Factors Related to Career Motivation Among Female Adolescents

by-

Valerie L. Holms

A thesis
presented to the University of Manitoba
in partial fulfillment of the
requirements for the degree of
Master's of Arts
in
Department of Psychology

Winnipeg, Manitoba

(c) Valerie L. Holms, 1985

FACTORS RELATED TO CAREER MOTIVATION AMONG FEMALE ADOLESCENTS

BY

VALERIE L. HOLMS

A thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of

MASTER OF ARTS



Permission has been granted to the LIBRARY OF THE UNIVER-SITY OF MANITOBA to lend or sell copies of this thesis, to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film, and UNIVERSITY MICROFILMS to publish an abstract of this thesis.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

ABSTRACT

Most young women today can expect to spend an average of 30 years in the paid labour force. Since the necessity of a number of years of economic self-support is a reality for almost every woman, it is important to investigate variables which affect female life planning. The purpose of the present study was to examine the impact of several psychological and social variables on the career motivation of female adolescents. According to the first hypothesis, the set of independent variables including grade level, gender identity, academic performance, socioeconomic status, attitudes toward women, and knowledge of women and work account for a significant amount of the variance in the four dependent measures utilized to assess career motivation (career commitment, occupational aspirations, educational aspirations and vocational certainty). Since research and theoretical literature suggest that conflict may exist between the desire for a career and the desire to marry and raise a family, a second hypothesis stated that a significant interaction exists between career commitment and marriage/family commitment in predicting vocational certainty. Subjects in the high career-high marriage/family commitment category were expected to demonstrate significantly higher vocational uncertainty than subjects in the three other groups (high career-low marriage/family commitment, low career-high marriage/family commitment, low career-low marriage/family commitment). male students from each of three grade levels (eight, ten, and twelve) and a wide range of socioeconomic backgrounds were asked to respond to a ten-page questionnaire. The association between the seven independent variables and the four dependent measures was tested for significance using a canonical correlation analysis. A 2 (high-low marriage/family commitment) X 2 (high-low career commitment) analysis of variance was used to test the second hypothesis. nificant canonical correlations together accounting for 34% of the variance were generated. The first pair of canonical variates indicated that those young women with higher educational aspirations and higher career commitment also tended to have better grades in school (higher academic performance), more liberal attitudes toward women, and a masculineandrogynous gender identity. The second significant canonical correlation suggested that a combination of career commitment and lower educational aspirations corresponded to higher marriage/family commitment, lower socioeconomic status and higher grade level. No significant interaction between marriage/family commitment and career commitment was found. The study highlights the importance of studying the impact of psychological variables on career motivation as well as the importance of examining career and family commitment independently.

ACKNOWLEDGEMENTS

I'd first like to express my gratitude to Dr. Lillian Esses for her continued support and encouragement, and for her invaluable contributions throughout all stages of this project. Her constant enthusiasm and interest gave me the added motivation I so often needed.

To Dr. Altemeyer and Dr. Henjum, I wish to express my appreciation for their valuable input into the design and writing of this thesis.

I'd like to sincerely thank Marcy Pollock for contributing so much of her expertise to the statistical analyses required in this project.

To my family, I wish to extend my thanks for their guidance, encouragement, and confidence in my abilities.

Thanks David, for helping me to keep smiling.

LIST OF TABLES

<u>Tal</u>	<u>ble</u>	page
1.	Reliability Estimates for Multiple-Item	
	Scales	.42
2.	Intercorrelations Between Measures	.44
3.	Descriptive Statistics for Career Motivation	
	and Social-Psychological Variables	.46
4.	Canonical Correlation, Canonical R-Squared,	
	and Tests of Significance for Career	
	Motivation and Social-Psychological	
	Variables	.47
5.	Standardized Canonical Coefficients for	
	Career Motivation and Social-	
	Psychological Variables	.49
6.	2X2 Analysis of Variance (high-low career	
	commitment X high-low marriage/family	
	commitment in relation to vocational	
	certainty)	.51

TABLE OF CONTENTS

ABSTRACT												
ACKNOWLEDGEMENTS												
LIST OF TABLES	i											
page												
INTRODUCTION												
The Importance of Career Education in												
Adolescence 4												
Identity Formation and Career Development 5												
Female Career Development 9												
Perceived Marriage/Family and Career												
Incompatibility												
Methodological Issues												
Socioeconomic Status and Academic Performance18												
Grade Level												
Gender Identity												
Knowledge of Women and Work												
Attitudes Toward Women												
Marriage/Family Commitment												
Present Study												
METHOD												
Subjects												
Materials												
Career Commitment Scale												
Personal Attributes Questionnaire												

	Att	itu	de	S	То	wa	arc	l V	vou	ner	S	ca	le	•	•	•	•	•	•	•	•	٠	.36
	Kno	wle	dg	e	of	V	Vоп	ner	ì a	nc	l W	lor	k	Sc	al	е.	•	•	•	•	•	•	.38
	Mar	ria	ge	/F	am	i]	Lу	Cc	mn	nit	me	nt	: 5	ca	16	•	•	•	•	•	•	•	.39
RES	SULTS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	.40
I	Demog:	rap	hi	С	Da	ta	a .	•	•	•	٠	•	•	٠	•	•	•	•	•	•	•	•	.40
1	Relia	bil	it	У	Αn	a]	Lys	sis	S .	•	•	•	•	•	•	•	٠	•	•	•	•	•	.41
I	lypot]	hes	is	0	ne	•		•	•	•	•	•	•	•	•	•	•	٠		•	٠	•	.43
F	lypot	hes	is	Т	wo	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	.50
DIS	scuss	ION		•	•	•	٠	•	•	•	•	•	•	•	•	•	•	٠	•	•		•	.53
3	Impli	cat	io	ns	f	or	: F	'ut	ur	e	Re	se	ar	ch	١.	•	•	•	•	•	•	•	.62
I	Pract	ica	1	Ιm	pl	ic	at	ic	ns	S .	•	•	•	•	•	•	•	•	•	•	•	•	.64
REI	FEREN	CES	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	٠	•	.66
API	PENDI	CES	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	.82
I	Paren	tal	P	er	mi	SS	sic	n	Le	ett	er	•	•	•	•	•	•	•	•	•	•	•	.83
ζ	Quest	ion	na	ir	е		•	•	•	•		٠		•				•			•		.85

INTRODUCTION

In recent years more and more emphasis has been placed on the importance of a career in a woman's life. Current societal trends indicate that most women will have to be financially self-supporting at some point in their adult lives. Recent research, however, indicates that many young women still adhere to traditional stereotypes by expecting to be primarily wives and mothers (e.g., Komorovsky, 1973; Tangri, 1972).

Many theorists and researchers studying female career development believe that traditional gender-role expectations have an impact on women's adoption of childrearing and homemaking duties as their primary responsibility (e.g. Bernard, 1974; Caplow, 1954; Finegan, 1975; Hare-Mustin & Broderick, 1979; Polacheck, 1975; Russo, 1976; Sweet, 1973). For exambelieved the socialization process Bernard (1974) ple, teaches that motherhood is a woman's major source of fullfillment. Russo (1976) added that the "motherhood mandate", or the view that a woman's major goal in life is to raise children, influences women's life plans. Thus, traditional gender-role norms place childrearing and homemaking first while pursuit of a career is viewed as secondary or optional (Danziger, 1983).

Hock, Gnezda and McBride (1984) have provided research evidence to support the view that women with children view their mothering role as primary. They recently studied attitudes toward motherhood and employment among a sample of 317 mothers. The majority of the women surveyed supported the view that they alone could meet the needs of their children, and if possible, would rather stay home with their children than be employed full-time.

These attitudes extend to younger age groups as well. For example, Kenkel and Gage (1983) have demonstrated that some young women see homemaker as their only desired role. In their longitudinal study of 1503 girls from low income families in grades five and six and again in grades 11 and 12, 12% answered "housewife" to the question "If you could choose any job you wanted, what kind of job would you really like to have in the future?" and 24% checked "housewife only" as their second choice. They reported that girls in the entire sample typically aspired to feminine occupations within a narrow range of choices and family responsibilities were often seen to be of primary concern. Thus, traditional attitudes toward women's primary role being in the home continue to be held despite the fact that today 51.6% of all women are in the labour force (Statistics Canada, 1982) and this figure is expected to increase to between 65% and 70% by the year 2000 (Ciuriak & Sims, 1980).

The norm that a young woman marry and become economically dependent on her husband is no longer viable for a number of social and economic reasons. First, a rising divorce rate is increasing the number of single-parent woman-headed house-Approximately one half of all 1980's marriages in holds. Canada will end in divorce (Saskatchewan Advanced Education and Manpower, 1984). One in ten Canadian families is a single-parent woman-headed household and 50% of all female sole-support families are living below poverty level (Statistics Canada, 1985). Secondly, economic necessity is the major incentive for women to work outside the home. statistics show that 51% of all two-parent families would fall under the poverty line if the wife stopped working (Canadian Advisory Council on the Status of Women (CACSW), 1983). A third reason relates to the long life-span of women which may lead to financial insecurity in widowhood. According to Canadian statistics the average life expectancy for a woman is 79 years (Saskatchewan Advanced Education and Manpower, 1984). Approximately two out of three women over the age of 65 live in poverty (Statistics Canada, 1985). Finally, fertility control added to the longer life-span leaves 40 years free from child care. The average woman in Canada can expect to be in the labour force for approximately 30 years (Saskatchewan Advanced Education and Manpower, Thus, failure to encourage women's occupational independence may result in women having difficulty coping with life circumstances.

With impetus from the women's movement, women of all ages are being encouraged to explore new lifestyle options and seek fullfillment through careers. For the purposes of this study, "career" has been defined as involvement in the paid labour force.

In order to assist young women in effectively planning for future roles adequate career education and guidance are required.

The Importance of Career Education in Adolescence

Critical choices must be made in grades nine and ten regarding courses and prerequisites for further education and training. Thus, realistic planning is very important at this time in a young woman's life. Since most high school programs demand that students begin to specialize and narrow their options by grade 10, counselling in grade eight and grade nine is important (Herr & Cramer, 1984).

The need for career information and guidance becomes evident in studies carried out by Prediger, Roth, and Noeth (1973), and Glaze (1980). The career development of 28,298 students in grades 8, 9, and 11 was examined by Prediger et. al. (1973). Results indicated that over three quarters of grade 8 and 11 students expressed a desire for assistance in career planning. Making career plans was the major reported area of need, and over half of eighth and eleventh graders

stated that they had, so far, received little or no help in career planning. Over 40% of students in grade 11 were uncertain about whether their educational plans were consistent with the occupations they were considering. Glaze (1980) found in a study of grade 11-13 females that over half the young women felt they did not know enough about the occupations available to them to make a well-informed career choice.

A description of female identity formation and career development is necessary to understand the process by which women prepare for future roles. The following section examines identity formation and its relationship to the career planning process.

Identity Formation and Career Development

A number of pioneers in the field of career development (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Holland, 1959; Roe, 1956; Super, 1951) have pointed out the intimate relationship between identity formation and vocational choice. They define vocational behaviour as "a developmental process whereby a person makes vocational decisions that are congruent with his or her self concept or personal orientation" (Astin & Myint, 1971, p.370). Final choices are made after interests, capacities and opportunities are weighed. Thus, based on a series of decisions made over a number of years, ideal choices are replaced by realistic alternatives and a

self concept or identity related to occupational choice is developed.

Erik Erickson (1950) was one of the first theorists to emphasize the importance of the adolescent stage of development in the formation of identity. According to Erickson, the major challenge during adolescence is the development of one's own identity as an adult. This occurs primarily through the choice of and commitment to an occupation or life role.

However, the set of normative expectations regarding women's adult lives seem to interfere in the career development process for women. There may not be the same opportupersonal ability and interests nity to match occupation when marriage and motherhood are placed first and encouraged (Ginzberg, Berg, Brown, Herma, Yohalem, & Gorelick, 1966; Oppenheimer, 1968). Hyde and Rosenberg (1980) have described this lack of congruence in female identity formation in terms of "personal" identity and "vested" identity. Personal identity refers to one's sense of identity as a unique individual and incorporates those behaviours and activities intrinsically rewarding to that individual. Vested identity is defined as those behaviours and activities for which one receives extrinsic rewards (behaviours expected by society). According to these authors, matching of personal and vested identities which occurs mainly through occupational choice is critical to identity formation. Thus, for a boy, those things that are extrinsically rewarding may also be intrinsically rewarding. However, for a girl, the vested identity in adulthood is that of housewife/mother since it is normative or expected. Wide ranges of characteristics which exist in growing girls are often neglected and Hyde and Rosenberg point out that a girl may often be encouraged to choose a vested identity incongruent with her personal identity. Thus, acquiring a self-concept through career choice for women seems to be complicated by a conflict between the role demands of wife/mother and of worker.

Many theorists have speculated that development of a self-concept for women is delayed since occupational decision making is also delayed (Angrist, 1969; Ginzberg, Ginsburg, Axelrad & Herma, 1966; Osipow, 1975). For example, Angrist (1969) hypothesized that while boys in late adolescence are striving to develop an adult identity, girls postpone their identity formation in order to adapt themselves to their future husbands. She described this as contingency training in which women prepare for anticipated and unanticipated contingencies by being flexible. These may include the unknown qualities of a husband, of a family, and of when to work in relation to familial demands. Angrist expressed the belief that women often prepare themselves for jobs as "something to fall back on" in case of widowhood or divorce.

In their study of over 800 girls in grades seven to twelve, Rapoza and Blocher (1976) found that approximately one in every four girls was unable to report an educational or vocational plan. They referred to girls' lack of career planning as the "Cinderella effect" or "waiting for the magic slipper." This is a lack of planning based on the idea that these girls may have been waiting to be chosen by a husband and then have their lives decided for them. The authors viewed this pattern of thinking as costly and self-defeating, given the reality that so many women will need to be in the work force.

