LIFE ROLE ASPIRATIONS OF HIGH ABILITY

FEMALE UNDERGRADUATES

By

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ABSTRACT

This study used a biodemographical questionnaire and a variant of Kelly's (1955) repertory grid technique to examine the life role aspirations (career, home and family, and personal) of a group of high ability women and to describe how their role perceptions and expectations seemed to influence their career aspirations.

All subjects were of similar high academic standing (72% average or above) and were either in the final year of the Bachelor of Commerce Program at the University of British Columbia or in first year Law (combined Commerce/Law Option).

Twenty-nine subjects met with the researcher in small groups to complete the questionnaires. Each subject provided biodemographical data, including information about her projected five-year plans for paid employment, graduate or professional school, relationship style/marital status, and children. In addition, each subject completed a 12 x 12 role grid while imagining herself in each of 12 different roles during the subsequent five years of her life. Twelve roles and 12 constructs (considerations judged to be important influencing factors in the life role aspirations of women) were rank ordered in terms of personal preference and importance. Then, each of the 12 roles was rated according to each of the 12 constructs.

Group results were reported and described on a number of dimensions, including level and type of career aspirations, preference and preferability ranks of roles, importance and centrality ranks of constructs, overall level of conflict, conflict between constructs, and

conflict between roles.

The main finding was that all the women in the group were aspiring to relatively high level full-time careers in business or law for the next five year period of their lives. Their most preferred roles were professional roles. They appeared to be most strongly motivated by a desire for personal growth, which they seemed to construe mainly in terms of achievement. On the whole, they seemed to be a group of confident and independent women who were conflict-free in their attitudes toward their projected life roles.

The results of this study are useful to counsellors and educators of high ability women who are seeking to combine multiple roles in a manner which allows for maximum development of potential.

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DEDICATION

I would like to dedicate this thesis
to my mother, Marguerite McBain,
who, by her acknowledgement and
support of my strength and
abilities, has assisted me in
continuing to develop my potential.

CHAPTER I

Scope and Focus of the Study

Background of the Problem

The life role aspirations of high ability women must necessarily be understood within the social context of what is possible for women to achieve within a given society. Opportunitites and social expectations for women in Canada form the general context in which the lives of the women in this study are embedded.

Understanding women's achievement has become important for many reasons - personal, ideological, social - not the least of which is that significant numbers of women are now taking part in the world of achievement outside the home.

Since the 1950's, female participation in higher education and the workforce has steadily increased (Carnegie Commission on Higher Education, 1973; Labour Canada, 1980; Statistics Canada 1977, 1981). However, the level and scope of women's achievement does not appear to have undergone as marked a shift. Women still tend to enter at and to remain in lower status and lower paying positions (Labour Canada, 1980, 1981) and to be underrepresented in the higher echelons of almost every

occupation (O'Leary, 1974; Sutherland, 1978). When measured in terms of their participation in management, women still hold little decision making power (Bennett & Loewe, 1975; Economic Analysis and Research Bureau, 1979; Labour Canada, 1980; Greenglass, Note 1).

The question is – why are women continuing to underachieve in almost every occupation and, more specifically, why are they continuing to underachieve in management? How can women's achievement be improved? Greenglass (Note 1) outlined some possible explanations for the continuing occupational underachievement of women:

> The question of why women have not become more visible
> among the higher levels of management has been addressed
> from several different perspectives, and no doubt is a
> complex one requiring explanation on several levels.
> While overt discrimination may be a less salient factor
> today than perhaps it was in the not-too-distant past, sex
> stereotyping, the absence of female role models,
> mentors, and support groups, lower salaries, and masculine
> job stereotypes as a result of women's employment status,
> all function as real obstacles to the advancement of
> women. (p. 1)

A first step in exploring the question of how women's achievement can be improved is an examination of the factors upon which level of occupational achievement is assessed. The three indices which seem to be most central are educational status, income level, and general level of occupational prestige. For example, Blishen and McRoberts (1976)

used these variables (educational status, income level, and prestige ranking) to construct a socioeconomic index for occupations in Canada. The result was a rank ordering of 500 Canadian occupations (e.g., administrators in teaching and related fields received a rank of one and hunting, trapping and related occupations received a rank of 500).

