</tr>
<tr>
<td>25 — 44</td>
<td>23%</td>
<td>31.7%</td>
<td>46.6%</td>
</tr>
<tr>
<td>45 — 64</td>
<td>17%</td>
<td>31.6%</td>
<td>37.4%</td>
</tr>
<tr>
<td>65+</td>
<td>3%</td>
<td>6.3%</td>
<td>4.2%</td>
</tr>
<tr>
<td>All ages</td>
<td>25.9%</td>
<td>30.5%</td>
<td>39.7%</td>
</tr>
</tbody>
</table>

*rounded to nearest whole number for 1953 only.

The most significant increases are in the 25 — 44 year group where the level of activity has doubled and the 45 — 64 year group where it has more than doubled. In the past ten years alone, the participation rate of the 25 — 44 year group has increased 15%.

It is important to note that even given the aforementioned changes in the levels of female participation, the age profile for men and women in Ontario is still quite different. In 1974, 30.5% of the women in the labour force were less than 25 years of age, contrasted with only 22.2% of the men.
The participation rate of women in the labour force has increased dramatically since the early 1950s. Perhaps the greatest change has been in the numbers of married women choosing either to remain in the paid work force or to re-enter it after an absence of some years. In 1951, only 15% of married women in Ontario worked outside the home. This figure doubled in 15 years to 31.6%. Since 1966, there has been a further increase to 41.6% in 1974.

TABLE SEVEN
Participation Rates by Marital Status — Ontario

<table>
<thead>
<tr>
<th>Marital status</th>
<th>1966</th>
<th>1974</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>31.6%</td>
<td>41.6%</td>
<td>+10%</td>
</tr>
<tr>
<td>Single</td>
<td>48.4%</td>
<td>52.6%</td>
<td>+4.2%</td>
</tr>
<tr>
<td>Other*</td>
<td>30.4%</td>
<td>32.5%</td>
<td>+2.1%</td>
</tr>
</tbody>
</table>

*divorced, separated, widowed

As noted in Table Seven, there has been increased participation by all women since 1966. By far the greatest change, however, was for married women, an increase of 10% contrasted with a 4.2% increase for single women and 2.1% for other women.

This increased participation of married women in the labour force has changed its composition. In 1951, 38% of the female work force was married. By 1974, this figure has increased to 62.2%, or almost two thirds of all working women.

The reasons behind the increased labour force participation of married women are varied. For many, the decision to work is based on financial need. Whatever the reason, the presence in 1974 of 813,000 married women in the labour force has contributed strongly to a change in attitudes concerning the commitment a woman will make to a job. No longer can the assumption be made that a woman will work only until she is married.

Since a high percentage of Canadian women are in the labour force during the childbearing and childrearing years, it is important to note information about their children.

In 1973, there were 895,000 children under the age of 16 in Ontario with working mothers. The majority of these were of school age, but 206,000 were six years of age or less and likely to require childcare.

The older the youngest child in a family, the more likely a mother is to work, as demonstrated below.

TABLE EIGHT
Labour Force Participation Rates of Women by Age of Youngest Child, Ontario — October 1973

<table>
<thead>
<tr>
<th>Age of youngest child</th>
<th>Labour force participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 2 years*</td>
<td>26%</td>
</tr>
<tr>
<td>2 - 5 years</td>
<td>36%</td>
</tr>
<tr>
<td>6 years &amp; over</td>
<td>48%</td>
</tr>
<tr>
<td>no child under 16</td>
<td>70%</td>
</tr>
<tr>
<td>Total</td>
<td>40%</td>
</tr>
</tbody>
</table>

The level of educational attainment of the Ontario labour force has continued to increase. The female labour force, however, is still somewhat more educated, on average, than the male.

TABLE NINE
Labour Force by Level of Schooling, Ontario — 1971

<table>
<thead>
<tr>
<th>Highest Level of Schooling</th>
<th>% Men in Category</th>
<th>% Women in Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than grade 9</td>
<td>27.2%</td>
<td>19.4%</td>
</tr>
<tr>
<td>grades 9 - 11</td>
<td>32.4%</td>
<td>33.6%</td>
</tr>
<tr>
<td>grades 12 - 13</td>
<td>24.6%</td>
<td>35.2%</td>
</tr>
<tr>
<td>some university</td>
<td>7.6%</td>
<td>7.2%</td>
</tr>
<tr>
<td>university degree</td>
<td>8.3%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

A higher percentage of men than women have less than a grade nine education but fewer women have a university degree.

The more educated a woman is, the more likely she is to be in the Canadian labour force. Only 14% of women with less than a grade 9 education worked in 1973, contrasted with 66% of those with a university degree.

TABLE TEN
Female Participation Rates by Level of Education, Canada — 1973

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Female Labour Force Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>under grade 5</td>
<td>14.0%</td>
</tr>
<tr>
<td>grade 5 - 8</td>
<td>22.8%</td>
</tr>
<tr>
<td>some high school</td>
<td>36.1%</td>
</tr>
<tr>
<td>completed high school</td>
<td>50.1%</td>
</tr>
<tr>
<td>some university</td>
<td>61.9%</td>
</tr>
<tr>
<td>university diploma</td>
<td>61.4%</td>
</tr>
<tr>
<td>university degree</td>
<td>66.0%</td>
</tr>
<tr>
<td>some other education or training</td>
<td>52.4%</td>
</tr>
<tr>
<td>completed other education or training</td>
<td>57.7%</td>
</tr>
<tr>
<td>Total</td>
<td>40.1%</td>
</tr>
</tbody>
</table>
In 1974, 506,000 women in the Ontario labour force were single, divorced or widowed. These women are almost entirely self-supporting and work out of necessity. In addition, there are married women in Ontario who are the sole-support of their families because their husbands are unemployed, disabled or absent.

Female family heads form one of the most disadvantaged groups in our society. In Ontario in 1973, the average yearly income of a male-headed family was $14,427, of a female-headed family, $8,060. Although 13.4% of all Canadian families are classified as low-income, 41.6% of those with a female head fall in this category. [5]

Many married women work because their husbands are not paid enough to support another adult and two or three children. These women work to supplement their husbands' incomes; In 1973, the average income of a husband-wife family in Ontario with the husband only working was $10,724. Where the husband and wife both worked, the average income was $12,127. 28.3% of Ontario husband-wife families with one wage earner, earned less than $7,000. Only 20.1% of those with both spouses working were in this category.

In 1973, the average annual earnings of full-time women workers in Canada was $5,527. For men, the comparable figure was $10,072. This earnings differential is reflected across occupational groups.

A number of empirical studies have examined the male-female wage differentials in Canada, attempting to determine what percentage of the differential is due to sex of the worker. All have found that consideration of other variables (e.g., age, job level, hours of work) decreases the wage gap to a range of 10-25 percent. In all cases, however, having taken into consideration such human capital differences, a wage gap remained, attributable to sex. Ostry comments in her analysis of earnings data "even after accounting for differences in the work year, occupational deployment and 'quality' of labour between the sexes, there remained fairly sizeably pay gaps between male and female workers in Canada." [7]

Table Twelve documents wage rates for office occupations in Toronto for October 1, 1974. The survey covered establishments with 20 or more employees. It will be noted that male weekly salaries still exceed those of women, even given quite narrow occupational categories. The gap, however, is much narrower than it was when broad occupational classifications were used.