McGuigan (1980) reported retrospective research data indicating that women 20 to 40 years ago were preparing for adulthood by romantically anticipating whom they would marry. In this study of women aged 35 to 55, the only task viewed as significant in young adulthood was creating a relationship of love which was chosen as most important significantly more often than (a) constructing a dream, (b) forming an occupational aspiration, and (c) finding and relating to a mentor. In a 1973 study, Parelius found that young women with nontraditional aspirations believed that men would not want them as marriage partners.

An investigation of young women's current life plans is required. The limitations of theoretical literature in the area of female career development are outlined in the next section.

Female Career Development

Many existing theories of career development have been unable to adequately explain vocational behaviour in women (Patterson, 1973; Super & Bohn, 1970). Early theories of career development were based solely on studies using male samples (e.g., Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Holland, 1966; Rosenberg, 1957). Thus, the career patterns of men are much better understood. Osipow (1975) speculated that any generalization regarding women's career development is quickly outdated since the role of women continues to change rapidly. Women appear to be a more heterogeneous group than men in terms of life-career patterns. Their career development is governed by combinations of practical demands, attitudes, and wife/mother/homemaker role expectations.

Early attempts to construct separate theories of career development for females focused on the salience of the homemaker role in the lives of women and the dependence of the career role on the homemaker role (Karpicke, 1980). For example, Psathas (1968) postulated that factors which influence women's occupational choice are mediated by aspects of the sex role such as intention to marry, time of marriage, reasons for marrying, husbands' economic situation, and husbands' attitude toward his wife working. Psathas discussed women's decision-making as being dependent upon the acquiring of skills and qualities necessary to attract a mate.

Zytowski (1969) proposed nine postulates to characterize the differences in the work life of men and women. One of these postulates stated that vocational and homemaker participation are mutually exclusive and vocational participation means a departure from the homemaker role.

Super(1957) viewed the range of possible roles for women in terms of the level of career involvement. A woman's role choice was conceptualized according to a single continuum wherein the career role was at one end while the homemaking role was at the other.

The few scales that have recently been designed to measure family and career commitment also appear to have been based on the a priori assumption that homemaking commitment and career commitment exist along a unidimensional continuum (e.g., Lifestyles for Women Scale, Burns, 1974; Homemaking Commitment Scale, Farmer, 1980; Matthews Attitudes Toward Career and Marriage Scale, Matthews, 1960). The assumption is that homemaking or family commitment and career commitment are opposites; the more committed a person is to a career, the less committed they are to home and family. earlier studies, negative correlations between homemaking and career commitment seem to have been found by virtue of the way in which the scales had been constructed. which separates career commitment from family commitment and recognizes them as independent dimensions although not necessarily mutually exclusive is needed in order to identify women with high commitment to both family and career.

By measuring marriage/family commitment and career commitment separately, perceived conflicts between career goals and the wife/mother role may be examined empirically. Recent literature examining the potential conflict between marriage/family and a career is outlined in the next section.

Perceived Marriage/Family and Career Incompatibility

For the female adolescent, much uncertainty and identity confusion may occur around the pursuit of a career and the expectations of marriage and motherhood. The anticipation of a dual role may suggest to women that they choose an occupation compatible with their domestic and childcare duties (Kenkel & Gage, 1983). For example, they may choose teacher, nurse, or secretary since these are seen as having high turnover rates which allow them to move in and out of the job market in keeping with family responsibilities. has been demonstrated by Lighter, Tetenbaum, and Travis' (1981) study of the career orientation of grade 11 and 12 females. Young women in this study were most likely to pursue career patterns wherein they could leave the labour force to have children, then return to part-time when the children reached kindergarten or full-time when children reached elementary grades.

Scarf (1980, cited in Okun, 1984) has recently pointed out the double messages young women of today receive. They

are encouraged by the family and society in general to succeed in a masculine, work-oriented world and to remain feminine, nurturing, and adaptive in order to marry and have children. Richardson (1979) adds that the traditional role of mother and homemaker may be devalued by placing too strong an emphasis on career goals.

Conflicts between the expectations of the traditional female role and occupational aspirations were examined in an earlier study by Douvan and Adelson (1966). These researchers examined the realistic expectations as well as the fantasy aspirations of adolescent girls and boys. While boys' realistic expectations closely corresponded to their fantasy aspirations, girls had much less congruence between their reality and fantasy conceptions. Girls stressed occupational and educational planning in their expectations. In their fantasies, girls expressed concerns about personal attractiveness, popularity, and marriageability. This dissassociation between fantasy and realistic planning was used as an indication of the ambiguity in the female role and the conflict between traditional marriage/parenthood expectations and a commitment to work.

Matthews and Tiedeman (1964) studied the attitudes related to a decline in girls' career commitment from junior high to college. Themes seeming to affect young women's lifestyles all reflected an inherent conflict between career commitment and the traditional female role. These included:

(a) the assumed negative reactions on the part of men to the use of a woman's intelligence, (b) acceptance of the dominant position of working men and women's place in the home, (c) demands of family and work and potential conflicts between the two leaving less time for the roles of wife and mother, (d) conflicts in timing such that dating and marriage interfere with career preparation, and (e) uncertainty about what a woman's role should be.

More evidence for lowered aspirations comes from Harmon (1971) who found that women perceived their adolescent vocational choices as shifting from more demanding, atypical occupations to more typical female occupations. As well, low percentages of gifted girls aspiring to full-time careers sparked the suggestion that gifted girls may decide against an occupation which would require great commitment and would detract from family responsibilities (Fox, Brody, and Tobin, 1979, cited in Kerr, 1983).

Astin and Myint (1971), in a study of 5,387 women five years after high school, found 12th grade traditional career choices to be highly predictive of career choices 5 years later. Yet, nontraditional professional or scientific careers were often channelled to more traditional jobs in later years. That is, women aspiring to teaching, health fields, office work, the arts, and homemaking more often indicated similar preferences five years later while women originally aspiring to professions or business careers

shifted toward more traditional choices such as teacher, secretary, and housewife. Burlin (1976) also studied the occupational aspirations of adolescent females and found that many girls preferred male dominated careers but actually expected to end up in female dominated occupations. Burlin interpreted this finding as evidence of a perception among young women of incompatibility between professional careers and marriage and a family.

Card, Steele, and Abeles (1980) found a large gap for females between aspirations for education and careers their actual attainment 11 years after graduating from high school. The authors related this discrepancy to the greater responsibility taken by women as compared to men for homemaking and childrearing. Even though attitudes toward the traditional division of labour have begun to change, the actual division of home responsibilities has changed very lit-When a woman works, men in general do not spend sigtle. nificantly more time on household chores. A working mother may add to her 38 to 40 hours a week of paid work a minimum of 21 hours of housework (Pearson, 1979). Thus, when considering the practical demands placed on women by society, the perception of problems in combining a career with marriage and motherhood is realistic.

Berson (1977) studied the perceived costs of combining a career and motherhood among a sample of single and married women. She found significant differences between the two

groups in terms of their views of working. Married women with children perceived working as being more costly in terms of autonomy and leisure needs. A similar pattern was found between women whose mothers either worked full-time or were full-time housewives. Subjects did not differ on the valuing of these roles. Berson concluded that the perceived costs of combining a career and motherhood may play a major part in educational and vocational decision-making. Thus, these women have a clearer view of the advantages (feeling more independent, utilizing education) and the costs (less leisure time and less time with the children) when one works.

In order to provide an understanding of the difficulties involved in studying female career planning, the following section examines the methodological problems involved in research of this nature.

Methodological Issues

As Osipow (1975) has pointed out, the study of women's career development is made difficult by the rapidly changing times. During the 1970's, dual-career couples became a reality (Farmer, 1983). Today, the majority of women work outside the home and the number of women in the labour force continues to increase each year (Statistics Canada, 1982). Thus, studies done in this area need to be continually updated in order to have relevance to female career planning.

In studying the career motivation of young women, the investigator is faced with choosing from a multitude of potential predictors. These may include personal factors such as academic achievement and self-esteem, family backgound factors such as birth order and parental encouragement, and environmental factors such as urban-rural location and social origin. With limited sample sizes, the inclusion of a large number of variables becomes a statistical problem. Thus, many researchers must forfeit attempts to account for most of the variance in explaining career motivation by carefully selecting those variables which will add to or clarify existing literature.

A major methodological problem exists in the selection of variables to measure career motivation. Currently, no widely accepted definition of career motivation or career commitment exists. Thus, in previous studies, a number of indicators of career motivation have been included separately or in various combinations and questions or scales used to assess each have usually been quite different, leaving many research results incomparable. Those indicators most often chosen include measures of career commitment and homemaking commitment, realistic occupational goals, fantasy career choices, educational plans, and traditional versus liberal occupational choices. The amount of overlap between the various indicators has not yet been determined.

Marini (1978) concluded, in her review of the literature on adolescents' educational and occupational aspirations, that standardized scales assessing the career and family plans of junior and senior high school women are required. Many measures which have been used with high school students are not comparable and report little or no reliability and validity data (e.g., Geller, 1984; Ligher et. al., 1981; Matthews & Tiedeman, 1964). Other scales have been developed using select samples, such as undergraduate student populations (e.g., Almquist-Angrist Index of Career Salience, Almquist & Angrist, 1970; Lifestyles for Women Scale, Burns, 1974; Career and Marriage Plans Questionnaire, Walker, 1974). More representative studies using well standardized scales are needed.

Very few studies to date have included psychological variables in their analysis of female career motivation. Factors such as attitudes toward women and gender identity appear worthy of investigation. This is especially apparent since many theorists base their explanations of female career behaviour on the impact of the socialization process and traditional gender-role expectations.

There has been a failure in past literature to examine marriage/family commitment and career commitment independently. This has resulted in a perpetuation of the belief that the two phenomena are inseparable. In order to empirically test this assumption, an investigation of how these two types of commitment are related is required.

A major goal of the present study was to focus on a number of variables affecting the career plans of high school women. The following sections summarize theory and research regarding the seven independent variables included in this study.

Socioeconomic Status and Academic Performance

Super and Bohn (1970) regard parental socioeconomic status as the starting point and major determinant of the career pattern. However, other variables such as academic performance become important as one's career unfolds.

Explanatory models for the aspirations of females have been found to differ from those of males. For example, social origin seems to have a greater influence on the aspirations of girls while boys' aspirations are predicted more by mental ability (Alexander & Eckland, 1974; Haller & Portes, 1973; Hout & Morgan, 1975; Rosen & Aneshensel, 1978; Sewell & Shah, 1967, 1968).

Danziger (1983) studied gender-related differences in educational and occupational aspirations among white 9th and 12th graders in the United States. She examined the effects of such intervening variables as school achievement, perceptions of academic ability, parental expectations, and the availability of employment opportunities on the relationship of mental ability and socioeconomic status to educational

and occupational aspirations. Danziger found that while educational aspirations were similar for male and female students, ability and school achievement were the main factors shaping these aspirations for males while female educational aspirations were more highly predicted by class related attitudes. Females from lower socioeconomic backgrounds had lower aspirations which were related to perceived constraints on opportunities and less parental encouragement. Mental ability and school achievement were weak predictors of girls' educational aspirations. School grades have a more direct influence on girls' occupational aspirations yet the effect of social origin remains high and is still a better predictor of female than male occupational goals. boys perceptions of what they can attain are highly correlated with academic ability and achievements while girls' perceptions are more strongly a function of social background. Danziger (1983) interprets these results to suggest that girls' perceptions of occupational opportunities may be affected more than boys' by parental attitudes and there may be a wider acceptance of achievement norms across social classes for males than for females.

In Astin and Myint's (1971) longitudinal study, scholastic aptitude and high educational aspirations were the best predictors of a career orientation among young women. Girls in high school who scored higher on scholastic aptitudes, especially on mathematical ability, and who planned to con-

tinue their education after high school, usually chose fields requiring a greater commitment. Although socioeconomic status was included as a variable in this study, Astin and Myint found it to have very little effect on the career orientation of high school girls. Even though this finding is directly contradictory to Danziger's, the two studies are not comparable. Danziger examined educational and occupational aspiration levels while Astin and Myint's definition of career orientation referred to the type of occupation aspired to. Occupations were classified along a continuum according to the amount of academic preparation or "career commitment" required.

Farmer (1981) has pointed out that while the effects of academic performance and socioeconomic status on career and educational aspirations have been examined, their relationships to career commitment has not yet been well documented.

<u>Grade Level</u>

In high school, girls consistently obtain better grades than boys (Coleman, 1961; Flanagan, Davis, Dailey, Shaycroft, Orr, Goldberg, & Neyman, 1964; Gordon, 1969; Lavin, 1965; Maccoby, 1966). However, high school girls appear to decline in personal aspirations. For example, Rapoza and Blocher (1978) found that girls educational and vocational plans were lower even if they put higher importance on grades and estimated their academic performance higher than

boys. Rapoza and Blocher (1978) suggested that these lowered aspirations correlate with a time when gender-identity is being established. They have speculated that influence from home, school, and peers create a reluctance to take on plans that threaten the feminine image. In many homes girls are taught not to compete and are encouraged to become nurturing and dependent. In school, educational materials often portray traditional gender roles, and math and science may not be encouraged. Many peers encourage girls to seek status through their appearance and sexual attractiveness. Popularity and dating become important and a girls' social status is often determined by her attractiveness while a males' value rests on achievement (Elder, 1969). Rapoza and Blocher believed that this passive manner of acquiring identity may lead to a lack of planfulness in career decisions.

Many other studies also document a decrease in occupational and educational aspirations in girls entering high school while boys aspirations increase (Cutright, 1960; Harmon, 1971; Hauser, 1971; Matthews & Tiedeman, 1964; McDill & Coleman, 1963). Explanations for this decrease include increased importance girls place on relationships and their futures as wives and mothers. An education and career may be regarded as less important for these roles while boys recognize education and an occupation as necessary for their role as provider and life-long member of the work force.

Olive (1973) has stated that high school girls seem to depress their own occupational potential. Olive studied the gender differences in vocational preferences between 197 male and 237 female high school students. She found that despite no differences in general intelligence, female adolescents did not perceive themselves as having occupations in the highest postions (e.g., physician, dentist, college president, etc.). Olive cited evidence of innaccurate portrayals of women's work patterns in elementary school readers which may strongly influence occupational aspirations in girls by convincing them that they should not succeed in school or try to compete in high prestige occupations outside the home.