Because earnings are a significant indicator of social value, and hence, of women's opportunities, the present author concurs with the following assumption of Fitzgerald and Crites (1980):

> ...we interpret the possibilities for women's equity partially in economic terms; that is, women will not achieve equity until they have access to financial resources and are not dependent on others for their livelihood. It is this dependence, possibly more than any other factor, which has kept women from developing to the extent of their desires and possibilities. (p. 45)

Occupations which are predominantly male occupations (e.g. occupations in the sciences, management and administration, law, medicine, and the technical and skilled trades) tend to be much higher in prestige and/or income level than predominantly female occupations (e.g., clerical, sales and service occupations, nursing). Therefore, as stated by Brito and Jusenius (1978) "the extent to which there is an alteration in women's occupational preferences for the future is of great importance to attempts to improve their relative earnings position" (p. 165-166).

Other researchers have noted the importance of level of

aspiration to subsequent occupational status attainment (Canter, 1979;

Fottler & Bain, 1980; Haller, Otto, Meier, & Ohlendorf, 1974). Canter

(1979) suggested that aspirations actually act as limits on

performance. For example, a woman with low aspirations may not give

herself the opportunity to achieve, or she may even avoid achievement.

The field of management is one field in which it is possible for

women to achieve equity, financial and otherwise, with men and to

advance in accordance with high aspirations. This is so because

managerial and administrative positions are higher in rank than the

majority of other occupations (Blishen & McRoberts, 1976) and are higher

paying (Labour Canada, 1980). Although entering this field does not

guarantee career advancement and higher salary, it does increase one's

chances for the same (Bogorya, 1982; Mironowicz, 1981; Vine, 1981).

This study, then, will focus on women who are seeking careers in

management.

The number of women planning for and entering the field of

management has increased rapidly over the past ten years. For example,

at the University of British Columbia, the number of women graduating

from the Bachelor of Commerce Program has steadily increased from 10% in

1974 to 29% in 1982. The figures are similar for the Masters in

Business Administration Program, with the percentage of women graduates

rising from 8% in 1974 to 32% in 1982 (Office of Institutional Analysis

and Planning, Note 2).

The participation of women in higher education does tend to

increase income and to decrease the wage gap between the earnings of

women and men. However, the wage gap is still strikingly large even at higher levels of education. For example, women with a university degree earn, on average, only 55.9% of what men with the same level of education earn (Labour Canada, 1981).

Higher education in management does increase a woman's eligibility for more prestigious positions and her likelihood of success in the business world (Bogorya, 1982; Mironowicz, 1981; Vine, 1981). However, education alone does not produce financial parity, as the above example demonstrates, nor does it guarantee success.

Another very important factor in the differential aspirations and achievements of women and men academically and professionally is the sex role socialization process which occurs in our culture. Fitzgerald and Crites (1980), in their recent review article summarizing the state of the art in the evolving career psychology of women, stated that:

> ...the potential career development of women, although not
> fundamentally different than that of men, is a great deal
> more complex due to that combination of attitudes, role
> expectations, behaviors, and sanctions known as the
> socialization process. (p. 45)

Ohlsen (1968) believed that society's ambivalent attitude toward women working outside of the home has socialized girls and women to be more concerned about success in love, marriage, and family than with the choice of and success in an occupation. His interviews with women suggested that even intellectually gifted women often preferred not to work outside the home as this was seen as a threat to success as a homemaker.

Horner's (1970, 1972) work on fear of success is another example of this line of thought. Her hypothesis was that women fear success in achievement contexts because such success conflicts with the traditional role and will thus be followed by negative consequences such as potential affiliative loss, social rejection, and a sense of being less feminine.