TABLE TWELVE
Median Weekly Earnings for Office Occupations, Toronto — 1974

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>Female</th>
<th>Male</th>
<th>Female as % of Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Clerk, Jr.</td>
<td>$120</td>
<td>$140</td>
<td>85.7%</td>
</tr>
<tr>
<td>Accounting Clerk, Sr.</td>
<td>145</td>
<td>175</td>
<td>82.9%</td>
</tr>
<tr>
<td>Bookkeeper, Sr.</td>
<td>165</td>
<td>200</td>
<td>82.5%</td>
</tr>
<tr>
<td>Clerk, General Office, Jr.</td>
<td>111</td>
<td>119</td>
<td>93.3%</td>
</tr>
<tr>
<td>Clerk, General Office, Int.</td>
<td>137</td>
<td>151</td>
<td>90.7%</td>
</tr>
<tr>
<td>Clerk, General Office, Sr.</td>
<td>158</td>
<td>189</td>
<td>83.6%</td>
</tr>
<tr>
<td>Computer Operator, Jr.</td>
<td>135</td>
<td>150</td>
<td>90.0%</td>
</tr>
<tr>
<td>Computer Operator, Sr.</td>
<td>158</td>
<td>189</td>
<td>83.6%</td>
</tr>
<tr>
<td>Computer Peripheral</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Operator</td>
<td>140</td>
<td>153</td>
<td>91.5%</td>
</tr>
<tr>
<td>Cost Clerk</td>
<td>135</td>
<td>178</td>
<td>75.8%</td>
</tr>
<tr>
<td>Manager, Administration</td>
<td>207</td>
<td>288</td>
<td>71.9%</td>
</tr>
<tr>
<td>Office Boy/Girl</td>
<td>100</td>
<td>107</td>
<td>93.5%</td>
</tr>
<tr>
<td>Order Clerk</td>
<td>140</td>
<td>167</td>
<td>83.6%</td>
</tr>
<tr>
<td>Programmer, Jr.</td>
<td>185</td>
<td>190</td>
<td>97.4%</td>
</tr>
<tr>
<td>Programmer, Sr.</td>
<td>229</td>
<td>250</td>
<td>91.6%</td>
</tr>
<tr>
<td>Secretary, Jr.</td>
<td>141</td>
<td>145</td>
<td>97.2%</td>
</tr>
<tr>
<td>Secretary, Sr.</td>
<td>162</td>
<td>168</td>
<td>96.4%</td>
</tr>
<tr>
<td>Stock Records Clerk</td>
<td>125</td>
<td>160</td>
<td>78.1%</td>
</tr>
<tr>
<td>Systems Analyst, Jr.</td>
<td>202</td>
<td>245</td>
<td>82.5%</td>
</tr>
<tr>
<td>Systems Analyst, Sr.</td>
<td>243</td>
<td>289</td>
<td>84.1%</td>
</tr>
</tbody>
</table>

*Sample too small for reliable estimate.
Traditionally, Canadian women have been employed in very few occupational areas. Data for 1974 do not reveal any substantial changes from previous years. Women are still concentrated in the clerical, sales and service sectors of the economy. 63.5% of all female workers are in these occupations, contrasted with 27.1% of all males. Table Thirteen shows that men are much more evenly distributed throughout the occupational structure than women. None of the same concentrations appear in the male occupational breakdown. In fact, no occupation contains more than 11.5% of all male workers, whereas the clerical sector alone contains over one-third of all women in the labour force. 2.7% of all women are in the managerial and administrative category, compared with 7.6% of all men. 

TABLE THIRTEEN
Percentage Distribution of Men and Women by Occupational Group, Canada – 1974.

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>% Women in Category</th>
<th>% Men in Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial and Administrative</td>
<td>2.7</td>
<td>7.6</td>
</tr>
<tr>
<td>Natural Sciences, Engineering and Mathematics</td>
<td>.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Religion</td>
<td>*</td>
<td>.4</td>
</tr>
<tr>
<td>Teaching</td>
<td>7.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Medicine and Health</td>
<td>9.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Artistic, Literary &amp; Recreational</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Clerical</td>
<td>35.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Sales</td>
<td>10.1</td>
<td>11.2</td>
</tr>
<tr>
<td>Service</td>
<td>18.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Farming, horticultural and animal husbandry</td>
<td>2.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Fishing, hunting and trapping</td>
<td>*</td>
<td>.4</td>
</tr>
<tr>
<td>Forestry and logging</td>
<td>*</td>
<td>1.1</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>*</td>
<td>.9</td>
</tr>
<tr>
<td>Processing</td>
<td>2.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Machining</td>
<td>.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Product fabricating, assembling and repairing</td>
<td>6.8</td>
<td>11.5</td>
</tr>
<tr>
<td>Construction trades</td>
<td>*</td>
<td>11.0</td>
</tr>
<tr>
<td>Transport equipment operation</td>
<td>.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Materials handling</td>
<td>1.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Other crafts and equipment operating</td>
<td>.6</td>
<td>1.8</td>
</tr>
<tr>
<td>All Occupations</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*figures too small to be reliable

In Table Fourteen, the major occupational groups in Canada are examined to demonstrate what percentage of their employees are women. As could be predicted, the occupational areas with women in the majority are clerical and service/recreation. Women are also a strong contingent in the professional/technical area (46.9% of employees). If this area is broken down into smaller categories, however, (see Table Thirteen) one finds the majority of women are in the fields of teaching and nursing.

TABLE FOURTEEN
Women Employees as a Percentage of Major Occupational Groups*, Canada – 1974

<table>
<thead>
<tr>
<th>OCCUPATIONAL GROUP</th>
<th>Women as % Total Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical</td>
<td>72.9%</td>
</tr>
<tr>
<td>Service/Recreation</td>
<td>51.8%</td>
</tr>
<tr>
<td>Professional/Technical</td>
<td>46.9%</td>
</tr>
<tr>
<td>Sales</td>
<td>32.3%</td>
</tr>
<tr>
<td>Labourers and Unskilled</td>
<td>16.7%</td>
</tr>
<tr>
<td>Managerial</td>
<td>16.0%</td>
</tr>
<tr>
<td>Farming</td>
<td>14.5%</td>
</tr>
<tr>
<td>Craft and Related</td>
<td>13.2%</td>
</tr>
<tr>
<td>Communication/Transportation</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

*Some categories differ from those listed in Table Thirteen where the professional/technical categories are divided into more detailed subgroups, e.g., teaching.

In addition to examining women's labour force activity with respect to occupation, it is useful to look at the participation of women in selected industries. Table Fifteen shows that in ten years, the percentage of all employees who were women increased in all industries excepting Community, Business and Personal Service. The largest increase was in Finance, Insurance and Real Estate (9.8%) followed by Public Administration (6.3%). Both of these industries have expanded rapidly in the past decade, thus increasing job opportunities.

TABLE FIFTEEN
Women Employees as a Percentage of Selected Industries, Canada

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>WOMEN EMPLOYEES AS % TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1964</td>
</tr>
<tr>
<td>Agriculture</td>
<td>11.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>21.5</td>
</tr>
<tr>
<td>Construction</td>
<td>3.7</td>
</tr>
<tr>
<td>Transportation, Communication &amp; Other Utilities</td>
<td>14.0</td>
</tr>
<tr>
<td>Trade</td>
<td>31.9</td>
</tr>
<tr>
<td>Finance, Insurance and Real Estate</td>
<td>44.7</td>
</tr>
<tr>
<td>Community, Business and Public Service</td>
<td>59.9</td>
</tr>
<tr>
<td>Public Administration</td>
<td>22.3</td>
</tr>
<tr>
<td>Other</td>
<td>*</td>
</tr>
<tr>
<td>Total</td>
<td>28.9</td>
</tr>
</tbody>
</table>

*figures too small to be reliable
The increase in size of the female labour force has been exceeded by the rise in women's union membership.

TABLE SIXTEEN
Labour Union Membership by Sex, Ontario (11)

<table>
<thead>
<tr>
<th>UNION MEMBERS</th>
<th>1963</th>
<th>1973</th>
<th>% Increase 1963-73</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>564,448</td>
<td>750,048</td>
<td>29.5%</td>
</tr>
<tr>
<td>Female</td>
<td>103,626</td>
<td>205,457</td>
<td>98.3%</td>
</tr>
<tr>
<td>Total</td>
<td>671,074</td>
<td>955,505</td>
<td>42%</td>
</tr>
</tbody>
</table>

In 1963, 15.4% of all union members were women. By 1973, this figure had increased to 21.5%.

FOOTNOTES
(1) All Statistical data is from Statistics Canada, The Labour Force — monthly report and annual averages. (Catalogue No. 71-001) unless otherwise noted.
(5) Statistics Canada, Income Distributions by Size in Canada, 1973; Catalogue 13-207 (annual); Table 78.
(6) Ibid, Table 57.