O'Leary (1977) stated findings which indicate that while there are no significant differences between girls and boys in achievement and grades in math at the end of the first year of high school, by the second year the number of girls taking math declines. She reported that girls felt taking mathematics might interfere with social relationships, was less useful to girls, and would make them feel masculine.

The question remaining is whether junior and senior high school girls' career aspirations are still decreasing with age in the 1980's. Many of the studies reporting decreases were carried out in the 60's and early 70's. With a greater emphasis on the importance of career planning for young women it would be important to examine career planning differ-

ences among girls of varying ages in order to assess whether this decline is still occurring today.

Gender Identity

Differences in societal expectations and the assignment traits to boys and girls have been widely documented (Anastasi & Foley, 1949; Fernberger, 1948; McKee & Sherriffs, 1957; Rosencrantz, Vogel, Bee, Broverman & Broverman, 1968; Seward & Larson, 1968; Wylie, 1961). Social learning theory states that as soon as gender is established, a set of rewards and punishments by significant others are set in motion which contribute to the development of attitudes, feelings, and behaviours in a child appropriate for that gender (Mischel, 1966, 1970; Mussen, 1969). Expectations for marriage and motherhood determine a girls' future while her individuality is not often taken into account. A boy's future is much less predictable since he is encouraged to fulfill his own unique potential (Bem & Bem, 1970).

Parsons and Bales (1955) believed that expectations placed differentially on males and females through socialization are extensions of the biological functions of males and females. In a group such as the family, the expressive function (maintenance of harmonious relations among members) is assigned to the female primarily as an extension of the biological childbearing and nursing functions. On the other hand, males are assigned the instrumental role, which refers

to relations between the system and the outside world. In a similar theory, David Bakan (1966) described how agency, or self assuredness and assertiveness, is emphasized in a boy's socialization while communion, or control of assertion and interest in the inner, family world, is encouraged for girls.

Not only are differential characteristics assigned to men and women, but women's traits are viewed as less positive and less socially desirable than men's (Kitay, 1940; Lynn, 1959; McKee & Sherriffs, 1959; Rosencrantz et. al., 1968; White, 1950). Rosencrantz et. al. (1968) asked a sample of male and female college students to rate themselves, an adult female, and an adult male on a number of behavioural, attitudinal, and personality characteristics. They found a greater number of stereotypically masculine traits to be rated as more socially desirable than feminine traits.

Celkis (1981) has stated that "...women seem to be socialized to be interested in pleasing others, to be motivated to achieve in 'feminine' areas, and to have a fear of success relative to atypical areas of achievement; women may also have a tendency to devalue feminine traits and to feel that they are less capable as well as less powerful than males. The nature of the socialization of women, therefore, seems to be contrary to developing personality characteristics and behaviours which are prerequisites for achieving in 'masculine' vocational areas" (p. 12).

Results of personality studies are useful in interpreting the way in which gender-identity may impact on career motivation. For example, Adams and Sherer (1985) tested 45 male and 56 female college students on a number of psychological measurements. They found that both male and female subjects classified as masculine scored significantly higher on general self-efficacy, social self-efficacy and assertiveness and significantly lower on depression and social introversion than feminine and undifferentiated subjects. Adams and Sherer's data suggest that measured masculine and androgynous people are more psychologically healthy in the sense of scoring higher on assertiveness and self-efficacy scales. That is, they are more likely to be found to act on their environment than to be passive. Similarly, Feather (1985) reported a positive correlation between masculine gender identity and self-esteem and a negative relationship between masculinity and depression among male and female college students.

The relationship between gender-role identity and career commitment has been explored in recent studies. Marshall and Wijting (1980) discovered that a masculine identity in women was related to a high career commitment while a feminine gender-role identity was negatively related to career commitment. Similarly, Wong, Kettlewell, and Sproule (1985) have reported a relationship between gender identity and career achievement. These authors asked 66 working Canadian

women to fill out questionnaires which were rated as to their level of career achievement. They found that both masculinity and the absence of femininity were related to higher career achievement.

Rooney (1983) studied the career motivation of groups of workers, students, and homemakers who had finished high school three years earlier. She found that workers and students were more committed to a career and were more likely to endorse a masculine gender-role orientation than homemakers. In addition, Rooney reported that while parental socioeconomic status did not discriminate one group from another, students perceived greater parental support than homemakers and workers.

Little has been done to date to examine the effects of gender-role identity on level of occcupational and educational aspirations.

Knowledge of Women and Work

It would seem that understanding the commitment and plans of adolescents is necessary for developing appropriate career education. For example, students should be aware of changes in the labour force since this information may affect career choices and planning. Only one study to date (Pedro, 1982) has examined the relationship between knowledge about the work force and career motivation. Pedro

studied the career planning involvement of 82 grade 11 females. She included a 25-item true-false scale to measure students' knowledge of facts about the female occupational experience. She found that knowledge of women's occupational experience did not significantly predict women's career planning involvement.

Woodcock and Herman (1978) found in their investigation of the effectiveness of a career awareness workshop intervention that career awareness was increased significantly when using a "knowledge of women's work-facts" scale. Since knowledge appears to be an important aspect of career awareness, and the knowledge variable has not been studied extensively, it would be useful to examine the relationship between knowledge regarding changes in the labour force and career motivation among young women today.

Attitudes Toward Women

Super and Bohn (1970) have stated that in order for women to have equal opportunities, societal attitudes toward women and their work must change. These authors suggested that from an early age, women must be helped to develop less stereotyped and more realistic ideas about their occupational roles.

Numerous authors (e.g., Bernard, 1974; Hare-Mustin & Broderick, 1979; Polacheck, 1975; Russo, 1976; Sweet, 1973)

have suggested that traditional attitudes and role expectations may impede women's goals for a career and economic independence. Traditional stereotypes stressing marriage and motherhood seem to perpetuate the conflict between pursuing a career and adhering to social expectations.

Parelius (1973) reported major shifts toward feminism occurring between 1969 and 1973 among a sample of college women. She inferred this shift from the findings that women in 1973 were more committed to developing their intellectual capacities, were more likely to be aspiring to graduate degrees, and were more often planning a "double track" work and homemaking pattern by intending to combine marriage, family, and a career. Parelius stated that her data did not indicate a decreased interest in marriage and motherhood but a redefinition by women of a "woman's place" in society.

A clear relationship between the acceptance of traditional attitudes regarding a woman's role in society and career motivation is yet to be demonstrated empirically.

Marriage/Family Commitment

When studying female career development it is important to recognize the integral part the wife and mother roles play in the career planning process. As already pointed out, the assumption has been made that homemaking commitment and career commitment exist along a unidimensional continuum.

(1971) has suggested that when a person is involved in performing more than one role, each role requires only part of one's personality to fulfill the duties of that role. Consistent with this belief, a two-dimensional model has been adopted in this study. Instead of career commitment and marriage/family commitment lying on opposite ends of a single scale, two separate dimensions are assumed to exist with one running from low to high marriage/family commitment and the other from low career commitment to high career commitment. Thus, a scale measuring marriage/family commitment independent of the career role has been included in order to test the notion of a unidimensional concept and to make possible the identification of high commitment to both a family and a career.

Present Study

It has been pointed out that a major problem with previous studies has been the inconsistent use of different dependent variables rendering most results incomparable. In order to take into account the many different facets of career aspirations and planning, four indicators of career motivation were included in the present study. Thus, career motivation was defined as a combination of (a) career commitment, (b) occupational aspirations, (c) educational aspirations, and (d) vocational certainty. The vocational certainty measure presented here has not been used is past

research. It was postulated that the certainty with which one states a specific occupational choice may be relevant to career planning.

The effects of seven major variables on female career motivation were examined. Three of these variables have been shown to have an important influence on career motivation (socioeconomic status, academic performance, and grade level). The present study is additive in that it includes psychological measures seldom or never used in research of this nature (gender-identity, knowledge of women and work, attitudes toward women).

Marriage/family commitment was included as a seventh independent measure. Although homemaking commitment scales (e.g., Farmer, 1983) have been used in the past to attempt to measure this concept, as pointed out earlier, these scales have been confounded by the inclusion of career commitment items set in opposition to homemaking. The present study was designed to examine an empirical basis for proposing that marriage/family commitment and career commitment lie on two separate continua. This separation is extremely important to the understanding of female role conflict.

The first hypothesis stated that the set of independent variables including grade level, gender identity, academic performance, socioeconomic status, attitudes toward women and knowledge of women and work would account for a signifi-

cant amount of the variance in each of the four dependent measures (career commitment, occupational aspirations, educational aspirations, and vocational certainty).

Four separate groups were expected to form based on scores on the career commitment and marriage/family commitment scales. These were (a) high career-high marriage/family commitment, (b) high career-low marriage/family commitment, (c) low career-high marriage/family commitment, and (d) low career- low marriage/family commitment. Since research and theoretical literature suggests that conflict may exist between the desire for a career and the desire to marry and raise a family, the second hypothesis stated that subjects in the high career-high marriage/family commitment category would demonstrate significantly higher vocational uncertainty than subjects in the other three groups. tional uncertainty was chosen for this analysis since certainty about one's occupational choice appeared to be the best indicator of the existence of conflict over one's decision-making.

METHOD

Subjects

Subjects were selected from six schools in Winnipeg covering a wide range of socioeconomic backgrounds. Female students from each of three grade levels (eight, ten and twelve) were asked to volunteer their participation. Parental permission (signed consent forms) was obtained before commencing data collection (See Appendix A).

<u>Materials</u>

The measuring instrument consisted of a ten-page questionnaire. It included the four indicators of career motivation: (a) career commitment; (b) occupational aspirations; (c) educational aspirations; and (d) vocational certainty, as well as seven independent variables: (a) marriage/family commitment, (b) grade level, (c) gender-identity, (d) academic performance, (e) socioeconomic status, (f) attitudes toward women (AWS), and (g) knowledge of women and work. Two separate forms of the questionnaire, each with a unique arrangement of scales, were randomly distributed among the sample (See Appendix B).

Each subject indicated the level of education they intended to complete by choosing from six possibilities: less than grade 12, (b) grade 12 diploma, (c) 1 year community college or vocational/ technical/trade school, (d) 2 years community college or vocational/ technical/trade school, (e) 3-4 years university (undergraduate degree), and (f) over 4 years of university (professional or graduate degree). Education level scores ranged from one to seven with one indicating the lowest level and seven indicating the highest level of educational aspiration. Next, were asked to state the job they expected/hoped to have as an occupation. Occupational aspiration levels were analyzed in terms of prestige level using the Blishen and McRoberts' (1976) Revised Socioeconomic Index for Occupations in Cana-This scale classifies over 480 occupations according to income and educational levels based on 1971 census data. Subjects indicated the certainty of their occupational choice by choosing a score from one (not at all certain) to seven (extremely certain) on a Likert-type scale.

Descriptive information was obtained from the sample, such as gender, grade level, age, religious background, ethnic background, family's first language, class level (ie. 00, 01, 02, 04), involvement in career counselling, family type (nuclear family, single-parent family, remarried family), and parent(s)' occupation(s) and educational attainment. Socioeconomic status was assessed by classifying pa-

rental occupations using the Blishen and McRoberts' (1976) scale. In cases where both parents were working full-time, the score of the parent with the highest occupational level was used.

Academic performance was based on students' estimate of their overall average grade in the present year in required subjects such as Math and English (A-F). The American College Testing Program (Sawyer & Maxey, 1979) has found 96% agreement between students' reported grades and actual achievement scores.

Career Commitment Scale. Super and Culha (1976) developed the Work Salience Inventory from which the career commitment The career commitment scale measures a scale was derived. person's interest in long-term career opportunities. Farmer (1983) used 14 of the original 17 items after a reliability analysis indicated a substantial decrease in internal consistency due to the three items' inclusion. An additional item added by Farmer contributed to the reliability of the scale. Scores range from 15 to 75 with a high score indicative of enjoyment in making plans for the future, desire to have a job to be proud of, and views of a career as central to the adult role and a means of self-expression. Alpha reliability for the 15 item scale is .83. Questions are reponded to in a Likert response format along five-point continua from 1 (strongly agree) to 5 (strongly disagree).

Personal Attributes Questionnaire. Gender-identity was measured using the shortened version of the Personal Attributes Questionnaire (PAQ) (Spence, Helmreich & Stapp, 1974). The PAQ consists of 24 bipolar trait descriptions set up along five-point scales. Items selected for the scale were those showing significant gender-role stereotypes in research using the Sex-Role Stereotype Questionnaire (Rosencrantz, Vogel, Bee, Broverman & Broverman, 1968). Items reflect instrumental content (getting the job done, decisiveness, self-confidence, standing up under pressure and being active, competitive, and independent) and expressive content (gentle, helpful, kind, concern for others, warmth, and understanding).

The PAQ consists of three eight-item scales. The masculinity (M) scale contains eight instrumental items socially desirable for males and females but, both stereotypically and in self report, are more characteristic of males. The same is true of the femininity (F) scale which is comprised of expressive characteristics socially desirable for both sexes but stereotypically and in self report are more characteristic of females. The masculinity-femininity (M-F) scale consists of socially desirable traits which vary in both sexes and contain both expressive and instrumental characteristics.

Helmreich, Spence, and Wilhelm (1981) have presented evidence from a factor analytic study which supports the exis-

tence of essentially orthogonal masculinity and femininity factors. In a study by Spence et. al. (1974) test-retest reliability was found to be .91 for females and .80 for males. Internal consistency reliability for 248 college men was .73 and for 282 women was .91.

Four gender-role orientation groups can be obtained from the PAQ. These four groups were used in the present study. Subjects scoring above the median on the masculinity scale and below the median on the femininity scale are classified as masculine. Feminine subjects score above the femininity median and below the median on masculinity. Subjects scoring below the median on both scales are classified as undifferentiated. Androgynous subjects score above the median on both the masculinity and femininity scales.