Recent empirical investigations (Monahan, Kuhn, & Shaver, 1974; Cherry & Deaux, 1978) and criticisms (Greenglass, 1982) of the fear of success hypothesis have suggested that fear of success is not just a female phenomenon, but is a concern shared by both women and men. Rather than viewing fear of success as a motive it may instead be viewed as a representation of men's and women's stereotyped reactions to others (i.e., women and men) whose behaviours violate traditional gender roles (Greenglass, 1982). Fear of success may affect women's career aspirations more than those of men, though, because many more occupations are traditionally male, and as stated earlier, traditionally male occupations tend to be much higher in prestige and income level.

The phenomenon of home/career conflict is another frequently occuring topic in the literature. It has been seen as a crucial factor affecting women's career involvement (Farmer, 1971, 1978; Farmer & Bohn, 1970; Hall, 1975; Hall & Gordon, 1973; O'Leary, 1974, 1977; Stake, 1979b). Women have traditionally been seen in the roles of wife, mother, and homemaker and, until recently, they have lived their lives primarily in these roles. Their increasing entry into the paid labour force has brought with it the need to re-think traditional role

definitions and to juggle time and energy demands for multiple roles. It follows, then, that any comprehensive understanding of women and career involvement requires consideration of how, and to what extent, role factors are operating in their career choice and planning processes.

Past and present sex role expectations seem to have contributed significantly to the lowered career aspirations of women. Considerable numbers of bright women have either chosen no careers at all or careers far below their level of ability (Fitzgerald & Crites, 1980). This consistent underutilization of women is a great loss of potential both personally, for individual women, and for society.

It seems apparent, then, that the socialization process must consistently be confronted, rather than cooperated with, if women are to be freed to make informed career choices based on all that they are and can be (Fitzgerald & Crites, 1980).

Statement of the Problem and Purpose of the Study

Even though the majority of women do not achieve highly in careers, some women do aspire to and do pursue higher level occupations. A question that arises here is, "What is the difference between women who aspire to higher level careers, and thus aim for more non-traditional roles as women, and those who don't, that is, those who have more traditional plans for lower level careers and for placing

primary emphasis on home and family roles?" Answering this question will help us to understand (and perhaps to assist) those women who are currently underachieving.

Because women's career involvement is clearly related to role factors (Stake, 1979b) and because women's attitudes, expectations, opportunities, and attainments are changing so rapidly, it was decided to do a descriptive and exploratory study of the relationship between the role construal and career aspirations of high ability women.

It seemed important to study those women who had the potential to achieve highly. Women, like men, are not a homogeneous group - not all women have the potential to reach top level positions. Therefore, the subjects for this study were recruited from a population of women who had both the ability and the level of education necessary to pursue high level careers in business. All subjects were females of similar high academic standing (72% average or above) and were either in the final year of the Bachelor of Commerce Program or in first year Law (combined Commerce/Law degree) at the University of British Columbia. This sample provided a fairly homogeneous group in terms of interest, ability level, socioeconomic status, level of education, and working environment.

The purpose of this study was to gather from these high ability women information about their plans for the next five years of their lives - to examine their life role aspirations (career, home and family, and personal) and to describe how their role perceptions and expectations seemed to influence their career aspirations.

Multiple role life planning involves examining and prioritizing

many different role alternatives and combinations. Many considerations enter into this decision making process. To facilitate the simultaneous examination of many roles and many considerations and to facilitate the interpretation of how these women were planning for and construing life role alternatives, a variant of Kelly's (1955) repertory grid technique was chosen as the main instrument for data collection. Each subject provided information for a 12 x 12 role grid in which 12 life roles were evaluated or rated on a set of 12 constructs (considerations judged to be important influencing fators in the life role aspirations of women).

If different levels of career aspiration had been found during data analysis, comparisons would have been made between women with higher career aspirations and women with lower career aspirations. Subjects' stated career aspirations were matched with the socioeconomic index for occupations in Canada (Blishen & McRoberts, 1976). An arbitrary cut-off point on the scale was to have been used to distinguish between higher and lower career aspirations. Results for the two groups (higher aspiring vs lower aspiring) would have been compared to determine if there was anything about their role perceptions, expectations, and construal that made a significant difference in their career aspirations.