TECHNICAL NOTE
1. All statistical data and definitions are courtesy of Statistics Canada.
2. All numbers are rounded to thousands and percentages are rounded to one decimal place. Therefore, numbers or percentages may not add to totals shown.
3. Population is defined as persons 14 years and over, exclusive of inmates of institutions, members of the armed forces and Indians living on reserves.
4. Labour force is that portion of the population 14 years of age and over who, at the time of the survey were employed or unemployed. People not counted in the labour force include those in the population 14 years of age and over who were going to school, keeping house, too old or otherwise unable to work and voluntarily idle or retired.
5. Housewives, students and others who work part-time are classified as employed. If they looked for work, they are classified as unemployed.
6. Participation rate is defined as the percentage of the population (defined above) who are in the labour force.
WOMEN IN THE LABOUR FORCE
"BASIC FACTS"
UPDATE

In Ontario in 1977:

- there were 1,589,000 women in the labour force
- the female labour force participation rate was 49.7%
- 39.3% of all workers were women
- the unemployment rate for men was 5.9%; for women, 8.6%
- 23.6% of women in the labour force were part-time workers

A. Female Labour Force Participation Rates by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 - 19</td>
<td>50.8%</td>
</tr>
<tr>
<td>20 - 24</td>
<td>71.8%</td>
</tr>
<tr>
<td>25 - 34</td>
<td>60.1%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>60.7%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>54.3%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>37.9%</td>
</tr>
<tr>
<td>65+</td>
<td>4.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49.7%</td>
</tr>
</tbody>
</table>

B. Average Annual Earnings of Full-Year Workers in

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
<th>Female as % Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>$18,747</td>
<td>$10,805</td>
<td>57.6%</td>
</tr>
<tr>
<td>Professional</td>
<td>16,772</td>
<td>9,952</td>
<td>59.3%</td>
</tr>
<tr>
<td>Clerical</td>
<td>11,045</td>
<td>7,157</td>
<td>64.8%</td>
</tr>
<tr>
<td>Sales</td>
<td>13,758</td>
<td>7,645</td>
<td>54.3%</td>
</tr>
<tr>
<td>Service</td>
<td>10,136</td>
<td>4,711</td>
<td>46.5%</td>
</tr>
<tr>
<td>Farming etc.</td>
<td>8,946</td>
<td>4,148</td>
<td>46.4%</td>
</tr>
<tr>
<td>Processing &amp; Machining</td>
<td>11,928</td>
<td>7,270</td>
<td>61.0%</td>
</tr>
<tr>
<td>Product Fabrication</td>
<td>12,007</td>
<td>6,060</td>
<td>50.5%</td>
</tr>
<tr>
<td>Construction</td>
<td>13,483</td>
<td>- (1)</td>
<td>-</td>
</tr>
<tr>
<td>Transport</td>
<td>12,174</td>
<td>6,660</td>
<td>54.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13,188</td>
<td>7,266</td>
<td>55.1%</td>
</tr>
</tbody>
</table>

(1) Sample too small for reliable estimate
APPENDIX D

CURRICULUM MODELS, PROGRAMS AND RECOMMENDATIONS

ON CAREER EDUCATION
Curriculum Models, Programs and Recommendations on Career Education

The centrality of work in the lives of individuals provides sufficient rationale for educational institutions to implement systematic programs in Career Education. An increasing focus in this area has been an important educational trend in the United States over the past decade. McLure and Bruan (1973) in their volume which includes the reactions of 23 educators, businessmen and students, to the Career Development concepts proposed by the United States Office of Education, describe Career Education as "survival insurance." Traditional schooling, they state, has not been meeting survival needs. Career Education is student oriented and enables students to relate information to living. It uses knowledge, values and skills as a means to student ends and not ends in themselves. This knowledge is also related to the range of life careers and roles in which individuals will participate; in other words, it is "education for survival in our contemporary society" (p. 106).

The concept of Career Education is an evolving one and definitions tend to be very general. This is desirable as the concept is expanding. Career Education is neither restricted to nor is it synonymous with the old concept of vocational education. As McLure and Bruan suggest, the image many have of vocational education is a group of boys gathered around an old car. However, Career Education is

... a way to help young people develop the competencies they need to be wage earners and producers. It must be one of the primary goals of schooling. (p. 107) (Emphasis added.)
No scheme of education in any society can be regarded as successful if it fails to prepare the young to take authentic and responsible roles within adult society. It might be argued, then, that preparation for work must receive central attention in any satisfactory arrangements for education in any society. Thus in a society in which work is a predominant aspect of most adult roles, it follows that the process of education must pay serious attention to preparation for work. Indeed, it would seem a shaky conclusion to suggest that essential educational tasks should not be carried out in some central way by the system of schools itself. (p. 217)

An interesting point they make repeatedly is that, traditionally, society has tried to attack emotional, racial, ethical-moral and cultural problems directly by telling people how to behave. The fact that such methods have not been altogether successful is an indication that schools must do more than just telling. They must provide opportunities for students to experience and cope with real life situations.

Whereas Career Education has to address the needs of both boys and girls, special efforts must be directed at female students. Life patterns for men and women are not similar, therefore educational or vocational planning for men may not be adequate to meet the needs of women. This does not mean that boys and girls need separate Career Education classes but just the opposite. It is important that counselors understand the major conflicts that many of their female students face as they attempt to plan for their roles as both homemakers and career women. Counselors need to align themselves with the forces changing the status of women in society. In particular, they must recognize that the directions in which girls are channelled and the alternatives to which they are exposed can have a major influence on their individual lives and hence on
the status of women in society.

The curriculum models which will be discussed have all been implemented in the United States. Unfortunately, education in Canada has not yet adopted this concept as an important curriculum area of emphasis at all grade levels. Various models will be discussed for their instructive potential. In some cases aims and objectives of models will be stated, as these in themselves will provide educators with ideas on rationale, goals and outcome expectations. In other instances, specific recommendations and activities will be discussed.


They summarize, from an extensive review of the literature, complaints on current practices with respect to Career Guidance in the United States.

1. There is too much emphasis on one-to-one counselling.
2. Counsellors are not adequately trained and lack the specialized knowledge to perform the many diverse tasks involved in educational and occupational counselling.
3. Counsellors have limited authority and relatively low status in school systems.
4. Career guidance is a minor commitment of most counsellors who prefer personal counselling and guidance for college.

5. There is too much emphasis on guidance for college; non-college-bound students receive insufficient attention, and college guidance is confined to the selection of institutions with little consideration of career implications.

6. Most of counsellors' time is spent on administrative, clerical and disciplinary duties.

7. Guidance, which is often regarded as a costly fringe service, is usually undersupported and is subject to cuts in times of economic stress.

8. Present guidance programs tend to focus on adding to general happiness, while they are lacking in specific goals.

9. Available occupational information is inadequate and uninteresting to students.

10. Counsellors are isolated from the school staff; vocational guidance is given in bits and pieces, and vocational and academic guidance are given separately.

11. Counsellors have insufficient understanding of the special needs of ethnic minorities (p. 47).

Many of the foregoing criticisms have appeared with disturbing regularity in the counselling literature. Recognizing these deficiencies in the field and attempting to improve counselling practice, particularly vis-à-vis Career Education may well improve the general status of the profession. It is noteworthy that the blame
need not fall entirely on individual counsellors, but on counsellor education programs and Boards of Education as well. Professional preparation of counsellors and their conditions of employment must keep abreast of changes in society.

McLure and Bruan record the following innovative approaches in the discussion of the part the school and community should play in career development.

1. **Walk-in centres.** Schools may be responsible for walk-in centres which would be housed in the schools themselves, in shopping centres, and in community centres. Such facilities would serve dropouts, parents, out-of-school youths, graduates and members of the general public who wish to learn more about Career Education. The centres may also provide counselling and an amalgamation of materials, such as job briefs, brochures and computerized data. Converted school buses and trailer trucks may be used in this manner.

2. **Parent classes.** The results of this thesis as well as other studies do attest to the importance of many parental variables in the career choice of youth. McLure and Bruan amplify this point in stating that follow-up studies verify that despite the efforts of schools, parents exert the greatest influence in the career choice of young adults. Consequently, the education of parents becomes education for the child. Short term classes may focus on the phases and stages of career development, and one may add, the factors which affect career choice and their implications.
3. **School-industry exchange.** Such exchanges would be mutually beneficial. Faculties and students may participate in organized tours, and industrial personnel may spend time in the schools, familiarizing themselves with current goals, trends, subjects offered and student dynamics.

4. **Assessment buses.** These would include portable mobile units for vocational evaluation purposes, which could be utilized during the day by students and at night by adults. The major areas of focus could be a multidimensional approach to career assessment which would include psychometric testing, simulated work and analytical studies of personal behaviour.

5. **Moving photographic career library.** As concepts in Career Education become more crystallized, subject matter and career development will become more integrated. Teachers may relate their subject areas to goals of awareness, appreciation of self, attitudinal development and career direction. Business and professional agencies may facilitate the task of teachers by providing highly illustrative displays to help teachers and students clarify the relationship of classroom theory and real work. Displays could move from school to school with an average of 10-20 large displays each year, being viewed in each school.