The Attitudes Toward Women Scale. The Attitudes Toward Women Scale (AWS) (Spence & Helmreich, 1972) measures attitudes toward the vocational, educational, and intellectual roles of women. It focuses on issues such as freedom and independence, dating, courtship and etiquette, sexual behaviour, and marital relationships and obligations. A shortened version of the scale consists of 15 declarative statements with four response alternatives ranging from strongly agree to strongly disagree. Possible scores range form 0 to 45 with higher scores indicating more liberal attitudes toward women. The short form correlated .91 with the original 55-item AWS when tested on a college student population.

The Cronbach's alpha for the version used in this study has been found to be .89 (Spence & Helmreich, 1972).

Loo and Logan (1977) administered both the full and short versions of the AWS to male and female students in a Canadian university. Female scores (M=126.8, SD=23.2) were more liberal than males' (M=109.0, SD=20.8, t(148)=5.07, p<.005). The authors concluded that the range and variability of scores for the sample and the significant differences between the genders demonstrate the scale's utility as a measure of the attitudes toward women's role in society.

Kilpatrick and Smith (1974) attempted to validate the scale by administering it to members of an active feminist group, the National Organization of Women (NOW). Members of this group would be expected to score higher than normative controls in the original Spence and Helmreich (1972) of female college students and students' mothers. differences were found between the groups with NOW members scoring significantly higher than female college students (t(253)=21.89, p<.001) and students' mothers (t(303)=31.22,p<.001). Further validation for the scale was attempted using a sample of women's studies students, both male and female, before and after taking the women's studies course (Lunneborg, 1974). Males were significantly (p<.05) less liberal than females before taking the course but not afterward. Lunneborg concluded that even for a group of students thought to have a high level of liberalism the scale is still sensitive to changes in attitude.

The AWS has been used in numerous studies of personality. For example, Etaugh (1975) reported that among female college students, liberal views toward women are consistent with a generally liberal political outlook. Those holding more liberal attitudes were more likely to have inactive or no church affiliation, be further along in their college education, have a higher grade point average, have had mothers who were employed or were dissatisfied with homemaking, had grown up in a large community, and had felt lonelier during their teen years than those holding more traditional attitudes.

Mennigerode (1976) cited a relationship between liberal attitudes and an internal locus of control while Hjelle and Butterfield (1974) have reported a significantly higher degree of self-actualization among women professing liberal, profeminist attitudes.

Knowledge of Women and Work Scale. The Knowledge of Women and Work Scale was designed by the author and is comprised of twelve true and false statements designed to sample students' knowledge of current trends in the labour force and in the family in relation to women. Examples of items include: (a) Most women work because of economic need; (b) Women should not be hired for jobs which require additional training since they will quit anyway when they get married or pregnant; and (c) Most women work in three areas—clerical (e.g., clerical (typing, filing), sales

(salesclerk), and service (waitress, cashier). Possible scores range form 0 to 12 with higher scores indicating more accurate knowledge of women's current situation. Items were derived from common myths as well as 1981 Canadian census data regarding women in the work force.

Marriage/Family Commitment Scale. The marriage/family commitment scale, designed and pretested by the author, purports to measure the importance one places on the commitment to marriage and raising a family. Higher scores on this scale indicate the view that marrying and having a family will be satisfying, fullfilling, and add meaning to one's life. Sample items include: (a) Children will give meaning to my life; (b) I do not consider myself "family-oriented"; and (c) I consider marriage and having a family very important. Questions on the marriage/family commitment scale are responded to along five-point scales from 1 (strongly agree) to 5 (strongly disagree).

RESULTS

Demographic Data

Subjects ranged in age from 13 to 21 with a mean age of 15.6 years. The sample was composed of 107 girls in grade eight, 99 in grade ten and 111 in grade 12.

None of the subjects were married. In terms of future marriage plans, 20 girls (6%) were not planning to marry, nine (3%) hoped to marry before the age of 20, 198 (64%) hoped to marry between the ages of 20 and 25, 77 (25%) hoped to marry between the ages of 26 and 31 and four (1%) hoped to marry after 31 years of age. The majority of respondents (87%) hoped or were planning to have children while 11% did not wish to have children.

In terms of religious affiliation, 40% of the subjects were Catholic, 32% were Protestant, 1% were Jewish, 11% stated a religious association other than the above major groups, and 16% reported no religious affiliation. Of the 317 subjects, 75% reported English as their first language, 5% reported speaking French at home, and 20% of the subjects spoke a language other than English or French at home.

With respect to the subject's home environment, 81% of the students lived in two-parent families, 14.5% in single-parent families, and 4.5% reported living in "other" situations (e.g, with. siblings, friends, or alone).

The majority of subject's mothers (55%) worked full-time, 23% worked part-time, and 23% did not hold paid jobs. Of the fathers, 91% worked full-time, 4% part-time, and 5% were not employed in the labour force. The average education level reported for mothers and fathers was between a grade 12 diploma and one year of community college/vocational/technical/trade school (mean=2.50, standard deviation=1.80 for mothers; mean=2.66, standard deviation=2.10 for fathers).

Reliability Analysis

Cronbach's alpha (1951) was calculated for each scale with multiple items. Cronbach's alpha is an index of reliability based on the extent of variability within responses to each item. The reliability estimates are outlined in Table 1.

Insert Table 1 about here

Table 1

Reliability estimates (Cronbach's alpha) for multiple-item scales.

Scale	Cronbach's alpha		
1. Career Commitment Scale	.80		
2. Marriage/Family Commitment Scale	.83		
3. Knowledge of Women and Work Scale	. 41		
4. Attitudes Toward Women Scale	.80		
5. Personal Attributes Questionnaire	.74		

Hypothesis One

In order to assign subjects to sex-role orientation groups, the median split method (Spence & Helmreich, 1978) was used. The median on the femininity (F) scale was 32.36 (mean=32.13; standard deviation=4.46). On the masculinity (M) scale, the median was 28.28 (mean=28.24; standard deviation=3.91). Subjects were classified as: 95 undifferentiated, 70 feminine, 66 masculine and 82 androgynous.

To test the first hypothesis, a canonical correlation analysis was performed between the set of career motivation variables and the set of social-psychological variables. The career motivation set included career commitment, occupational aspirations, educational aspirations, and vocational certainty. The social-psychological set measured marriage/family commitment, grade level, gender identity, academic performance, socioeconomic status, attitudes toward women, and knowledge of women and work.

A Cook's D analysis was carried out on the data to test for outliers. No multivariate outliers were identified. Of the 317 observations, 48 were omitted in this analysis due to missing values. Assumptions regarding within-set multicollinearity were met. The intercorrelations among the eleven variables are shown in Table 2.

Insert Table 2 about here

Table 2

<u>Intercorrelations Between Measures</u>

Measure	2	3	4	5	6	7	8	9	10	11
SECUCIONE 2 DE CONTRACTOR DE C				(n=26	59)			···		***************************************
<pre>1.Career Commitment</pre>	.14	.32	.34	.06	.10	.29	.26	.15	.03	.21
2.Occupational Aspirations		.44	02	17	.08	.15	.13	.03	.17	.18
3.Educational Aspirations			.06	18	.00	.26	.11	01	.23	.30
4.Vocational Certainty				.13	.06	.03	.09	.13	.03	.15
5.Marriage/ Family Commi	tment	· · · · · · · · · · · · · · · · · · ·			11	29	.05	.02	04	09
6.Knowledge of Women + Work						.11	07	.34	.02	.02
7.Attitudes Toward Women							.24	.08	.19	.19
8.Gender Identity								.02	.03	.11
9.Grade Level									.12	.14
10.Socioeconom Status	ic									.22
11.Academic Performance										

In particular, it is important to note that the correlations among the four measures of career motivation were low. As well, no correlation existed between career commitment and marriage/family commitment.

Table 3 contains the means, standard deviations, minimum values and maximum values of the eleven variables included in this analysis (See Table 3).

Insert Table 3 about here

Two canonical correlations were significant in accounting for 34% of the variance among the eleven variables. The first canonical correlation was .47 (22% of variance, F(28, 931.65)=4.20 p<.01); the second was .35 (12% of variance, F(18, 733.05)=2.73 p<.01). The remaining two canonical correlations were effectively zero (See Table 4).

Insert Table 4 about here

The first two canonical correlations therefore accounted for the significant linkages between the two sets of variables.

Table 3

<u>Descriptive statistics for motivation and social-psychological variables.</u>

Variable	Mean	Standard Deviation	Minimum Value	Maximum Value	
Career Commitment	61.96	7.55	40.0	75.0	
Occupational Aspiration	58.01	14.33	0.0	75.0	
Educational Aspiration	4.68	1.32	1.0	6.0	
Vocational Certainty	4.79	1.72	1.0	7.0	
Marriage/Family Commitment	56.36	10.88	25.0	78.0	
Knowledge of Women and Work	8.31	1.91	0.0	12.0	
Attitudes Toward Women	49.83	6.28	32.0	60.0	
Gender Identity	2.44	1.16	1.0	4.0	
Grade Level	10.05	1.66	8.0	12.0	
Socioeconomic Status	48.30	15.91	20.0	75.0	
Academic Performance	4.69	0.88	2.0	6.0	

Canonical correlations, canonical R-squared, and tests of significance for career motivation and social-psychological variables.

Canonical Correlation	Canonical R-squared	đf	<u>F</u>
147	.22	28, 931.65	4.20*
235	.12	18, 733.05	2.73*
317	.03	10, 520	1.32
415	.02	4, 261	1.41

<u>*p</u><.01.

The two pairs of canonical variates appear in Table 5.

Insert Table 5 about here

Shown in the table are the standardized canonical variate coefficients.

With a cutoff correlation of .35 for interpretation, the variables relevant to the first canonical variate in the career motivation set were, in order to magnitude, career commitment and educational aspirations. Among the social-psychological variables, academic performance, attitudes toward women, and gender identity were relevant to the canonical variate. Taken as a pair, the first canonical variates indicated that those with higher career commitment (.61) and higher educational aspirations (.45) also tended to have better grades in school (higher academic performance) (.53), more liberal attitudes toward women (.50), and a masculine to androgynous gender identity (.36).

The second canonical variate in the career motivation set was composed of career commitment and educational aspirations, while the corresponding canonical variate from the social-psychological set was composed of marriage/family commitment, socioeconomic status, and grade level. Taken as a pair, these variates suggested that a combination of higher career commitment (.76)

Table 5

<u>Standardized canonical coefficients for career-motivation and social-psychological variables.</u>

Variables	First Canonical Variate Coefficients	Second Canonical Variate Coefficients		
Career Motivation Set				
Career Commitment	.61	.76		
Occupational Aspirations	.25	20		
Educational Aspirations	.45	75		
Vocational Certainty	.09	.16		
Social-Psychological Set				
Marriage/Family Commitment	.03	.69		
Knowledge of Women and Work	.12	.13		
Attitudes Toward Women	.50	.25		
Gender Identity	.36	.23		
Grade Level	.05	.38		
Socioeconomic Status	.13	54		
Academic Performance	.53	17		

and lower educational aspirations (-.75) corresponded to a combination of higher marriage/family commitment (.69), lower socioeconomic status (-.54), and higher grade level (.38).

Hypothesis Two

All 317 cases were used in the second analysis. the second hypothesis, a median split procedure was used to divide subjects into four groups based on their marriage/ family commitment and career commitment scores. The median 57.09 on the marriage/family commitment scale was (mean=56.00; standard deviation=11.04) and the median for career commitment was 62.16 (mean=61.55; standard devia-A 2(high-low marriage/family commitment) tion=7.45). 2(high-low career commitment) analysis of variance was performed to test for a significant interaction between marriage/family commitment and career commitment in affecting significant vocational certainty. Α main $\underline{F}(1,313)=22.93$, $\underline{p}<.01$, was found for career commitment with subjects with high career commitment (mean=5.05) scoring significantly higher on vocational certainty than subjects falling into the low career commitment (mean=4.10) category (See Table 6).

Insert Table 6 about here

Table 6

2X2 Analysis of Variance (high-low career commitment X

high-low marriage/family commitment in relation to vocational
certainty).

Source of	Anova			
Variation	Sums of Squares	đf	<u>F</u>	
Main effects				
Career Commitment	63.94	1, 313	20.60*	
Marriage/Family				
Commitment	30.94	1, 313	9.97*	
Two-Way Interaction				
Career X Marriage/				
Family Commitment	2.62	1, 313	2.62	

p<.01.</pre>

A second main effect, $\underline{F}(1,313)=9.97$, $\underline{p}<.01$, was found for marriage/family commitment such that subjects with high marriage/family commitment (mean=4.88) scored significantly higher on vocational certainty than those subjects with a low marriage/family commitment (mean=4.25) score.

No significant interaction between marriage/family commitment and career commitment was found using the vocational certainty variable.

In order to test for the influence of order effects on subjects' responses, a multivariate analysis of variance was performed using type of form (form one or form two) as the Two significant differences were independent variable. Those subjects filling out form one demonstrated found. lower marriage/family commitment significantly $(\underline{F}(1,267)=6.91, \underline{p}<.01)$ than those filling out form two. well, subjects' scores on the Attitudes Toward Women scale differed depending on the form used. Subjects responding to form one had significantly higher AWS scores (more liberal attitudes) (F(1,267)=10.47, p<.01) than those filling out form two.

DISCUSSION

The combination of variables included in this study added new dimensions to the interpretation of factors influencing career motivation. As indicated by the results, it is important to consider the effects of a number of different variables in attempting to predict career motivation among young women. The results of the canonical correlation analysis underline the importance of examining many variables simultaneously.

The first pair of canonical variates illustrated those girls who obtain high grades in school, have more liberal attitudes toward women, and identify with a masculineandrogynous gender-role are more highly committed to a career and are aspiring to high levels of education. Conversely, young women with lower marks, more traditional attitudes toward women, and a feminine-undifferentiated gender identity have both lower career commitment and lower educational goals. These results are consistent with those of Astin and Myint (1971) who found that high scholastic aptitude and high educational aspirations were strong predictors of career orientation among young women. Similarly, Danziger (1983) reported the important influence of school grades on girls' aspirations.