When the data were analyzed it was discovered that the subjects were a very homogeneous group in terms of career aspirations - they were all relatively high aspiring and were planning for careers commensurate with their level of education. This in itself was a fairly significant finding, as these women differed from previous findings (see the

comments of Ohlsen (1968) and Fitzgerald & Crites (1980) in regard to
bright and even gifted women choosing careers well below their level of
ability). The study changed, therefore, from a comparative one to a
descriptive analysis of high-aspiration women.

Definition of Terms

The most important terms used in this study have been given the
following operational definitions:

1. High ability women are defined as women in fourth year
Commerce or first year Law who had, in their previous year of studies
(i.e., their third year in the Bachelor of Commerce Program at the
University of British Columbia) achieved a 72% or better average. A 72%
or better average was chosen because in order to qualify for graduate
school in Commerce, applicants must have obtained a 72% or better
average in their final two years as undergraduates. One of the roles
used in the study was that of graduate student. Therefore, it was
necessary that all those participating in the study have the minimum
necessary prerequisites for this role.

2. Life roles have been discussed by Hall and Hall (1979) in
terms of three main areas of activity: work or career roles, home and
family roles, and personal roles. They provided a list of such roles as
examples: parent, manager, partner, neighbour, daughter, sister,
friend, community member, self (a person), church member, and author.
In the present study subjects rank ordered and rated six standard roles

(daughter, friend, homemaker, mother, partner/wife, and single person) and six personal examples of the following role titles or descriptions: community member/citizen, graduate student, personal well-being and enjoyment, profession of highest aspiration, profession of lowest aspiration, and expected profession.

3. <u>Life role aspirations</u> were determined by asking subjects to provide information about their five-year plans for student, professional, and family roles. In addition they were asked to complete the life role grid while imagining their lives (who they'd be, where they'd be, what they'd be, and who they'd be doing it with) during the subsequent five year period of their lives (i.e., the period from May 1983 to May 1988).

4. <u>Constructs</u> were the elements or values upon which the life roles were judged or rated. The constructs used in this study included: opportunity to meet needs for achievement, affiliation, and power, enjoyment, amount of support and encouragement from spouse, friends, colleagues, parents, and other family members, presence of a role model, self-estimate of competence and success, and degree of commitment or investment.

5. <u>The life role grid</u> is a repertory grid in which a set of 12 life roles are rated on a set of 12 constructs. The repertory grid technique was first described by Kelly (1955) and further developed by others (e.g. Bannister & Mair, 1968; Slater, 1976; Cochran, Note 3). This technique is essentially a sorting and rating task which produces primary data in matrix form (Bannister & Mair, 1968). The grid

facilitated the interpretation of subjects' overall construing of life roles.

Research Questions and Rationale

A coherent theory enabling the prediction of women's career behaviour is not possible at this time due to the rapidly changing role of women in our society (Fitzgerald & Crites, 1980). In regard to achievement, affiliation, and power (the three most central human motives), Denmark, Tangri, and McCandless (1978) said:

> Following the review of the three most central motives in
> human personality, as they appear in women, it is much
> easier to critique the material than to effect a
> synthesis. The field is quite chaotic, and it is
> difficult to derive solid conclusions about any of these
> motives in women, let alone use them as building blocks
> for a theoretical framework of the relationship among
> them. (p. 445)

Although certain predictions could have been made about the relationships of some constructs to life role planning (e.g., women who rank achievement high and perceive themselves as competent in profesional and graduate student roles are more likely to aspire to these roles than those who don't), predictions about the overall construing were more difficult, and perhaps impossible. Therefore,

rather than attempting to test specific hypotheses, the present research addressed several descriptive and exploratory questions aimed at eliciting information about the overall construing of life role alternatives in terms of specific constructs.