Before focusing on curriculum models which address themselves to specific areas of Career Education, it is important to point out that Career Education cannot be accomplished by sporadic efforts such as "Career Days," but is a process which must extend over several years, beginning in the kindergarten classroom. Bottoms and O'Kelly
Research substantiates that career development tasks are not mastered singly, in sequential order at a given point in time. Instead, they are mastered in a process that extends over several years—a process in which the accomplishment of one task overlaps the partial fulfillment of others. Hence, a developmental curriculum anticipates the necessity of helping students accomplish different career development tasks to varying degrees at each educational level. (p. 22)

The major dimensions which they identify in career development are

(1) understanding of self characteristics, (2) occupational areas,
(3) educational avenues, (4) educational and occupational decisions,
(5) economic and social values of work, and (6) psychological and sociological meaning of work. They further identify the intent of a developmental vocational curriculum, the applicable grade level and desirable student outcomes. For example, the tasks of Grades K-6 are orientational in nature; the intent of Grade 7 is exploration and employability; Grades 8 and 9, exploration, employability and job preparation, and Grades 10-12, job preparation, employability, exploration, job entry and job adjustment. The outcomes range from acquiring positive attitudes towards work, making tentative career choices from broad occupational areas or several occupational clusters, to specific choice of an occupational cluster for in-depth exploration.

Battenschlag's model (1974) focusses on career preparation (including academic, vocational and technical skills) and career development (including self awareness and assessment, career awareness and exploration, career decision-making and planning, and job placement).
Holstein's (1971) model is divided into four segments: Career awareness (Grades 1-6), career orientation (Grades 7-8), career exploration (Grades 9-10) and career preparation (Grades 11-12).

Pointer's (1972) model has four main areas of concentration:
(1) Occupational information, (2) decision-making skills, (3) self-concept and (4) community resources.

Kennedy's (1974) model focuses on the following areas:
(1) Career awareness (knowledge of the total spectrum of careers),
(2) self awareness (knowledge of the components that make up self),
(3) economic awareness (perceived processes of production, distribution and consumption), (5) educational awareness (perceived awareness of the relationship between education and life roles), (5) skill awareness and beginning competency (ways in which man extends his behaviour), (6) decision-making skills (application of information to a rational process to reach decisions), (7) employability skills (social and communication skills appropriate to career placement), and (8) appreciations, attitudes (life roles, feeling towards self and others in respect to society and economics). The outcomes of these eight elements would lead to the acquisition of: career identity, self identity, economic understanding, educational identity, employment skills, career decisions, career placement, and social self-fulfillment, respectively.

Tuckman's (1972) model focuses on self awareness (interests, attitudes, beliefs, opinions, aspirations, values, motives, needs, orientations, aptitudes and competencies which refer to skills and talents); career awareness (educational requirements, skill require-
ments, nature of the work, work climates, work rules, work expectations); and career decision-making, which represents the integration of self-awareness and career awareness into the making of a tentative career decision (the process of matching self and career, the examination of cultural expectations and stereotypes; the process of constantly narrowing the field toward the selection of career clusters or a single career; and a growing awareness of the relationship between means and end).

The above represent the recurring themes and areas of focus in the literature on Career Education. Many of the theoretical frameworks of the models are premised on child development theory. Educators intending to integrate career education into the regular curriculum may pattern their approach on these general areas.

The review will subsequently focus on models which address specific themes. Examples of exercises and performance objectives will be included, when appropriate.

The self-concept theme appears regularly in Career Education literature and is of particular significance to women. Putman and Hansen (1972) investigated the relationship of the feminine role and self concepts to vocational maturity. This was a stratified sample of 375, 16 year old middle class girls from suburban or rural-suburban areas. Results demonstrated that self concept was significantly associated with vocational maturity, which was defined as the rate and level of an individual's development in career planning. The study indicated that girls tended to be vocationally more
immature when compared to male classmates, and have a lower self concept than the average individual. They conclude:

Without tradition and with few, if any role models, a young woman must learn her functions or role in society. She somehow must develop a self concept that allows her to express a realistic vocational preference. She must, for this is forming a self concept, be able to admit into awareness an organized configuration of perceptions which includes her characteristics and abilities and her percepts and concepts of herself in relation to others and to her environment. She also must deal with the values that are associated with experiences and objects as well as the values placed on her goals and ideals by herself and others. (p. 436)

Harway and Austin (1977) in discussing the external and internal barriers which inhibit the progress of women, emphasize that the inter-relationship of self concept with achievement is the focus of much research. Self concept and life goals do have implications for the alternatives individuals consider and the choices they make about educational preparation and careers. The job of counsellors, they state, is to expose girls to the myths and stereotypes about women, to expand their knowledge about the nature and impact of a self concept and to help them develop self concepts congruent with their full potential.

A developmental task that many girls are forced to confront is the conflict between their self concept and the feminine role concept as perceived by society (Putman and Hansen, 1972).

Benson's (1973) curriculum model suggests learning activities and resources to support his five basic goals in the areas of self esteem, decision-making, career lifestyle exploration, interpersonal competence and a work ethic. These lesson plans are described in
terms of broad objectives, performance objectives, behavioural objectives and evaluation criteria. The learning activities are applicable to the curriculum areas of Art, Business Education, English, Language Arts, Foreign Languages, Home Economics, Industrial Arts, Mathematics, Music, Physical Education, Health and Social Studies, History and Science. The first objective of the program: "To implement a positive self concept by making a tentative career choice with awareness of personal characteristics as they relate to work roles" has a framework for achieving these objectives, both in terms of broad objectives and performance objectives. The broad objectives are:

A. The students analyze strengths in terms of skills, developed abilities, interests and potential for growth.

E. The students analyze personal values in terms of tentative career plans and projected life styles.

C. The students analyze the social roles and lifestyle implications of their tentative career choices.

D. The students describe the potential sources of satisfaction and self expression in their preferred occupations.

E. Students analyze personal values and need for achievement in terms of career aspirations.

F. Students demonstrate personal contributions to society by work experiences such as entry level jobs and describe their contributions through work.
The author provides detailed objectives for the other areas of focus. All areas in this model are crucial to Career Education; the other area which is very important to women is the objective: "To develop a respect for work, including its personal as well as its social contributions and implications." Each lesson plan has varied learning activities, suggestions for related subject and/or skill area and Grade. There is an extensive list of approaches and resources provided in the appendices. The activities are exciting and innovative, ranging from having students discuss the power of group norms over member behaviour or the meaning of success, to studying various savings and investment possibilities, and investigating pension plans. An outcome of these exercises may be the promotion of achievement motivation in students.

Another area, which is particularly applicable to the results of this thesis is emphasis on helping students overcome stereotypes. The pernicious nature of stereotypes and the difficulty in combating them is recognized by many educators. Maccoby and Jacklin (1974, p. 355) observe:

If a generalization [stereotype] about a group of people is believed, whenever a member of the group behaves in the expected way the observer notes it and his belief is confirmed and strengthened; when the member of the group behaves in a way that is not consistent with the observer's expectations, the instance is likely to pass unnoticed and the observer's generalized belief is protected from disconfirmation.

Women and ethnic minorities have been subjected to many stereotypes, many of which are career-related. The labour market structure for
example, will change when parents, educators and employers allow both boys and girls to cross occupational boundaries freely. Harway and Austin (1977) extend this idea and reiterate that until girls are encouraged to explore their potential for assertiveness and independence and boys their potential for empathy and compassion, the whole range of human feelings and behaviours will not be equally available and acceptable for all.

The review of literature of the present study mentioned the pervasiveness of incidences of sexism in the media. Many of the books which children read have been known to perpetuate stereotypes about women. Galloway (1979) examined the Grades 11 to 13 English Literature curriculum in Ontario secondary schools and her findings were consistent with those of other researchers who indicate that women are presented stereotypically. The vast majority of books with a sexist bias will not be removed from various curricula, therefore it may be necessary for counsellors and teachers to sensitize students to this phenomenon and to provide experiences for them to redress this situation.

Feminist Northwest (1975 a and b) designed units to combat sex role stereotyping in both males and females. These include a number of learning games which encompass many language arts skills. The games and exercises will sensitize students to the use of sexist language. In one of the units they are introduced to different forms of neuter pronouns, sexist definitions and reading awareness activities. Another area provides materials which emphasize women and their autobiographies. "Non-sexist Literature" suggests ways
students can become aware of sex role stereotyping in literature and encourages writing of non-sexist literature. "Sexism in the Media" suggests activities to help students become aware of sex discrimination messages from various media and suggests ways to work towards the elimination of sex role stereotyping. They also present criteria for evaluating educational material for sex role stereotyping characteristics. A bibliography of additional resources to assist in the aforementioned areas is also presented.