The discovery of the contribution of attitudes towards women to the interpretation of career motivation is an important one. Previous studies have failed to include these attitudes as a variable yet the present findings indicated a strong relationship existing between attitudes toward women, career commitment, and educational aspirations. It is possible that women's attitudes toward their role in society make up an integral part of their personality and, in turn, may significantly affect their future life considerations.

The examination of gender-role attitudes and gender-identity in this study has contributed to an empirical validation of ideas expressed in the literature regarding the impact of traditional values on women's career aspirations. A number of researchers (e.g. Bernard, 1974; Danziger, 1983; Fox et. al., 1979; Rapoza & Blocher, 1976; Russo, 1976) have theorized about this relationship, yet no conclusive evidence has been gathered. It is clear from this study that more traditional attitudes toward women go hand in hand with lower educational aspirations and lower career commitment. If one assumes that a young woman's own attitudes are influenced by one's family and society through the socialization process, one can postulate a link between traditional stereotypes and young women's life plans. It is easy to see the relationship between a young woman's traditional attitudes and a more feminine-undifferentiated gender-role identity. Someone adhering to traditional role expectations for women

is conceivably more likely to endorse a feminine role identity. It could be argued that the lower grades in school are another function of these traditional attitudes which put less emphasis on academic achievement for girls and more on marriageability. Perhaps obtaining high marks is not a priority to those girls with a more traditional orientation.

The relationship of gender-identity to career commitment found in this study confirmed the results reported by Marshall and Wijting (1980), and Wong et. al. (1985). studies found a relationship between masculine gender-identity and increased career commitment. More corroborating evidence for the relationships found in the first canonical correlation came from Rooney (1983). Rooney expected students to differ from homemakers and workers on parental socioeconomic status yet she found that SES had no significant impact in discriminating the groups. She did find that workers and students were more committed to a career and were more likely to endorse a masculine gender-role orientation than homemakers. In looking at previous studies (Adams & Sherer, 1985; Feather, 1985) it seemed that many factors associated with a masculine gender-identity such as assertiveness, self-efficacy, and self-esteem, may also be related to levels of career motivation and are worthy of further study.

Astin and Myint's (1971) results may be compared to those presented here in that girls with a lower academic aptitude

were more likely to have lower career commitment and lower educational aspirations. In order to explain the relationships, Astin and Myint took into consideration the stability of the young woman's career choice. Those girls with lower scholastic abilities were likely to change their aspirations from more to less demanding careers while those with high aptitudes were more likely to maintain plans over time. Astin and Myint postulated that the more capable students may be more perceptive about their own interests and aptitudes at a young age and therefore select educational and vocational goals consistent with the aptitudes and skills required for successful educational and vocational experi-The results of the present study indicated that ences. lower academic performance related to lower educational Therefore, girls with lower goals in female adolescents. grades also appeared to choose goals consistent with their abilities, which contradicted Astin and Myint's speculation that only those girls who demonstrate higher academic skills are capable of making realistic decisions.

The second significant pair of canonical variates showed that older girls from a lower socioeconomic background with high commitment to marriage and a family have high career commitment yet lower educational aspirations. It appeared that as girls mature, their commitment to both marriage/family and a career increases. At the same time, socioeconomic background may influence planning for further education. It

is possible that girls from lower socioeconomic backgrounds may perceive the financial difficulty involved in pursuing higher education. As well, conflict may arise between the desire for a family and the time involved in continuing one's education even though career commitment remains high.

This relationship also illustrated that at younger ages, girls from higher socioeconomic backgrounds tended to have both lower career commitment and lower marriage/family commitment, with high educational aspirations. It appeared that girls from higher socioeconomic backgrounds perceive the possibility and/or desirability of furthering their education but at a younger age are not motivated to commit themselves either to a career or to marriage and a family.

As demonstrated by the failure to find the significant interaction expected in the second hypothesis, girls in this study were not less certain about their occupational goals if they were highly committed to both a family and a career. It appeared that either a higher commitment to a career or a higher commitment to marriage and a family related to increased certainty about one's occupational plans. When girls had a low commitment in either area they were less likely to know what they wanted to do in terms of a career.

The lack of uncertainty shown when commitment to either a career or family is high might be explained by a lower ability at a young age to see the difficulties involved in com-

bining a career and family. In Berson's (1977) study, mothers perceived more clearly the costs involved in working (less leisure time and less time with the children) single women, even though the two groups did not differ in their valuing of the mother and worker roles. Thus, it can be speculated that a conflict between the two roles does not become evident until a person is actually in the situation As a woman approaches the age of having to combine roles. at which she is planning to have children, the difficulties involved in working at the same time are likely to become an investigation of women at later Thus, more apparent. stages in their development would be beneficial in determining the nature of perceived career and family conflicts.

Since no negative correlation was found between marriage/family and career commitment it may be that tests to date have been inconclusive in measuring family commitment by placing it with career commitment on a single, unidimensional continuum. It is recognized that reliability and validity testing of the marriage/family commitment scale employed in this study are required before the results can be interpreted with more confidence. However, the high internal consistency of the scale reported here indicates its potential as a useful tool in examining marriage/family commitment. Further standardization as well as a comparison of this scale to measures of self concept and achievement motivation would be important steps in future research.

Three variables did not contribute significantly to the relationships studied. First, it appeared that the prestige level of the occupation a woman aspires to is not related to her age, socioeconomic status, academic performance, gender identity or attitudes toward women. Studies documenting a decrease in occupational aspirations with age (e.g., Cutright, 1960; Harmon, 1971; Hauser, 1971; Matthews & Tiedeman, 1964; McDill & Coleman, 1963) may be outdated. It is possible that the young women of today place more value on the worker role than they have in the past. Also, these young women may be aware of the necessity of participation in the labour force.

Secondly, vocational certainty was not related to any of the social-psychological variables. Vocational certainty was measured using only one seven point scale. Although this type of direct question seemed to have face validity, the item may not reliably measure a person's certainty since numerous decisions involving a single career choice may need to be taken into account. A more reliable way to measure one's vocational certainty may involve devising a multi-item scale taking into account a number of factors influencing one's certainty (for example, financial resources, extent of investigation of the choice, etc.).

Thirdly, the extent of knowlege a person has regarding the position of women in the labour force did not impact on their career motivation. Although this variable has not been studied extensively, this finding is consistent with Pedro's (1982) work in which knowledge of women's occupational experience did not significantly predict women's career planning involvement. The extremely low internal consistency found for the Knowledge of Women and Work scale used in the present study indicates that scales of this kind may not adequately measure the concept being proposed. Until a more reliable tool is developed, the impact of labour force knowledge on young women's career motivation cannot be determined. This should be taken into consideration in future research.

Contrary to the large number of young women citing homemaker as their only desired goal in the study by Kenkel and Gage (1983), only 3 (1%) of the 317 girls included in this sample stated that they hoped/expected to be housewives only. Kenkel and Gage's sample of girls in grades five and six was notably younger than the sample used in the present study and it may be speculated that girls' plans change as they mature. This finding may also reflect how changing attitudes which put more and more emphasis on the importance of jobs in the labour force for women may affect life plans and choices. As Richardson (1979) has pointed out, by attempting to free women from a narrow feminine role and placing strong emphasis on career goals, the traditional role may be denigrated.

Girls in this study chose from a wide range of occupations. However, the majority (80%) of occupational choices were in the upper level of the socioeconomic range. These included choices such as doctor, teacher, lawyer, and psychologist. This finding points to the strong possibility of demand characteristics interfering with subjects' responses. The attempt to investigate the level of career choice aspired to could be identified by the survey questions. This, in combination with the fact that the researcher was female, may have influenced respondents to answer in what was thought to be a socially desirable way; that is, with higher aspirations.

Differences found between responses to form one and form two of the questionnaire add to the speculation that items contained in the questionnaire affected the answers given. Subjects filling out form one completed the career commitment scale before answering the marriage/family commitment scale. These subjects had significantly lower scores on marriage/family commitment which points to the possibility that they perceived career commitment as being viewed more desirable in the study. As well, subjects filling out the Attitudes Toward Women Scale after completing the career and marriage/family commitment scales and the occupational/ educational items (form one) demonstrated significantly higher (more liberal) attitudes than those filling out form two. Their responses may have reflected a perception of the

study advocating more career-oriented values and thus more liberal views of women. Since social desirability seems to have the potential to influence responses on questionnaires of this nature, the inclusion of a check for social desirability or increased attempts to conceal the nature of the study should be considered in future research.

Upon closer examination of occupational choices, it was found that a number of higher level occupational goals did not match the lower level of education aspired to. Although this finding requires much further examination, it is consistent with Prediger et. al.'s (1973) finding that students were uncertain whether their educational plans were consistent with their occupational considerations. This would be an important direction for future research since it implies a need for more adequate career counselling in the area of educational planning.

Implications for Future Research

None of the four measures of career motivation utilized in the present study were highly correlated. An important consideration for future research seems to be the inclusion of a number of indicators of career motivation since each of the factors included in this study appeared to measure a different aspect of this variable.

The results of this study indicate the importance of considering a number of factors, with a particular need for including psychological factors, in the investigation of career motivation. Emphasis on cross-disciplinary research combining the efforts of both educators and psychologists is required.

The importance of looking at career and family goals independently cannot be overstated. Authors such as Super (1980) and Lopata (1971) have stated that within a lifetime, everyone is involved in many roles, either simultaneously or in sequence. Lopata (1971) suggested that when a person is involved in performing more than one role, each role required only part of one's personality to fulfill the duties of that role. This belief is supported by the present finding of no direct negative correlation between career and marriage/family commitment. Further studies are needed to clarify this relationship and uncover ways in which it can be valuable in examining family/career conflicts.

Since the ability to perceive the actual familial costs involved in labour force participation may be low among younger age groups, an investigation of young women at later stages in their development would be beneficial. As well, longitudinal studies linking aspirations to actual career behaviour would add valuable knowledge to the study of female career motivation.

The necessity of standardizing existing scales on various age groups and different populations has been pointed out. This remains an important consideration for future research. In addition, the development of a scale assessing the social desirability of responses with young age groups is required if research using questionnaire data to study career motivation is to continue.

Finally, an examination of the existence and meaning of 'traditional' expectations in today's changing society is needed since adherence to traditional attitudes, as measured by the Attitudes Toward Women Scale, have been shown to relate significantly to career commitment and educational aspirations.

Practical Implications

Rooney (1983) pointed out that in order to enhance role choices one must assume that an individual participates in and values many role simultaneously. This assumption may not be made when intervening to enhance career aspirations; rather, a career role is assumed to be dichotomous to a home/family role choice. As shown in the present study, this is not the case. Thus, an important task facing educators and practitioners is the preparation of young people for multiple roles.

Farmer (1983) has stated that counsellors and educators can facilitate the combining of home and work roles by discussing the possible obstacles involved during the high school years and helping students plan for ways to overcome these obstacles. An added intervention may include helping young women to plot life plans in terms of different stages in order to promote a better understanding of the issues involved in combining roles.

As indicated by the results of this study, the adoption of attitudes and gender-role identities is an important factor in the career development of young women. Thus, intervention at very young ages involving increasing young people's awareness of the variety of life choices available and removing gender-role stereotyping would be beneficial. Super and Bohn (1970) have suggested that in order for women to have equal opportunities, societal attitudes toward women and work must change. In the meantime, progress can be made through vocational counselling. From an early age, women must be encouraged to develop less stereotyped and more realistic ideas about their possible occupational roles in order to be adequately prepared for later life.

REFERENCES

- Adams, D. H., & Sherer, M. (1985). Sex-role orientation and psychological adjustment: Implications for the masculinity model. Sex Roles, 12, 1211-1218.
- Alexander, K. L., & Eckland, B. K. (1974). Sex differences in the educational attainment process. <u>American Sociological Review</u>, 39, 668-682.
- Almquist, E. M., & Angrist, S. S. (1970). Career salience and atypicality of occupational choice among college women.

 <u>Journal of Marriage and the Family</u>, 32, 242-249.
- Almquist, E. M., & Angrist, S. S. (1971). Role model influences on college women's career aspirations. Merrill-Palmer Quarterly, 17, 263-279.
- Anastasi, A., & Foley, J. P. Jr. (1949). <u>Differential psychology</u>.

 New York: Macmillan.
- Angrist, S. S. (1969). The study of sex roles. <u>Journal of Social Issues</u>, <u>25</u>, 215-232.
- Angrist, S. (1972). Changes in women's work aspirations during college. <u>International Journal of Sociology and the Family</u>, 2, 87-97.
- Astin, H., & Myint, T. (1971). Career development of young

- women during the post high school years. <u>Journal of</u> Counseling Psychology, <u>18</u>, 386-393.
- Bakan, D. (1966). The duality of human existence.

 Chicago, Ill.: Rand McNally.
- Bem, S. L., & Bem, D. J. (1970). Training the woman to know
 her place: The power of a nonconscious ideology. In D. J.
 Bem (Ed.), Beliefs, attitudes, and human affairs.
 Belmont, California: Brooks/Cole.
- Bernard, J. (1974). <u>The future of motherhood</u>. New York:

 Dial Press.
- Berson, J. S. (1977). <u>Perceived costs of combining</u>

 <u>career and family roles: The influence of early</u>

 <u>family history on adult role decisions</u>. Cardiff, Wales:

 British Psychological Society. (ERIC Document Reproduction Service No. ED 156 953).
- Blishen, B. R. & McRoberts, H. A. (1976). A revised socioeconomic index for occupations in Canada. <u>Canadian Review of Sociology and Anthropology</u>, <u>13</u>, 71-79.
- Burlin, F. (1976). The relationship of parental education and maternal work and occupational status to occupational aspiration in adolescent females. <u>Journal of Vocational</u> Behavior, 9, 99-104.
- Burns, M. S. A. (1974). Lifestyles for women: An attitude scale. <u>Psychological Reports</u>, <u>35</u>, 227-230.