The four research questions investigated in this study were:

1. Role Importance. How does this group of women rank order life roles in terms of personal importance?

2. Construct Importance. How does this group of women rank order constructs in terms of personal importance?

3. Interrelationships Between Constructs. For this group, how are constructs related on average?

4. Conflict.

  (a) Overall Conflict. What is the overall level of conflict for this group, i.e., to what extent are construct relationships in harmony or in conflict?

  (b) Conflict Between Constructs. For this group, do any of the constructs conflict with each other in the overall construing of life role alternatives?

  (c) Conflict Between Roles. As judged by the role sums, for which roles is conflict indicated?

Delimitation of the Study

The subjects for this study were a select group of high ability women within a particular age range. All subjects were women of high

academic standing (i.e., 72% or above average in their third year of the

Bachelor of Commerce Program). All but three of the subjects were

enrolled in the fourth and final year of the Bachelor of Commerce

Program at the time of the study. The remaining three subjects were in

first year Law (combined Commerce/Law Option). The majority of the

subjects were single (26 of the 29 subjects), were between the ages of

21 and 23, and had no children at the time of the study. The results,

then, are generalizable only to very similar groups of high ability

women.

Justification of the Study

Interest in the career psychology women, i.e., career development

and choice and factors which inhibit and enhance these proceses in

women, has exploded over the past several years and the resulting

expansion of the body of theory and research has begun to fill the many

gaps in our understanding of women's occupational involvement

(Fitzgerald & Crites, 1980). The gaps have only just begun to be filled

though, and in this time of rapid social change it is increasingly

important to monitor trends in women's career choices, expectations,

preferences, and aspirations. Career counsellors of women must remain

up-to-date in their own attitudes and knowledge if they are to provide

useful services to their female clients.

The majority of work that has been done on women and career

development has treated all women as if they were the same, i.e., had the same opportunities and abilities. This study takes into account the fact that women are not a homogeneous group - that factors such as past achievement, field and level of education, and everyday working/living environment strongly affect women's choices. These factors do, in reality, affect what is reasonable to hope for and thus to plan for, in terms of a career. For example, if a woman does not have the ability (e.g., intelligence) to pursue a high level career, then it is reasonable for her to aim for a lower level career for which she has the prerequisite ability. This study focuses on high ability women. The results will be useful to educators and counsellors of talented women who are seeking to combine multiple roles in a manner which allows for maximum development of potential.

CHAPTER II

Review of Related Literature

This review will begin with a discussion of current theories of

career development as they pertain to women. Following that some

specific variables believed to affect women's career involvement will be

discussed.

Theories of Career Development

O'Leary (1977) stated that in our society "the primary roles of

women and men are clearly defined: women marry and have children; men

work" (p. 119). Traditionally, a woman's primary role, that of

homemaker, has been "organized around the nurturance of children and the

support of the efforts of the family's breadwinner" (Zytowski, 1969,

p. 661).

These rigid role definitions of women and men are changing as an

ever increasing number of women enter the paid labour force. These

women must attempt to strike a balance between family and work

commitments. Men, too, are beginning to assume more active

responsibility in the home and family sphere. However, because men were

considered the "workers" of our society and, until recently, they were working outside the home in far greater numbers than women, theories of career development were developed almost exclusively on studies of men and their career involvement.

Existing theories, though male oriented, are a good starting point from which to embark on a search for variables relevant to the career development of women. As so succinctly stated by Fitzgerald and Crites (1980), "It seems reasonable to assume that all individuals, regardless of sex, share the basic human need for self-fulfillment through meaningful work" (p. 46). They preface their remarks, though, with the stated assumption that women's potential career development although not fundamentally different than the career development of men, is considerably more complex due to the socialization process and the role expectations, attitudes, sanctions, and behaviours which contribute to it. The present author concurs with this assumption.

A quick look at some theories of occupational choice, followed by a discussion of some of the special issues of concern to women and their career development follows.

Super (1963b) postulated that, in adolescence and early adulthood, there are two major stages in vocational development – exploration and establishment. The developmental tasks within these stages are: (1) crystallizing a vocational preference, (2) specifying this preference, (3) implementing it, (4) stabilizing within this vocation, (5) consolidating status within the chosen field, and (6) advancing in this vocation. Strongly inter-woven into Super's theory is

the idea that an individual implements his or her self concept through the choice of an occupation.