Smith (1976) also devised a very successful project which she entitles "Stamping Out Sex Stereotypes." The 20 months 'New Pioneers Project' witnessed dramatic changes in career choices for both boys and girls. The enrollment of girls in areas such as farm production, bricklaying and carpentry, and boys in home economics, foods and nutrition and home furnishings, was widespread and significant. The initial goal was attitudinal change; enrollment changes were not expected as early as they occurred. A similar project could be carried out in Ontario schools using existing facilities.

Data on the sex ratio of adults in science and technology careers reveal that women are under-represented in these careers. Many studies have confirmed this disproportionate distribution. Hansen and Neujahr (1974) for example, studied 301 high school students particularly gifted in science in 1959-1961, and later in 1971-1972. Both males and females were similar in intention to pursue science, but differed in their scores on standard tests of Mathematics and Science. As adults they differed in their participation in Science
and in particular in the branch of science chosen. They concluded:

The major difference between males and females in this sample would seem to be the depth of interest in science. The relative levels of interest are manifest in high school and again in publication rates beyond the graduate school level. The differences between males and females manifest at the high school level, seem to persist. Assuming that one of the goals of society is the more equal participation of women in the sciences and equally in the physical sciences, this data would seem to indicate that changes in attitudes and interests must begin rather early. (p. 45)

The research of McLure and Piel (1978) delineated four major reasons relatively few girls choose science. They studied 1,017 college-bound girls with particular reference to perceived barriers, information needs and facilitation factors related to the consideration of science and technology careers. The girls were screened to represent high ability and high or low levels of interest in science and mathematics. The most pertinent findings are that girls stated a lack of information on science careers and lack of encouragement by counsellors and teachers. Girls need help, they suggested, to resolve perceived role conflicts, between future careers and family life and they need a more positive perspective on preparation for and entry into science-related careers.

Girls may perceive that preparation for science careers is too difficult because they lack awareness of successful women scientists. . . . Discussions, references to such women in books and by educators and information for parents with examples of women scientists, may be effective in helping to change girls' perceptions of science as an appropriate field for women. (p. 181)
The major reasons relatively few girls choose science careers are:

1. Doubts about combining family life with a science career.
2. The preparation for such careers is believed to be too long and difficult.
3. They have had inadequate encouragement from influential adults, and
4. They see few examples of the important role women can play in science.

The major point of emphasis is the importance girls attach to encouragement from parents and teachers to enter non-traditional fields.

Thetford (1973) confirmed that employment trends forecast in the United States, for example, indicate a slow rate in the number of clerical workers, teachers, and only a moderate increase in the number of nurses--careers to which young girls frequently aspire. There will be a greater need for analysts, programmers, psychologists, and medical laboratory workers, to name a few. Whereas one cannot rely solely on employment trends forecasts in making career decisions, these should not be ignored. The surplus of elementary school teachers now evident in many areas of Canada has particular implications for young women.

The Hermon School Department's (1972) "Project Women" had six major objectives. These were: (a) to identify the career interests of 10th and 11th grade high school girls, (b) to measure how much girls knew about selected, male-dominated occupations,
(c) to acquaint girls with selected careers in which men predominate
(d) to enable girls to learn about these occupations from women
presently earning their living in these fields, (e) to train girls
(by means of a seminar) to discuss these occupations with other
students, (f) to provide "a rotating cadre" of para-professional
student help to work with and through the guidance department and
(g) to develop a model for a career guidance program for the
school. This package includes a "Knowledge of Careers Scale" and
interesting activities utilized in the training phase, for example:

1. A survey of women teachers in the school regarding their
   experiences and willingness to help in the program.

2. A survey of the local community relative to the fields
to be considered.

3. Developing a brochure of questions and answers and a
picture booklet about each of the careers.

4. Visiting women in the community in related fields.

5. Reading want ads in the local newspapers.

6. Making a bulletin board in the school about careers for
women.

7. Visiting an employment agency.


9. Developing a list of both fiction and non-fiction
books about women in careers.

10. Have a Parent Night at which girls make presentations.
11. Writing articles for the school and local newspapers about the project and Career Education for girls.

12. Making slide presentations on careers; girls would take pictures, develop scripts for use in guidance materials and in school assembly.

13. Place pictures of girls in hallways with their specific career areas identified.

Helping students to realize at an early stage the importance of work in one's life is another area of focus in the Career Education of young people. Hansen, Klaurens and Tennyson (1972) devised a package to help students examine the meaning of work in relation to themselves and their future needs. This package helped students to become aware of their own attitudes towards work; to discover the variety of career patterns possible; to understand that a career is a sequence of choices and positions throughout one's life which affects and determines one's total lifestyle, and that it is a means of developing and implementing one's self concept. They suggest enabling objectives, for example, on the meaning of job versus career, the effect of preferred career on future lifestyle and the management of personal resources. Various learning experiences are included in conjunction with the objectives.

Another unit, developed by Thoni, Hansen, Klaurens and Tennyson (1972) has a similar format of enabling objectives and learning experiences to help students:
1. Discover elements within the culture which have contributed to the traditional view of women.

2. Investigate the opinions that contemporary women hold of themselves and their place in the world of work.

3. Read and discuss relevant literature dealing with women, their traditional roles and their place in the world of work.

4. Participate in and observe situations in which women are found in roles other than the traditional ones.

5. Cite examples of change within the modern work society which have affected the traditional division of labour by sex, and

6. Investigate several life patterns which may be followed by women and discuss the significance of each in relation to the personal development and family life of a woman.

The accompanying activities in this package are innovative and would undoubtedly heighten the sensitivity of students to the many factors which influence career choice and lifestyle orientations, and would motivate them to consider non-traditional roles.

Carlson, Hansen, Klaurens and Tennyson (1972) combine the processes of self discovery and career exploration in one package. Their learning objectives are designed to help students

1. Define the range of characteristics which constitute a self concept and describe themselves according to those characteristics.
2. Discuss the sources and factors which have contributed to the development of the self concept, and gather self information.

3. Examine their abilities and characteristics with respect to the responsibilities and tasks of preferred occupations.

4. Examine personal characteristics related to data, people and things as these characteristics relate to occupational work functions.

5. Examine their abilities, aptitudes and other personal resources in light of educational requirements for preferred occupations.

6. Identify situations in the preferred occupations where compromise might be necessary, and investigate alternatives.

This unit has an extensive list of appendices which provides learning activities to support these objectives.

The basic tenets behind the project of O'Dell, Abbey, Clermonte and DeMark (1975) are that Career Development is an important, personal process and not an event, that young people, especially girls, experience great career-related conflict and anxiety and that they spend little time in career planning. The project was an attempt to meet the career development needs of girls and to confront the constricting aspects of female stereotyping. Use was made of values-clarification exercises, role-playing activities, simulations and games as primary techniques to promote self knowledge in young girls.

Thoni, Hansen, Klaurens and Tennyson (1972) also relate learning experiences to enabling objectives to help students learn about the valuing process in their career planning. The specific objectives are:
1. To label the values placed upon work by society and identify the sources of these values.

2. To describe the value each student places on personal endeavour and achievement and to compare these with broader societal values.

3. To describe the process involved when one makes a value decision.

4. To identify the values students relate to occupations, work situations and personal work behaviours.

Another important aspect of Career Education is the teaching of decision-making skills. Individuals are required to make certain important decisions during their lifetime, some of which have far-reaching consequences. Very few individuals have been taught to approach decision-making in a systematic way.

Feminist Northwest (1975) designed a game to help young women make life decisions. Players pretend to be "Debbie Kraft", an 18-year-old high school girl having no special advantages of income or family background. Each player has to deal with the consequences of a practical life decisions at least one of which girls inevitably make, such as, to go to college, to look for a job or to marry a boyfriend. For each of these situations several options are provided, each requiring the player to proceed to another page with still more options. All options lead to the following seven questions: Do you feel the failure was Debbie's fault? What do you think would happen to Debbie next? What groups and agencies in Debbie's community could have given her information, encouragement and
moral support? How could Debbie's situation have changed? How could Debbie's parents, teachers and counsellors have prepared her to become an independent, confident and self-fulfilled woman? How could they have helped her avoid becoming trapped? In what ways are people working for social changes so that young women can have different life options? The problem-solving strategy used in this game would be very useful for all girls but particularly for girls from working class backgrounds.

Special attention must be given to the non-college-bound and to minority women. The fact that these groups are being dealt with simultaneously does not suggest by any means, that minority women should be stereotyped and treated as "the non-college-bound." Neither ethnicity nor socio-economic status should prevent girls from furthering their education. Unfortunately, these factors sometimes have inhibiting consequences.