- Canadian Advisory Council on the Status of Women. (1983).

 As things stand: Ten years of recommendations. (Cat.

 No. LW31-14/1983E). Ottawa, Ontario: Author.
- Canadian Advisory Council on the Status of Women. (1983).

 It's your turn: A handbook for Canadian women. (Cat. No. LW31-15/1983E). Ottawa, Ontario: Author.
- Caplow, T. (1954). <u>The sociology of work</u>. Minneapolis: University of Minnesota Press.
- Card, J. J., Steele, L., & Abeles, R. P. (1980). Sex
 differences in realization of potential for achievement.

 <u>Journal of Vocational Behavior</u>, <u>17</u>, 1-21.
- Celkis, R. (1981). Achievement motivation and the vocational development of adolescent women: A review and application of achievement motivation research to vocational development theory. (ERIC Document Reproduction Service No. ED 203 244).
- Ciuriak, D., & Sims, J. (1980). <u>Participation Rate</u>

 <u>and Labour Force Growth in Canada</u>. Ottawa, Ont.:

 Department of Finance Canada.
- Coleman, J. S. (1961). <u>The adolescent society</u>. New York: Free Press.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.
- Cutright, P. (1960). Students' decision to attend college.

 <u>Journal of Educational Research</u>, 33, 292-299.

- Danziger, N. (1983). Sex-related differences in the aspirations of high school students. Sex Roles: A Journal of Research, 9, 683-695.
- Dellas, M., & Gaier, E. L. (1975). The self and adolescent identity in women: Options and implications. Adolescence, 10, 399-407.
- Douvan, E., & Adelson, J. (1966). The adolescent experience.

 New York: Wiley.
- Elder, G. H. (1969). Appearance and education in marriage mobility.

 <u>American Sociological Review, 34, 519-533.</u>
- Erikson, E. H. (1950). Childhood & society. New York: Norton.
- Etaugh, C. (1975). Biographical predictors of college students' attitudes toward women. <u>Journal of College</u>

 <u>Student Personnel</u>, <u>16</u>, 273-275.
- Farmer, H. (1980). The importance of family and career roles for high school youth. Paper presented at the American Psychological Meeting, Montreal, Quebec.
- Farmer, H. (1981). A user's manual for career motivation

 achievement planning: C-MAP. Champaign, Illinois: National

 Institute of Education.
- Farmer, H. S. (1983). Career and homemaking plans for high school youth. Journal of Counseling Psychology, 30, 40-45.
- Feather, N. T. (1985). Masculinity, femininity, self-esteem,

- and subclinical depression. Sex Roles, 12, 491-500.
- Featherman, D. L., & Hauser, R. M. (1974). Sexual inequalities and socioeconomic achievement in the U. S., 1962-1973. American Sociological Review, 41, 462-483.
- Fernberger, S. W. (1948). Persistence of stereotypes concerning sex differences. <u>Journal of Abnormal and Social Psychology</u>, 43, 97-101.
- Finegan, T. A. (1975). Participation of married women in the labor force. In C. B. Lloyd (Ed.), Sex, discrimination, and the division of labor. New York: Columbia University Press.
- Flanagan, J. C., Davis, F. B., Dailey, J. T., Shaycroft, M. F.,
 Orr, D. B., Goldberg, I., & Neyman, C. A. (1964). The

 American high school student. Pittsburgh: University of
 Pittsburgh.
- Fox, L. H., Brody, L., & Tobin, D. (1979). <u>Women and</u>

 <u>mathematics</u>: <u>The impact of early intervention programs</u>

 <u>on course-taking and attitudes in high school</u>. Baltimore:

 Intellectually Gifted Child Study Group, John Hopkins

 University.
- Geller, G. (1984). The effects of systemic discrimination on the aspirations of high school aged children. <u>School Counselor's Journal</u>, <u>September</u>, 13-20.
- Ginzberg, E., Ginsburg, S. W., Axelrad, S., & Herma, J. L. (1951). Occupational choice: An approach to a general

- theory. New York: Columbia University Press.
- Ginzberg, E., Berg, I. E., Brown, C. A., Herma, J. L.,
 Yohalem, A. M., & Gorelick, S. (1966).

 <u>Life styles of educated women</u>. New York: Columbia University
 Press.
- Glaze, A. (1980). Ontario girls' career aspirations and expectations. Orbit, 11, 19-22.
- Gordon, C. (1969) <u>Looking ahead</u>: <u>Self conceptions</u>, <u>race</u>

 <u>and family as determinants of adolescent orientation to achievement</u>. Washington, D. C.: American Sociological Association Monograph.
- Haller, A. O., & Portes, A. (1973). Status attainment processes. Sociology of Education, 46, 51-91.
- Hare-Mustin, R. T., & Broderick, P. C. (1979). The myth of mother-hood: A study of attitudes toward motherhood. <u>Psychology of Women Quarterly</u>, <u>4</u>, 114-128.
- Harmon, L. W. (1971). The childhood and adolescent career plans of college women. <u>Journal of Vocational Behavior</u>, <u>1</u>, 45-56.
- Harrison, R. (1969). Aspirations as related to school performance and socioeconomic status. <u>Sociometry</u>, 32, 70-79.
- Hauser, R. M. (1971). <u>Socioeconomic background and educational</u>

 <u>performance</u>. Washington, D. C.: American Sociological

 Association Monograph.

- Herr, E. L., & Cramer, S. H. (1984). <u>Career guidance and counseling through the life span: Systematic approaches.</u>

 Toronto, Ont.: Little, Brown & Company.
- Hjelle, L. A., & Butterfield, R. (1974). Self actualization and women's attitudes toward their roles in contemporary society. <u>Journal of Psychology</u>, <u>87</u>, 225-230.
- Hock, E., Gnezda, M. T., & McBride, S. L. (1984). Mothers of infants: Attitudes toward employment and motherhood following birth of the first child. <u>Journal of Marriage and the Family</u>, 46, 425-431.
- Holland, J. L. (1959). A theory of vocational choice. <u>Journal of Counseling Psychology</u>, 6, 35-45.
- Holland, J. L. (1966). <u>The psychology of vocational choice</u>. Waltham, MA: Blalsdell.
- Hout, M., & Morgan, W. R. (1975). Race and sex variations in the causes of the expected attainments of high school seniors.

 American Journal of Sociology, 81, 364-394.
- Hyde, J. S., & Rosenberg, B. G. (1980). Half the human experience:

 The psychology of women (2nd ed.). Lexington, MA.: D. C. Heath and Company.
- Karpicke, S. (1980). Perceived and real sex differences
 in college students' career planning. <u>Journal of Counseling</u>
 Psychology, 27, 240-245.
- Kenkel, W. F., & Gage, B. A. (1983). The restricted and gender-

- typed occupational aspirations of young women: Can they be modified? <u>Family Relations</u>: <u>Journal of Applied Family and Child Studies</u>, <u>32</u>, 129-138.
- Kerr, B. A. (1983). Raising the career aspirations of gifted girls.

 The Vocational Guidance Quarterly, 32, 37-43.
- Kilpatrick, D. G. & Smith, A. D. (1974). Validation of the Spence-Helmreich Attitudes Toward Women Scale. <u>Psychological</u>
 Reports, 35, 461-462.
- Kitay, P. M. (1940). A comparison of the sexes in their attitudes and beliefs about women. Sociometry, 34, 399-407.
- Komorovsky, M. (1973). Presidential address: Some problems in role analysis. American Sociological Review, 38, 649-662.
- Lavin, D. E. (1965). <u>The prediction of academic performance</u>.

 New York: Russell Sage.
- Lighter, J. R., Tetenbaum, T. J. B., & Travis, M. (1981, April).

 Predicting career orientation in adolescent females: A look at some forgotten family variables. Paper presented at the Annual Meeting of the American Educational Research Association, St. Louis, MO.
- Loo, R., & Logan, P. (1977). Investigation of the Attitudes

 Toward Women Scale in western Canada. <u>Canadian Journal of the</u>

 Behavioral Sciences, 9, 201-204.
- Lopata, H. Z. (1971). <u>Occupation</u>: <u>Housewife</u>. New York: Oxford University Press.

- Lunneborg, P. W. (1974). Validity of Attitudes Toward Women Scale.

 <u>Psychological Reports</u>, <u>34</u>, 1281-1282.
- Lynn, D. B. (1959). A note on sex differences in the development of masculine and feminine identification. <u>Psychological Review</u>, 66, 126-135.
- Maccoby, E. E. (1966). Sex differneces in intellectual functioning. In E. E. Maccoby (Ed.), <u>The development of sex differences</u>. Stanford: Stanford University Press.
- Marini, M. M. (1978). Sex differences in the determination of adolescent aspirations: A review of research. Sex Roles, 4, 723-753.
- Marshall, S., & Wijting, J. (1980). Relationships of achievement motivation and sex-role identity to college women's career orientation. Journal of Vocational Behavior, 16, 299-311.
- Matthews, E. (1960). The marriage-career conflict in girls and women. Unpublished doctoral dissertation, Harvard University.
- Matthews, E., & Tiedman, D. V. (1964). Attitudes toward career and marriage and the development of life style in young women.

 <u>Journal of Counseling Psychology</u>, <u>11</u>, 375-384.
- McClendon, M. Y. (1976). The occupational status attainment process of males and females. American Sociological Review, 41, 52-64.
- McDill, E. L. & Coleman, J. S. (1963). High school social status,

- college plans, and interest in academic achievement: A panel analysis. American Sociological Review, 28, 905-918.
- McGuigan, D. G. (Ed.). (1980). <u>Women's lives: New theory, research, and policy</u>. University of Michigan Center for Continuing Education of Women.
- McKee, J. P. & Sherriffs, A. C. (1957). The differential evaluation of males and females. <u>Journal of Personality</u>, <u>25</u>, 356-371.
- McKee, J. P. & Sherriffs, A. C (1959). Men's and women's beliefs, ideals, and self concepts. <u>American Journal of Sociology</u>, <u>65</u>, 356-363.
- Menzies, S. J. (1976). New directions for public policy: A position paper on the one-parent family. Ottawa, Ontario: Canadian Advisory Council on the Status of Women.
- Minnigerode, F. A. (1976). Attitudes toward women, sex-role stereotyping and locus of control. <u>Psychological Reports</u>, 38, 1301-1302.
- Mischel, W. (1966). A social-learning view of sex differences in behavior. In E. Maccoby (Ed.). The development of sex differences. Stanford, California: Stanford University Press.
- Mischel, W. (1970). Sex-typing and socialization. In P. H. Mussen (Ed.) <u>Carmichael's manual of child psychology</u>. New York: Wiley.
- Mussen, P. H. (1969). Early sex-role development. In D. A.

- Goslin (Ed.). <u>Handbook of socialization theory and research</u>. Chicago: Rand McNally.
- Okun, B. F. (1984). Working with adults: Individual, family and career development. Monterey, Calif.: Brooks/Cole Publishing Company.
- O'Leary, V. E. (1977). <u>Toward understanding women</u>. Monterey, CA.: Brooks-Cole Publishing Co.
- Olive, H. (1973). Sex differences in adolescent vocational preferences. The Vocational Guidance Quarterly, 21, 199-201.
- Oppenheimer, V. (1968). The sex labelling of jobs. <u>Industrial</u>
 Relations, <u>May</u>, 219-234.
- Osipow, S. H. (1975). The relevance of theories of career development to special groups: Problems, needed data, and implications.

 In S. Picou & R. Campbell (Eds.), <u>Career behavior of special</u>
 groups. Columbus, Ohio: Charles E. Merrill.
- Parelius, A. P. (1973).. Emerging sex-role attitudes, expectations and strains among college women. <u>Journal</u> of Marriage and the Family, 37, 146-153.
- Parelius, A. P. (1975). Change and stability in college women's orientations toward education, family, and work. <u>Social Problems</u>, 22, 420-432.
- Parsons, T., & Bales, R. F. (1955). <u>Family socialization and inter-action process</u>. Glencoe, Ill.: Free Press.

- Patterson, L. E. (1973). Girls careers expression of identity.

 The Vocational Guidance Quarterly, 21, 269-275.
- Pearson, M. (1979). <u>Women and work: The second time around</u>.

 Ottawa, Ontario: Canadian Advisory Council on the

 Status of Women.
- Pedro, J. D. (1982). Career maturity in high school age females.

 The Vocational Guidance Quarterly, 30, 243-251.
- Polachek, S. W. (1975). Discontinuous labor force participation and its effect on women's market earnings. In C. B. Lloyd (Ed.), <u>Sex</u>, discrimination and the division of labor. New York: Columbia University Press.
- Prediger, D. J., Roth, J. D., & Noeth, R. J. (1973).

 Nationwide study of student career development: Summary
 of results. Iowa City, IA: The American College Testing
 Program.
- Psathas, G. (1968). Toward a theory of occupational choice for women. Sociology and Social Research, 52, 253-268.
- Radloff, L. S., & Monroe, M. K. (1978). Sex differences in helplessness with implications for depression. In L. S. Hansen & R. S. Rapoza (Eds.), <u>Career development and counseling of women</u>. Springfield, Ill.: Charles C. Thomas.
- Rapoza, R., & Blocher, D. (1976). The cinderella effect: Planning avoidance in girls. Counseling and Values, 8, 12-19.
- Rapoza, R. S., & Blocher, D. H. (1978). A comparative study of

- academic self-estimates, academic values, and academic aspirations of adolescent males and females. In L. S. Hansen & R. S. Rapoza (Eds.), Career development and counseling of women. Springfield, Ill.: Charles C. Thomas, 1978.
- Richardson, M. S. (1974). The dimensions of career and work orientation in college women. <u>Journal of Vocational Behavior</u>, 5, 161-172.
- Richardson, M. S. (1975). Self concepts and role concepts in the career orientation of college women. <u>Journal of Counseling Psychology</u>, <u>22</u>, 122-126.
- Richardson, M. S. (1979). Toward an expanded view of careers.

 Counseling Psychologist, 8, 34-35.
- Roe, A. (1956). The psychology of occupations. New York: Wiley.
- Rooney, G. S. (1983). Distinguishing characteristics of the life roles of worker, student and homemaker for young adults.

 <u>Journal of Vocational Behavior</u>, 22, 324-342.
- Rosen, B. C., & Aneshensel, C. S. (1978). Sex differences in the educational-occupational expectation process. <u>Social</u>

 <u>Forces</u>, <u>67</u>, 164-186.
- Rosenberg, M. (1957). <u>Occupations</u> and <u>values</u>. Glencoe, Ill.: Free Press.
- M. (1968) Sex-role stereotypes and self concepts in college students. Journal of Counseling and Clinical Psychology,

- <u>32</u>, 287-295.
- Russo, N. F. (1976). The motherhood mandate. <u>Journal of Social</u>
 Issues, 32, 143-153.
- Saskatchewan Advanced Education and Manpower. (1984). <u>Did you know?</u>

 <u>or statistics to blow your mind</u>. Regina, Saskatchewan: Women's Services Branch.
- Scarf, M. (1980). <u>Unfinished business</u>. Garden City, N.Y.:
 Doubleday.
- Seward, G. H., & Larson, W. R. (1968). Adolescent concepts of social sex roles in the United States and the two Germanies.

 Human Development, 11, 217-248.
- Sewell, W. H., & Shah, V. P. (1967). Socioeconomic status, intelligence, and the attainment of higher education. <u>Sociology</u> of <u>Education</u>, <u>40</u>, 1-23.
- Sewell, W. H., & Shah, V. P. (1968). Social class, parental encouragement and educational aspirations. <u>American Journal</u> of Sociology, 213, 559-572.
- Spence, J. T. & Helmreich, R. (1972). The attitudes toward women scale: An objective instrument to measure attitudes toward the rights and roles of women in contemporary society.

 Catalogue of Selected Documents in Psychology, 2, 66.
- Spence, J. T., & Helmreich, R. L. (1978). Masculinity

 and femininity: Their psychological dimensions, correlates

 and antecedents. Austin: University of Texas Press.

- Statistics Canada (1985). <u>Women in Canada: A statistical report</u> (Cat. No. 89-503). Ottawa, Ont.: Author.
- Statistics Canada (1983). Ministry of Supply and Services

 Canada (Cat. No. L38-301 1983-1). Ottawa, Ont.: Author.
- Statistics Canada, Labour Force Survey Division (1982).

 <u>Historical labour force statistics: Actual data, seasonal factors, seasonally adjusted data</u> (Cat. No. 71-201).

 Ottawa, Ont.: Author.
- Super, D. E. (1951). Vocational adjustment: Implementing a self-concept. Occupations, 30, 88-92.
- Super, D. E. (1953). A theory of vocational development.

 American Psychologist, 7, 185-190.
- Super, D. E. (1980). A life-span, life-space approach to career development. <u>Journal of Vocational Behavior</u>, <u>16</u>, 282-298.
- Super, D. E., & Bohn, M. J. (1970). Occupational psychology.

 Belmont, Calif.: Wadsworth Publishing Co., Inc.
- Super, D. E., & Culha, M. (1976). <u>Work salience inventory</u>. New York: Institute for Psychological Research, Teachers College, Columbia University.
- Sweet, J. A. (1973). <u>Women in the labor force</u>. New York: Seminar Press.
- Tangri, S. S. (1972). Determinants of occupational role innovation

- among college women. <u>Journal of Social Issues</u>, <u>28</u>, 177-200.
- Treiman, D. J., & Terrel, K. (1975). Sex and the process of status attainment. A comparison of working women and men. American Review, 40, 174-200.
- Walker, D. (1974). <u>Psychological correlates of sex role</u>

 <u>behaviour</u>. Unpublished master's thesis, California State

 University at Chico.
- White, L., Jr. (1950). Educating our daughters. New York: Harper.
- Woodcock, P. R., & Herman, A. (1978). Fostering career awareness in tenth grade girls. School Counsellor, 25, 256-264.
- Wong, P. T. P., Kettlewell, G. & Sprould, C. F. (1985). On the importance of being masculine: Sex role attribution, and women's career achievement. <u>Sex Roles</u>, <u>12</u>, 757-769.
- Wylie, R. (1961). The self concept. Lincoln, Nebraska: University of Nebraska Press.
- Zytowski, D. G. (1969). Toward a theory of career development for women. Personnel and <u>Guidance Journal</u>, <u>47</u>, 660-664.

APPENDIX A

n

University of Manitoba Department of Psychology

Dear Parent(s):

I am a graduate student in clinical psychology at the University of Manitoba. I am currently carrying out a research project for my master's degree under the supervision of Dr. Lillian Esses, associate professor, Department of Psychology. I am interested in adolescents' career plans and how they are related to attitudes, background and personal characteristics.

I'm writing to request your permission for the participation of your son/daughter in this study. Each student will be asked to fill out a questionnaire. Questions included in this questionnaire will address such things as: (a) family background (family form—eg. single—parent family, remarried family; parental occupation(s); parental education; ethnic origin; religious background), (b) student's academic performance (average grade in required subjects such as Math and English), (c) career motivation (commitment to a career, occupational and educational plans), (d) commitment to marriage and a family, (e) attitudes toward women and knowledge of women in the labour force. All answers will be kept strictly confidential and only group trends will be examined. Questionnaires will be filled out anonymously.

As an added educational element, students will be encouraged to ask questions pertaining to the research, and information regarding changing trends in the labour force will be discussed. Participating classrooms will also be sent summaries of the research once it is completed.

I believe that this is an important area of study and hope it will be beneficial in shedding light on the career planning process of young people today.

Please have your son/daughter return this form to school as soon as possible. Thank you for your consideration of this matter. If you have any questions about the research please call me at 261-9318 or 474-9338 (messages).

prease	call	me a	201-331	0 01	4/	4-2330	(mes:	sages),		
Sincer	ely,										
Valeri	e Holm	ns									
					my	permi	ssion	to	take	part	i
the ab	ove re	esear	ch study.								
Cianat		١									

APPENDIX B

QUESTIONNAIRE BOOKLET

Form One

The following questionnaire has been designed to help understand how people's attitudes, background, and personal characteristics are related to their future life plans. Many of the questions you will answer and facts you will learn may guide you in thinking about yourself and your own plans for the future.

Your participation in this study is voluntary. Answers given to any of these questions will in no way affect your schoolwork. All answers will be kept strictly confidential. As well, the questionnaires are anonymous.

Please read all instructions carefully. Work as quickly as you can. Thank you for your cooperation. You may begin.

BACKGROUND INFORMATION

MALEFEMALE	
AGE	
GRADE	
RELIGION: (check one)	
Catholic (eg. United, Luth Jewish	eran)
None (please explain)
ETHNIC BACKGROUND:	
British	Italian
Chinaga	Native Indian
Other Asiatic	Polish
	Portuguese
Filipino	Scandanavian
French	Ukranian
German (please explain)
Other (prease exprain	
Language, if other than English, s	poken at home
My average mark in required subject (circle one) A B C D E F	ts (eg. English, Math) is:
Most of my classes are at the foll (check one) 00 01 02	owing level:(grades 10 & 12 only) 04
Have you ever taken a career educa career counsellor or guidance coun Yes No	tion course and/or spoken to a sellor about career planning?
Which of the following statements situation? (check one)	
I live with both of my natur	al/biological parents.
most of the time in a single	divorced and I live with my mother
	e-parent lamily. divorced and I live with my father
most of the time in a single	e-parent family.
My parents are divorced and	I live with my mother and
stepfather most of the time.	-

riy Lucii	ther most of the time. Her is dead and I live with my mother most of the time
in a si	ingle-parent family.
	ner is dead and I live with my father most of the time
in a si	ngle-parent family.
My fath	her is dead and I live with my mother and stepfather.
My moth	mer is dead and I live with my father and stepmother.
Both my	ner is dead and I live with my mother and stepfather. There is dead and I live with my father and stepmother. The parents are dead and I live with foster parents/
adoptiv	ve parents/relatives.
Other (Describe)
	be your parent(s) job(s) as completely as you can and
indicate whet	ther each is full-time or part-time.
	JOB TITLE/JOB DESCRIPTION
	JOB TITLE/JOB DESCRIPTION
Mother (stepm	nother, etc.)
, 	
Full-time	Part-time
Father (stepf:	ather, etc.)
Dull time	Part-time
cull-time	Part-time
What is the h	ighest level of formal schooling your parent(s)
	sighest level of formal schooling your parent(s)
	eighest level of formal schooling your parent(s) please check)
completed? (please check)
completed? (please check)
completed? () Mother (stepmo	please check)
completed? () Mother (stepmo	please check)
completed? (; Mother (stepmonum) less that grade 12	please check) nother,etc) n grade 12
completed? (procedured) Mother (stepmonum) less that grade 12 column.	please check) other,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school
completed? (proposed completed) Mother (stepmonum) less that grade 12 grade 12 grade 2 years of the completed comp	please check) other,etc) n grade 12 (high school diploma)
completed? () Mother (stepmonum) less that grade 12 1 year completed? 2 years of the completed?	nother,etc) In grade 12 In (high school diploma) In ommunity college/vocational/technical/trade school Community college/vocational/technical/trade school
completed? () Mother (stepmonum) less than grade 12 1 year co 2 years co 1-2 years 3-4 years	please check) other,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university
completed? (; Mother (stepmed) less that grade 12 1 year co 2 years co 1-2 years 3-4 years over 4 years	n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.)
completed? (; Mother (stepmed) less that grade 12 1 year co 2 years co 1-2 years 3-4 years over 4 years	n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.)
completed? (; Mother (stepmed) less that grade 12 1 year co 2 years co 1-2 years 3-4 years over 4 years	n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.)
completed? () Mother (stepmonum) less that grade 12 1 year con 2 years on 1-2 ye	please check) other,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) n grade 12
completed? () Mother (stepmonum) less that grade 12 1 year con 2 years on 1-2 years over 4 ye	please check) other,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) n grade 12 (high school diploma)
completed? () Mother (stepmonth) less that grade 12 1 year condition of the condition of	please check) other,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school
completed? () completed? () Mother (stepment 1 2 2 2 2 2 3 4 2 4 2 2 4 3 4 4 4 4 4 4 4 4	nother,etc) nother,etc) no grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) no grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school
less that grade 12 1 year conduction 1 2 years 3 4 year 2 years 4 year 2 years 3	nother,etc) nother,etc) no grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) no grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university
Completed? (Completed? (Completed? (Completed? (Completed? (Complete	n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's)
less that grade 12 1 year conduction 1 2 years 3 4 years 2 2 1 year conduction 1 year conduction 1 year conduction 2 years 3 4	n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university s university (undergraduate degree, Bachelor's) ears university (e.g. Master's or Ph.D.) ather,etc) n grade 12 (high school diploma) ommunity college/vocational/technical/trade school community college/vocational/technical/trade school s university

The level of	education	I intend	to comp	plete i	s:(chec	k one)		
less than grade 12grade 12 (high school diploma)1 year community college/technical/vocational/trade school2 years community college/technical/vocational/trade school3-4 years university (undergraduate degree, Bachelor's)over 4 years university (e.g. Master's or Ph.D.) The kind of work I expect/hope to have as an occupation is: (Describe your answer on the space provided)								
How certain (circle one)		about y	our cho:	ice at	this ti	me?		
1	2	3	4	5	6	7		
not at al certain	1				,	extremely certain		
What are you	r future ma	rriage p	lans or	hopes?	(check	one)		
marry b	earry efore I'm 2 etween the etween the hen I'm 32	ages of	20 and 2					
Do you plan/	hope to hav	e childr	en? yes	5	no			

Indicate whether you

- A AGREE STRONGLY
- B AGREE MILDLY
- C NEITHER AGREE NOR DISAGREE
- D DISAGREE MILDLY
- E DISAGREE STRONGLY

to each statement by circling A, B, C,D, or E for each item.

- A B C D E I enjoy making plans about my future.
- A B C D E I often think about what type of job I'll be in ten years from now.
- A B C D E To me, a career is a means of expressing myself.
- A B C D E I would like to have a job which I am really proud of.
- A B C D E I like to have a career goal towards which I can work.
- A B C D E I really don't think too much about whether or not I'll get ahead in my job.
- A B C D E Planning for and succeeding in a career is not my main concern.
- A B C D E I could be happy without having a career.
- A B C D E I would want to move ahead in my occupation, not stand still.
- A B C D E My career will give meaning to my life.
- A B C D E The occupation that interests me most will give me a chance to really be myself.
- A B C D E Planning for a specific career is worth the effort.
- A B C D E I do not consider myself "career minded".
- A B C D E You have one empty class period and you choose to take an extra course that would help prepare you for entry into a field career of your choice at a later time.
- A B C D E If I hit the jackpot or made it in the lottery I would quit my job.

Indicate whether you AGREE STRONGLY В AGREE MILDLY NEITHER AGREE NOR DISAGREE C DISAGREE MILDLY DISAGREE STRONGLY to each statement by circling A, B, C, D, or E, for each item. I consider marriage and having a family very D E A В C important. I do not wish to someday stay home and devote E Α В C D full-time to my home and family. I could be happy without having children. * C A В D E I could be fully satisfied dedicating my life to В C D E Α home and family. The satisfaction of caring for home and family C D Ε Α В outweighs the possible boredom that could be involved. I do not consider myself "family oriented". C D Ε Α В Finding the right spouse is one of the major В C D E A concerns in my life. I look forward to parenting. В C D Ε Α Whether or not I have children is not an A В С D E important consideration at this point in my life. Children will give meaning to my life. C E Α В D I do not want to marry and have children. Α В C D E Being a parent, to me, is one of the most C D E Α В important jobs. My main goal in life is to raise healthy, happy В C D E Α children. I want to have children and I want the A В C D E satisfaction of staying home and watching them grow from day to day. 15 years from now I do not want to be married and В C D E Α have children. Family life will be a major time commitment in D E В C my life. My life will not be complete until I get married. * D Ε Α В C

The statements listed below describe attitudes which different people have. There are no right or wrong answers, only opinions. You are asked to express your feelings about each statement by indicating whether you

- A AGREE STRONGLY
- B AGREE MILDLY
- C DISAGREE MILDLY
- D DISAGREE STRONGLY

(Circle A, B, C, or D for each)

- A B C D Swearing and obscenity are more repulsive in the speech of a woman than a man.
- A B C D Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
- A B C D It is insulting to women to have the "obey" clause remain in the marriage service.
- A B C D A woman should be as free as a man to propose marriage.
- A B C D Women should worry less about their rights and more about becoming good wives and mothers.
- A B C D Women should assume their rightful place in business and all the professions along with men.
- A B C D A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
- A B C D It is ridiculous for a woman to run a locomotive and for a man to darn socks.
- A B C D The intellectual leadership of a community should be largely in the hands of men.
- A B C D Women should be given equal opportunity with men for apprenticeship in the various trades.
- A B C D Women earning as much as their dates should bear equally the expense when they go out together.
- A B C D Sons in a family should be given more encouragement to go to college than daughters.
- A B C D In general, the father should have greater authority than the mother in the bringing up of children.