Ganschow, Helliwell, Hamilton, Jones and Tiedman (1973) report on six recurrent themes from their review of literature.

1. Women, minority students and students from low income families have not received occupational information and assistance to enable them to relate their abilities and interests to career options and specific skills training programs. These students need to develop more positive and realistic self concepts and decision-making competence, and the fact that cultural, class and sex biases abound in the tests which they are expected to use, does not help their cause at all.

2. School accountability and the relationship of the school to the business community is improved if placement and follow-up services exist within the school.
3. Computerized career counselling does not appear to be cost effective; other media methods and materials must be developed.

4. Counsellor education does not prepare counsellors to deal with the practical career guidance needed by the non-college-bound.

5. Personnel who may be able to offer practical information to the non-college-bound are sometimes excluded from the counselling process because of their lack of credentials.

6. The functions of guidance and counselling personnel working with non-college-bound students have not been subjected to constant re-evaluation in order to provide practical career guidance.

The following are some of their recommendations:

1. Reliable, valid assessment measures must be developed and standardized on the groups that they will be used to assess.

2. Minority, disadvantaged and women students must be provided with role models with whom they can relate and these models must not be portrayed in terms of sexual or racial stereotypes.

3. The experiences that these students encounter in secondary schools must relate to their expressed goals.

4. To deal with women and ethnic minorities, counsellors must be educated to become aware of their own biases since individuals cannot work effectively with others without first dealing with their own biases.

5. It is necessary for counsellors to make explicit their effort to understand the background and culture of the populations of students with whom they work, but they must also remain aware that each student is unique.

6. Counsellors must be willing and encouraged to effect changes in the students' out-of-school environment.

The disadvantaged girl, they contend, does not know who she is, what she can do or what she wants to do. The lack of a positive self image particularly characteristic of women and the rural poor, can have crippling effects on aspirations. Levels of aspirations rise with the level of understanding of and faith in oneself.
Ganschow et al. further suggest that counsellors help disadvantaged students develop a "sense of agency," which they define as a perception that one can affect one's life and what happens to oneself. The opposite, a sense of determinism and resignation, is evident in minority students. Ganschow et al. find support for their view in Osipow (1969) who strongly believes that disadvantaged students need help to perceive themselves as persons who do things, are capable and have competencies. He indicates that this help would lead to improved motivational levels and a reduction in work-related anxieties.

Minority women should be particularly sensitized to health-related concerns. Cultural matters are also important for this group as "self understanding necessarily entails an understanding of their own culture, the dominant culture, and how these two relate" (p. 25). They need to understand these conflicts so that they do not become overwhelmed by them. Ganschow et al. state that minority students become acquainted with the dominant culture in school, but discussions of their minority cultures are rare. This discussion is particularly important when one considers the impact of variables such as sex role ideology and ethnicity on career commitment, and the fact that religion, an important aspect in the lives of many minorities, is also associated with sex role beliefs. Their literature review also indicated that information alone will not suffice for minority students. These students may lack a "work orientation," therefore they need work experience, training, and financial aid.
It seems reasonable that young people who do not intend to continue their education after high school should not leave school until they have acquired a saleable skill. This recommendation may appear quixotic but there are available resources to make this suggestion a reality.

Ganschow et al. emphasize the value of group techniques (rather than one-to-one techniques) as a viable and desirable way of implementing practical career guidance for special students. This helps to establish rapport within the group, to provide peer support, increase understanding and to generate alternative solutions.

In dealing with concerns of women students, group work with both males and females helps both sexes to examine existing barriers and stereotypes. For minority and low income students, the value of group work is predicated on the strong group loyalties that these students display. (pp. 29-30)

These techniques are also effective with these students because they minimize reliance on verbal and abstract skills, characteristic of individual counselling. Role-playing techniques, for example, are recommended as they capitalize on the behavioural orientation of minority and low-income students and can utilize mutual peer orientation. It should also be pointed out that differences in language patterns and dialects are not indicative of intellectual deficiency (Gainschow, et al., 1973).

They outline criteria for establishing a comprehensive information system, the functions of school-based placement services, 21 ways of disseminating occupational facts, recommended counsellor education strategies and the role of technology in career guidance.
Findlay (1977) developed and tested a model to help Indian girls develop their potential. She states that the status of these women reveal the double burden of being a member of a minority group and female. The focus of the curriculum was on topics such as: 'Being an Indian Woman,' 'Being a Special Person,' and 'About Careers.' For these sections, related units were developed which included themes and discussions of:

1. Traditional Roles
2. Famous Indian Women
3. Growing up to be a Woman
4. The Outside You
5. Marriage - Expectations or Reality
6. Your Money
7. Food and You
8. Alcoholism
9. Coping with Parents
10. Life-span Planning
11. Decision-making
12. Educational Opportunities
13. Exploring Careers
14. Career Opportunities
15. Women Today and Tomorrow
16. Parenting Daughters

There is also a wealth of information and detailed plans for holding a career conference for girls, arranging field trips and organizing training workshops. Various means of involving parents and other adults in Career Education are also discussed.

Sarno (1976) also has a package designed for economically disadvantaged young women, age 11 to 17. Its main objective is to increase the awareness of self, others, career options, educational alternatives, and the factors that are involved in career decision-making. Interesting activities include values clarification exercises, collage exercises, exercises in planning the lives of fictitious persons, job application
exercises, exploring sources of career information, exploring various technologies through visits to laboratories and "hands-on" experiences, "placements" in actual work settings, photographing and displays.

Green (no date available, ED 107 571) designed a women's studies course for women who were not planning to attend college to help them become aware of their personal options and alternatives as well as the general concerns of women regarding their place in society. Her rationale for selecting this group is that there is such a scarcity of materials to help them when soon after high school they are confronted with decisions regarding marriage, childbearing and working. Girls who attend college can postpone these decisions for at least four years. The content of the curriculum is as follows:

Unit 1 - The Status of Women
1. Roles of women: person, citizen, wife, homemaker, mother, worker
2. Lifestyles and socio-economic status
3. Education
4. Employment
5. Health
6. Legal status

Unit 2 - Role Options for Women
1. Being single
2. Marriage
3. Housekeeping
4. Being a mother
5. Working
6. Independent activities

Unit 3 - Self Awareness
1. Getting to know and like yourself
2. Being an individual
3. Establishing lifelong goals and priorities
4. Developing special interests and activities
5. Playing the "feminine" role
Unit 4 - Career Development

1. Present and future employment needs
2. Vocational training
3. Job investigation
4. Job seeking skills
5. Remedies for discrimination

This provides a fairly comprehensive course with accompanying resources.

Another important focus of Career Education is the awareness of the impact of significant others on one's career choice. Antyolz, Hansen, Klaurens and Tennyson (1973) developed a guide to provide opportunities for students to examine how significant others—parents, friends, teachers—influence career development. The terminal performance goals are:

1. To describe how the expectations of others affect one's career behaviour and plans.
2. To select from advice given by others that which one can productively utilize in planning one's career.

They provide a series of enabling objectives in which students:

1. Identify standards set by significant others and cite examples of how these may motivate behaviour.
2. List needs or motives which may influence advice given by other people.
3. Describe how significant others in their lives differ in their abilities, activities, aspirations, and values, and identify these characteristics on which they differ from these significant others.
4. Describe their own career aspirations, behaviour, abilities and values and relate these to the influence of significant others.
5. Identify the ways in which their career plans and behaviour affect significant others.
Exercises and activities accompany these objectives.

Steinman (1970) also has clear views on the role of significant others; particularly parents. For her:

Parental attitudes represent both a limitation and a direction for young women. . . . Every young woman must be helped to make an early start at assessing her own needs and measuring these needs in relation to the environment. (p. 32)

The potency of many family and parental variables in the career decisions of young women is clearly established in the present thesis. Another finding which has been bourne out consistently is the discrepancy between parental expectations for their children and the children's expectations for themselves. Counselling may minimize the anxieties which this can produce.

The area of testing in general, but vocational testing in particular, continues to be assailed. Tests have been criticized for their inherent biases, especially those related to sex, race and class.