- A B C D Economic and social freedom is worth far more to women than acceptance of the ideal of femininity **
 which has been set up by men.
- A B C D There are many jobs in which men should be given preference over women in being hired or promoted.

The following are either true or false statements about women, families, and employment in North America. Circle the T for each one you believe is TRUE and the F if you believe the statement is FALSE.

- T F Most women work because of economic need (they have to).
- T F Most families are supported only by the father's income.
- T F Today more than half of all women ages 15 and over are in the paid labour force (work outside the home).
- T F A young woman today can expect to spend an average of 30 years in the paid labour force.
- T F When wives work outside the home, their husbands spend much more time on household chores.
- T F For every dollar that a man makes, a woman makes about 55 cents.
- T F Over one-half of all Canadian women can expect to be poor at some time in their lives.
- T F 5 out of 10 women with preschool children now work outside the home.
- T F Over 40% of marriages end in divorce.
- T F It is estimated that by 1990 nearly one million women now in the labour force will be unemployed due to technological change.
- T F Women should not be hired for jobs which require additional training, since they will quit anyway when they get married or pregnant.
- T F Most women work in three areas--clerical (eg. typing, filing sales (eg. salesclerk), and service (eg. waitress, cashier).

The items below inquire about what kind of person you think you are. Each item consists of a pair of characteristics with the letters A-E in between. For example:
Not at all Artistic..A..B..C..D..E..Very Artistic

Each pair describes contradictory characteristics—that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose A, if you think you are pretty good, you might choose D, and if you are only medium, you might choose C, and so forth. Please circle your answers.

Not at all aggressive	ABCDE	Very aggressive
Not at all independent	ABCDE	Very independent
Not at all emotional	ABCDE	Very emotional
Very submissive	ABCDE	Very dominant
Not at all excitable in a major crisis	ABCDE	Very excitable in in a major crisis
Very passive	ABCDE	Very active
Not at all able to devote self completely to others	ABCDE	Able to devote self completely to others
Very rough	ABCDE	Very gentle
Not at all helpful to others	ABCDE	Very helpful to others
Not at all competitive	ABCDE	Very competitive
Very home oriented	ABCDE	Very worldly
Not at all kind	ABCDE	Very kind
Indifferent to others' approval	ABCDE	Highly needful of others' approval
Feelings not easily hurt	ABCDE	Feelings easily hurt
Not at all aware of feelings of others	ABCDE	Very aware of feelings of others

Can make decisions easily	ABCDE	Has difficulty making decisions
Gives up very easily	ABCDE	Never gives up easily
Never cries	ABCDE	Cries very easily
Not at all self- confident	ABCDE	Very self-confident
Feels very inferior	ABCDE	Feels very superior
Not at all under- standing of others	ABCDE	Very understanding of others
Very cold in relations with others	ABCDE	Very warm in relations with others
Very little need for security	ABCDE	Very strong need for security
Goes to pieces under pressure	ABCDE	Stands up well under pressure

QUESTIONNAIRE BOOKLET

Form Two

The following questionnaire has been designed to help understand how people's attitudes, background, and personal characteristics are related to their future life plans. Many of the questions you will answer and facts you will learn may guide you in thinking about yourself and your own plans for the future.

Your participation in this study is voluntary. Answers given to any of these questions will in no way affect your schoolwork. All answers will be kept strictly confidential. As well, the questionnaires are anonymous.

Please read all instructions carefully. Work as quickly as you can. Thank you for your cooperation. You may begin.

A B C D E	AGE AGE NEI DIS	REE ST REE MI ITHER SAGREE SAGREE	AGREE MILDL STRON	NOR DISAGREE Y
A	В	C D	E	I consider marriage and having a family very important.
A	В	C D	E	I do not wish to someday stay home and devote full-time to my home and family.
A	В	C D	E	I could be happy without having children.
Α	В	C D	E	I could be fully satisfied dedicating my life to home and family.
Α	В	C D	Е	The satisfaction of caring for home and family outweighs the possible boredom that could be involved.
λ	70	C D	Tr.	I do not consider myself "family oriented".
A	В	C D	ட	-
A	В	C D	E	Finding the right spouse is one of the major concerns in my life.
A	В	C D	E	I look forward to parenting.
A	В	C D	E	Whether or not I have children is not an important consideration at this point in my life.
A	В	C D	E	Children will give meaning to my life.
Α	В	C D	E	I do not want to marry and have children.
A	В	C D	Е	Being a parent, to me, is one of the most important jobs.
A	В	C D	E	My main goal in life is to raise healthy, happy children.
A	В	C D	E	I want to have children and I want the satisfaction of staying home and watching them grow from day to day.
A	В	C D	E	15 years from now I do not want to be married and have children.
Α	В	C D	E	Family life will be a major time commitment in my life.
Α	В	C D	E	My life will not be complete until I get married.

Indicate whether you

Indicate whether you AGREE STRONGLY AGREE MILDLY В NEITHER AGREE NOR DISAGREE C DISAGREE MILDLY DISAGREE STRONGLY E for each to each statement by circling A, B, C,D, or item. I enjoy making plans about my future. В C D E I often think about what type of job I'll be in В C D Ε ten years from now. В C D Ε To me, a career is a means of expressing myself. Α I would like to have a job which I am really proud В C D Ε Α of. I like to have a career goal towards which I can A В C D \mathbf{E} work. C I really don't think too much about whether or not D E A В I'll get ahead in my job. Planning for and succeeding in a career is not my Α В C D Ε main concern. I could be happy without having a career. Α В C D E C D E I would want to move ahead in my occupation, not Α В stand still. My career will give meaning to my life. C D E В Α В C D Ε The occupation that interests me most will give me Α a chance to really be myself. C Ε Planning for a specific career is worth the effort. В D I do not consider myself "career minded". C D Ε В

A B C D E If I hit the jackpot or made it in the lottery I would quit my job.

later time.

You have one empty class period and you choose to

take an extra course that would help prepare you for entry into a field career of your choice at a

В

Α

C

D

E

The items below inquire about what kind of person you think you are. Each item consists of a pair of characteristics with the letters A-E in between. For example:

Not at all Artistic..A..B..C..D..E..Very Artistic

Each pair describes contradictory characteristics—that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose A, if you think you are pretty good, you might choose D, and if you are only medium, you might choose C, and so forth. Please circle your answers.

Not at all aggressive	ABCDE	Very aggressive
Not at all independent	ABCDE	Very independent
Not at all emotional	ABCDE	Very emotional
Very submissive	ABCDE	Very dominant
Not at all excitable in a major crisis	ABCDE	Very excitable in in a major crisis
Very passive	ABCDE	Very active
Not at all able to devote self completely to others	ABCDE	Able to devote self- completely to others
Very rough	ABCDE	Very gentle
Not at all helpful to others	ABCDE	Very helpful to others
Not at all competitive	ABCDE	Very competitive
Very home oriented	ABCDE	Very worldly
Not at all kind	ABCDE	Very kind
Indifferent to others' approval	ABCDE	Highly needful of others' approval
Feelings not easily hurt	ABCDE	Feelings easily hurt
Not at all aware of feelings of others	ABCDE	Very aware of feelings of others

Can make decisions easily	ABCDE	Has difficulty making decisions
Gives up very easily	ABCDE	Never gives up easily
Never cries	ABCDE	Cries very easily
Not at all self- confident	ABCDE	Very self-confident
Feels very inferior	ABCDE	Feels very superior
Not at all under- standing of others	ABCDE	Very understanding of others
Very cold in relations with others	ABCDE	Very warm in relations with others
Very little need for security	ABCDE	Very strong need for security
Goes to pieces under pressure	ABCDE	Stands up well under pressure

The statements listed below describe attitudes which different people have. There are no right or wrong answers, only opinions. You are asked to express your feelings about each statement by indicating whether you

- A AGREE STRONGLY
- B AGREE MILDLY
- C DISAGREE MILDLY
- D DISAGREE STRONGLY

(Circle A, B, C, or D for each)

- A B C D Swearing and obscenity are more repulsive in the speech of a woman than a man.
- A B C D Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
- A B C D It is insulting to women to have the "obey" clause remain in the marriage service.
- A B C D A woman should be as free as a man to propose marriage.
- A B C D Women should worry less about their rights and more about becoming good wives and mothers.
- A B C D Women should assume their rightful place in business and all the professions along with men.
- A B C D A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
- A B C D It is ridiculous for a woman to run a locomotive and for a man to darn socks.
- A B C D The intellectual leadership of a community should be largely in the hands of men.
- A B C D Women should be given equal opportunity with men for apprenticeship in the various trades.
- A B C D Women earning as much as their dates should bear equally the expense when they go out together.
- A B C D Sons in a family should be given more encouragement to go to college than daughters.
- A B C D In general, the father should have greater authority than the mother in the bringing up of children.

- A B C D Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.
- A B C D There are many jobs in which men should be given preference over women in being hired or promoted.

The following are either true or false statements about women, families, and employment in North America. Circle the T for each one you believe is TRUE and the F if you believe the statement is FALSE.

- T F Most women work because of economic need (they have to).
- T F Most families are supported only by the father's income.
- T F Today more than half of all women ages 15 and over are in the paid labour force (work outside the home).
- T F A young woman today can expect to spend an average of 30 years in the paid labour force.
- T F When wives work outside the home, their husbands spend much more time on household chores.
- T F For every dollar that a man makes, a woman makes about 55 cents.
- T F Over one-half of all Canadian women can expect to be poor at some time in their lives.
- T F 5 out of 10 women with preschool children now work outside the home.
- T F Over 40% of marriages end in divorce.
- T F It is estimated that by 1990 nearly one million women now in the labour force will be unemployed due to technological change.
- T F Women should not be hired for jobs which require additional training, since they will quit anyway when they get married or pregnant.
- T F Most women work in three areas—clerical (eg. typing, filing sales (eg. salesclerk), and service (eg. waitress, cashier).

BACKGROUND INFORMATION

MALE FEMALE	
AGE	
GRADE	
RELIGION: (check one)	
Catholic (eg. United, Luthe Jewish	eran)
None (please explain)
ETHNIC BACKGROUND:	
British	Italian Native Indian
Other Asiatic	Polish
Dutch	Portuguese
Filipino	Scandanavian
	Ukranian
Other (please explain	
Other(please explain)
Language, if other than English, sp	ooken at home
My average mark in required subject (circle one) A B C D E F	ts (eg. English, Math) is:
Most of my classes are at the follo (check one) 00 01 02 _	
Have you ever taken a career educate career counsellor or guidance c	
Which of the following statements a situation? (check one) I live with both of my natura	
	divorced and I live with my mother
most of the time in a single-	
	divorced and I live with my father
most of the time in a single-	
My parents are divorced and l	l live with my mother and
stepfather most of the time.	-

	<pre>_ My parents are divorced and I live with my father and stepmother most of the time. _ My father is dead and I live with my mother most of the time</pre>
	<pre>in a single-parent family My mother is dead and I live with my father most of the time in a single-parent family.</pre>
	_ My father is dead and I live with my mother and stepfather My mother is dead and I live with my father and stepmother Both my parents are dead and I live with foster parents/ adoptive parents/relatives Other (Describe)
	se describe your parent(s) job(s) as completely as you can and cate whether each is full-time or part-time.
	JOB TITLE/JOB DESCRIPTION
Mothe	er (stepmother, etc.)
F11]]-	-timePart-time
	er (stepfather, etc.)
Full-	-timePart-time
	is the highest level of formal schooling your parent(s) leted? (please check)
Mothe	er (stepmother,etc)
	_less than grade 12 _grade 12 (high school diploma)
	1 year community college/vocational/technical/trade school 2 years community college/vocational/technical/trade school
	_1-2 years university _3-4 years university (undergraduate degree, Bachelor's)
	over 4 years university (e.g. Master's or Ph.D.)
Fathe	er (stepfather,etc)
	less than grade 12 grade 12 (high school diploma) 1 year community college/vocational/technical/trade school 2 years community college/vocational/technical/trade school 1-2 years university 3-4 years university (undergraduate degree, Bachelor's)
	over 4 years university (e.g. Master's or Ph.D.)

The level of education	ı I inter	nd to co	omplete i	s:(chec	k one)	
less than grade grade 12 (high so 1 year community 2 years community 3-4 years universover 4 years universor 4 years 4 years universor 4 years 4 yea	chool dip college, y college sity (und	/technic e/techni dergradı	.cal/voca ate degr	tional/ ee, Bac	trade schoo: helor's)	L
The kind of work I exp (Describe your answer				occupat	ion is:	
(Describe your answer	on the .	space pi	ovided			
How certain do you fee (circle one)	el about	your ch	noice at	this ti	me?	
1 2	3	4	5	6	7	
not at all certain					extremely certain	
What are your future n	narriage	plans o	or hopes	check	one)	
never marrymarry before I'mmarry between the	20 years	s old f 20 and	1 25			
marry between themarry when I'm 32	e ages o	f 26 and				