Harway and Austin (1977) are concerned that the refining of tests and career guidance materials may be slow in coming and suggested that

in the interim, it is the counselors' responsibility to raise questions about every tool they use, whether it be an interest inventory, a career brochure, a college catalogue or the OOH.* They must ask whether the information or the test reflects stereotypic roles for men and women, and whether the materials tend to close certain career options for either sex. They must take steps to counteract the stereotypic assumption of any materials. The counselor and the client must confront and explore sex-role biases as they emerge in counselling sessions and pursue avenues that are broadening rather than binding. (p. 95)

*Occupational Outlook Handbook.
Dewey (1974), recognizing the sex-role stereotyping in vocational tests, developed a vocational technique called Non-Sexist Vocational Card Sort (NSVCS) for use in counselling both men and women. The NSVCS provides a process-oriented tool that gives a wider range of vocational choices to both sexes. She contends:

It makes more sense to base our counselling on the individual than to base it on sex or other differences of birth, such as race, religion, etc. Individual differences of many kinds are so striking that they outweigh any sort of group differences. I do not mean to suggest that men and women are the same, only that we need to break down the classic stereotypes, the cliches, and the generalities about sex differences in order to give any 'true' differences a chance to emerge. (p. 311)

Her claim is that the NSVCS is less sexist than traditional approaches because (a) the same vocational alternatives are offered to both men and women, (b) the gender of the occupational titles have been neutralized and (c) the process orientation of the technique allows the counsellor and client to confront and work through sex role biases as they become evident in the counselling relationship.

The format of the NSVCS is as follows: Seventy-six occupations or occupational categories are combined from the male and female forms of the Strong Vocational Interest Blank and the male forms of the Kuder Occupational Interest Survey (Form DD). These are typed on 3x5 cards and coded according to Holland's (1966) six personality types in order that conclusions about the nature of the clients' choices can be described. These occupations are representative of an extensive range of vocational values, and occupational titles are neutralized. The reverse side of each card summarizes the primary
job duties and responsibilities according to descriptions from the

In addition to the 76 cards there are three 4x6 cards on which
are written "Would not choose," "In question" and "Might choose."
Clients are asked to sort the 70 cards in three piles. All materials
are then removed except the "Wound not choose" pile which the client
is asked to group into piles based on similarity of reason for not
choosing. Reasons for groupings are then explored. Cards in the
"Might choose" group are considered next, as the client is asked to
rank order ten occupations in this group.

During the process, the counsellor notes how the client goes about
the task, observes reactions, and tries to find out if self-assessment
is based on past experience or her own evaluations of her talents. The
counsellor is also able to perceive how the client views certain
occupations and is, therefore, able to confront and work through sex
role bias. This technique is particularly useful with women in view of
the sex-role conflicts they experience and the fact that this technique
is tailored to unique needs, with no reliance on computer printouts.

The NSVCS seems particularly relevant to the research findings
of this thesis. The majority of the research subjects have indicated
that they did not have a knowledge of occupations that is adequate to
arrive at an informed choice. It may also be useful because of its
potential to confront reasons for the discrepancy between aspirations
and expectations in terms of the types of careers. Many Ontario girls
persistently aspired to be architects, lawyers or doctors but expected
to become interior decorators, legal secretaries or nurses respectively. A process-oriented technique, such as the NSVCS may prove useful.

It is also necessary to address oneself to counsellor education institutions and guidance personnel in general. The training and performance of counsellors are criticized so vehemently in the literature that one wonders if the superb job that many counsellors do in guiding young people and helping them to make well-informed career choices, or facilitating their life adjustment, self understanding and role clarification, will ever be recognized. Despite the fact that there are many excellent counsellors who have developed great self awareness and a consciousness of the impact of their personal characteristics, such as values, attitudes, and expectations on the counselling relationship, there are many others who continue to disregard societal changes and who do not adjust their attitudes, assumptions and strategies accordingly. Margaret Mead once suggested that Counselling based on absolute assumptions is routine at best; and at worst, it is dangerous.

The literature review of Ganschow et al. (1973), reveals that there are certain weaknesses in the training of the typical counsellor in Career Education which relate to:

1. The shortness and diffuseness of training, the lack of preparation in group guidance skills, and in the use of research findings.

2. The specific deficiencies in skills related to the counselling of women, the non-college-bound students and the lack of background information about work, educational opportunities and occupations which would represent alternatives to students,
and

3. The general lack of awareness of the world of work and its demands on individuals.

The following recommendations emerged.

1. Pre-service training should concentrate on developing skills to facilitate students' outcomes which need to be identified.

2. Counsellor certification should be standardized and revised. Counsellors should be required to demonstrate their competencies. Certification requirements that cannot be shown to relate directly to counselling should be abolished, for example, teacher creditation and experience.

3. Counsellors should be provided with adequate support personnel, whose responsibilities could range from clerical and administrative tasks to certain aspects of counselling. Counsellors would then be able to concentrate on counselling and the supervision of the support staff.

4. Arrangements should be made for students to have:
   a) Short-term work experience in a variety of occupational settings and counselling experience in non-school settings.
   b) Field experience in utilizing community resources.
   c) Experience in conducting follow-up studies and community occupational surveys.
   d) Visitations to post-high school training facilities.
   e) Experience in utilizing various types of data and the media to aid counsellees in vocational decision-making. This could include computer-based counselling systems.

Colby's (1976) module is directed at guidance personnel and staff development. This is a six-hour workshop run by a coordinator. The module is for use with girls in Grades 7 to 12 and aimed at non-biased career guidance. She defines 'career' as overall lifestyle, including education, work, leisure, marriage and family. After completing the module, guidance personnel (which includes counsellors, teachers,
administrators, directors of guidance, graduate and undergraduate students, participants in preservice and in-service training programs and others planning to be responsible for providing career guidance to junior and senior high school students), will be able to:

1. Describe at least one personal bias, myth or sex-role stereotype related to career options for women and its possible effects on the career guidance they provide in counselling females.

2. Develop a problem-solving game for use with young women which involves elements of values clarification, decision-making, goal setting, risk taking and predicting outcomes.

3. Design a career options exploration strategy for use with young women in their settings.

A problem-solving game used in this workshop is entitled, "When I Grow Up I'm Going to be Married." It was developed by the California Commission on the Status of Women and illustrates how time and circumstances affect women. This module would be very effective in Professional Development days with teachers.

One of her many recommendations is the infusion of a women's studies course into the regular school curriculum. Her concern that young women must be prepared to handle multiple life roles, whether simultaneously or sequentially, is amplified by the following concerns and statistics:

1. Childbearing patterns have changed. Earlier marriages and fewer children mean that the average mother of today has at least forty years of life after her youngest child is in school.

2. Nine out of 10 women will marry.

3. Eight out of 10 will have children
4. Nine out of 10 will be employed outside their homes for some period of their lives.

5. At least six out of 10 will work full time outside their homes for 30 years or more.

6. More than 1 in 10 will be widowed before the age of 50.

7. At least three in 10 will be divorced.

8. Four in 10 will be heads of families.

9. Most young women do not plan to go to college.

10. Most young women do not see themselves as achievers and problem solvers.

11. Most young women are not trained to deal with many of the realities that they will face.

Also in this module, provisions are made to prepare participants to present reasons to parents and administrators in their settings and to enlist their support for implementing career options exploration strategies for young women. They are encouraged to have files of local married and single women who are willing to meet girls on a one-to-one basis, or panels of women in non-traditional jobs, or who have successfully combined the roles of wife, mother, and career woman, or women who have made marriage and childbearing their primary focus. These women would be asked to discuss the highlights and frustrations of these choices.

Participants would also be encouraged to establish community-wide, exploratory work experiences for girls, including non-traditional areas. If these experiences are integrated into the school curriculum, course credits could be given to young women, depending on their fulfillment of certain requirements such as evaluations of their work experiences.
They could also develop a group of occupational information specialists among young women themselves who can promote career options awareness among their peers. It is her view that peer counselling can be further used to reinforce feelings of achievement and self-worth in each member. Participants are also challenged to develop a resource center containing books, magazines, games, films and other materials particularly useful in the career exploration of young women.

Kennedy (1974) also offers practical suggestions to superintendents, principals, supervisors, teachers and guidance counsellors for implementing Career Education in the school system. She advocates the merging of occupational information and training with the regular school curriculum. Her rationale is that, in school systems where Career Education was systematically tried, average daily attendance increased and drop-out rate decreased. An explanation of these findings is that Career Education made other subject matter more relevant to students in a real-life sense.

Kennedy encourages the utilization of community resources in the areas of (a) the home, (b) business and labour, (c) elected officials and public agencies and (d) school personnel. Concerning the home and parents, she makes the following suggestions:

1. Allow students credit for time spent with parents on-the-job.

2. Use parents as resource persons for speeches, interviews and other activities in the classroom.
3. Use parents as contacts with the business community.

4. Use the parents in the classroom as paraprofessionals.

5. Use elder family members who have one or more careers behind them and who are skilled in various crafts that are in short supply.

Kennedy claims that no group stands to benefit from Career Education as much as does business and labour. In addition to providing information concerning their needs, they would:

1. Provide free and/or inexpensive written material for use in building an occupational library.

2. Pick up where the classroom leaves off in providing sources for field trips, prolonged observation and "shadowing."

3. Provide locations for work experience and on-the-job training.

4. Provide personnel for interviews and speeches.

5. Provide a means for Career teachers to gain first-hand work experience outside the field of education on an exchange basis.

Elected officials may serve various functions:

1. They may be representatives of occupational clusters.

2. They may be speakers and suppliers of information on careers.

3. They (and their places of work) may be ideal for "shadowing" and for field trips, respectively.

Suggestions for making use of resources available in the schools themselves include the following:

1. Conduct surveys and build files on previous occupations, part-time work, hobbies and special interests of all personnel, including students.

2. If mini-courses are taught, assign teachers according to the above files, in addition to their subject area competency.
3. Use upper level students, who have held part-time jobs as resource persons.

4. Use vocational schools, shops and classes for field trips and/or small group exploration for lower level students.

5. Use school personnel other than teachers as resources for speeches, interviews, shadowing and on-the-job experience.

Of course it is necessary to keep up-to-date files of community resources, on available personnel, materials and locations.

Another important consideration in Career Education is that to be effective, such programs must begin as early as possible. In fact, many Career Educators feel that the process should begin in the kindergarten classroom.

Ryan (1972) discusses the increasing disillusionment with traditional school practices, as the relationship between learning and earning has not been clearly demonstrated for the majority of youth and their parents. Ryan developed a guide to help teachers of Grades 1-6 implement Career Education in their schools. It offers sample lesson plans applicable for incorporation in language arts, social studies, mathematics, science and physical education programs and also shows how each subject area relates to the world of work. The goals of the program are (a) to help children evaluate their abilities, (b) to provide realistic or "hands on" experience which bring children in contact with the real world and (c) to help each child implement his decisions and to accept responsibility for them. Ryan strongly urges teachers to radiate a very positive attitude while exposing students to a variety of career opportunities in all areas of work, specifically those of the "blue collar" nature.
Listed below are some of the many interesting activities he suggests for Grades 1 to 3 in the area of social studies.

1. Have each child make a "what I would like to be" notebook.

2. Have each child photograph his own parents at work and share ideas and feelings about the work they do.

3. Plan a bulletin board; each child decides what he or she does best. Photographs can be taken and this could be presented to parents on an "Open House."

4. Assign jobs each week to each student, who will simulate being in different work roles.

5. Make a chart with pockets with a title "Our work is done - let's have some fun." Each pocket will contain suggestion slips for activities to help children use their free time wisely.

6. Encourage students to write stories, poems, riddles, about workers on jobs, and to make lists of "good worker" rules.

7. Discuss the importance of being on time and role play a scene in which workers arrive late.

8. Discuss (by using pictures, photographs) differences between work and play.

9. Have students make a collage of people at work.

10. Observe the neighbourhood at work and identify various occupations.

11. Draw pictures of animals doing work, for example, discuss why beavers or birds work.

12. Study an ant colony and how work is assigned within the colony. Embellish this exercise by role playing.

13. Encourage the writing of stories, for example, one entitled "Who am I?" for the class to guess.

14. Write stories on a boy or girl who never went to school and the problems he or she faced.
15. Construct a worker chain of the jobs in the school. Have students develop other worker chains to understand the interdependence of workers.

16. Have parents demonstrate their particular job-related skills.

17. Play games such as "What's my line," or "Discrimination Day" in which the class is divided into "blue eyes, brown eyes and green eyes." This game may be used to help children understand prejudice and also to foster an understanding of group interdependence and cooperation. Such a game, however, must be followed by a discussion of feelings, what was learned and such "debriefing" techniques which constitute an integral aspect of any simulation exercise.

Kennedy (1974) also provides handbooks for teachers involved in Career Education at the K-6 level, specifically those who may be unfamiliar with Career Education concepts.

The five documents are entitled:

1. Comprehensive Education

2. Implementing Career Education - Procedures and Techniques

3. Career Awareness - Suggestions for Teachers

4. Career Exploration - Suggestions for Teachers

5. Career Preparation - Suggestions for Teachers

She divides Career Education into five phases:

1. The awareness phase, which is emphasized primarily in grades K-6, and which helps children to become aware of the values of a work-oriented society.

2. The orientation phase provides educational experiences which helps students to become familiar with the economic system. This is emphasized in Grades 7 and 8.

3. The exploration phase enables students to explore various occupational clusters, to obtain initial work experience and to integrate work values into their personal value systems. This is applicable in the Grades 7-10 range.
4. The preparation phase encourages a narrow choice of careers and prepares students to enter the labour force or to continue their education and later enter the labour force at a different level of employment. This begins at the Grade 10 level and continues to the end of high school, post secondary education or the post graduate level.

5. The adult and continuing education phase enables individual advancement and aids in the discovery, analysis and preparation for new careers.

Ryan and Kennedy have provided very comprehensive guides for use at the K-6 level. They include the majority of the important elements and skills to be acquired at this level. An important point is the inclusion of activities which would help children learn to use leisure constructively. It is important that students understand the interrelationship between work and leisure. In fact McDaniel (1974) believes that the concepts cannot be separated from the career development process. From a review of literature, he offers many definitions of this concept which all converge on the notions that (a) leisure refers to both time or an activity, (b) no pay results from the activity, (c) one engages in leisure activities by choice, when one is free from activities required for existence and subsistence, and (d) the activity is carried out for its own sake and is not motivated by the end product of the behaviour. A very provocative point that he makes is that traditionally, leisure has been set up in opposition to work, but it is necessary to conceptualize leisure as being fundamentally complementary to work.

With the advancement of technology, it is necessary for people in general, and women in particular, to learn to use their "free" time productively and for their enjoyment. The availability of labour-saving
devices in the home and the fact that mothers bear fewer children provide homemakers with more time for themselves.

The final curriculum models to be discussed are one of a series developed by Klaurens, Hansen and Tennyson (1972), and another by Antholz, Hansen, Klaurens and Tennyson (1972). Both are for use at the high school level. The major objective of the former model is to help students identify their individual needs and the occupations in which these needs will be satisfied. Specific objectives are:

1. To study the theory of work adjustment and to apply the theory to themselves and their present activities.

2. To study workers in their preferred occupations and to assess their satisfactions and dissatisfactions.

3. To compare immediate rewards with long term rewards in general occupational fields.

Some of the activities include:

1. Field interviewing of workers to list the sources of satisfaction and dissatisfaction of workers. These observations may lead to film productions.

2. Using the "want ads" in the newspapers to identify job opportunities and trends.

They include appendices on various dimensions of vocational needs, and criteria for the evaluation of job opportunities.

The latter model includes numerous suggestions of activities to help students:

1. Understand how one may contribute to society through work.

2. Describe the contribution of a wide range of occupations to society.

3. Describe how one's career may be a means of effecting social change.
Two other objectives are politically oriented:

1. To help students provide examples of ways in which business and labour organizations operate on the principle of private interest versus social responsibility.

2. To describe how work may help to overcome the social problems threatening mankind.

Summary

This appendix attempted to address both general and specific areas of Career Education, particularly those which would provide ameliorate measures for some of the findings of this thesis. The models and recommendations suggested can cater to many of the career-related needs of students. The themes discussed all constitute and integral part of a Career Education program, particularly one which is directed at females.

Curriculum models are included which defined Career Education and outlined the major components of an integrated program in this area. Many of these models have been field-tested on young girls and have been successful in changing attitudes and instilling new aspirations and expectations. More specifically, these programs can assist students in (a) confronting their sex-role beliefs, (b) recognizing the effects of sex-role stereotyping, (c) choosing non-traditional careers, (d) understanding the meaning of a career particularly in the lives of women, (e) understand process, (f) clarifying their values, and (g) achieving greater self-awareness. There were also curriculum models which addressed the concerns of minority women and the students who are not planning to attend university. Examples of women's studies courses for young
girls are also included.

It was the concern of the present investigator that researchers too often make recommendations which lack specific ideas on implementation. Many practitioners want to know more than simply what the findings and recommendations are — they want to have an understanding of how to deal with the recommendations in a pragmatic way. This appendix was an attempt to extend the thesis process so that ideas on implementing suggestions may be readily available to the teacher or the counsellor who is interested in the career education of young women.
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