Osipow (1975) suggested that the stages and tasks described by Super (1963b) may not accurately describe women's career development. Adolescent females may conduct only pseudo-exploration pending marriage plans, and may then delay establishment and maintenance of a career until after childrearing has essentially been completed. In addition, Fitzgerald and Crites (1980) pointed out the fact that, for women, the expression of a self concept through the choice of an occupation may be extremely difficult due to the apparent incongruence between the roles of worker and wife/mother.

These behaviours and attitudes, created and reinforced by the socialization process, have direct consequences for women's career achievement. Striking differences exist in the occupational status attainment of men and women. Rosenfeld (1979) very aptly summarized these differences:

When one considers an occupational career, one probably

thinks of a sequence such as the following: a person

leaves school and advances rapidly through a number of

related but successively better jobs until he reaches the

highest level job for which his education, training, and

experience qualify him. Additional education, training,

experience, and seniority may allow advancement later in

his career, but his most rapid advancement will occur

early. The male pronoun is used intentionally. A general

assumption is that men have careers. Women may work

outside the home at times - common wisdom goes - but women

do not really have careers since they are occupied by and

committed to their role within the home, as is perhaps

indicated by the discontinuity of women's employment.

(p. 283-284)

She went on to say that "women, in contrast with men, have a flat career

line, or even one going slightly down with years since leaving school"

(p. 288).

Super (1957) made one of the earlier attempts to include women in

his theory building. His classification of women's career patterns

included the following patterns: (1) stable homemaking, (2)

conventional, (3) stable working career pattern, (4) double-track, (5)

interrupted, (6) unstable career pattern, and (7) multiple-trial career

pattern. Essentially, he described the patterns of women's careers at

the time but did not identify or even discuss the potential value of

elucidating separate variables relevant to women's career development.

All but two of his descriptions are discussions of full-time homemaking

and/or various combinations of homemaking and working outside the home.

The stable working career pattern and the multiple-trial pattern are the

only two patterns which do not include the homemaking theme. Women

classified under the multiple trial pattern work in a succession of

unrelated jobs and thus never do develop a life work. In describing the

stable pattern, Super stated that a small percentage of women have

strong career (rather than homemaking) interest and motivation, and it

is these women who do develop a full-time life career. This description already seems obsolete, in light of women's present labour force participation rates. In Canada, the number of women in the labour force increased 61.6% in the 10 year period from 1969 to 1979. In 1979, 48.9% of the women in Canada were in the paid labour force. At this time, women represented 39.3% of the total labour force in Canada (Labour Canada, 1980).

Two theorists (Psathas, 1968; Zytowski, 1969) attempted to construct separate theories of career choice for females. Both theorists strongly emphasized the centrality of the homemaker role in the lives of women.

Psathas (1968) presented a number of factors which influence females' occupational choice. The most central of these factors included intention to marry, time of marriage, and husband's attitude toward his wife working. The effects of these factors, he believed, are mediated by sex role. Therefore, the understanding of these factors must begin with an examination of the relationship between sex role and occupational role.

Zytowski (1969) noted the current changing role of women, and ended his article with "the hope that altered social expectations and technological innovation (would) ultimately result in obsolescence" (p. 664) of his nine postulates characterizing the patterns of women's occupational participation. However, he himself spoke in fairly static terms about women. His ordinal scale for occupational participation of women included the following patterns: (1) mild vocational pattern (very

early or late entry to the workforce, for a brief period of time, in a "feminine" occupation, e.g., stewardess, nurse); (2) moderate vocational pattern (longer time span in the work force and/or employment in a less "feminine" occuation); and (3) unusual (early entry into the workforce for a lengthy or uninterrupted time span, in a non-traditional occupation for a woman). His use of the term unusual to describe a pattern that, for a man, would most likely be labelled "typical" casts such women in a deviant role and is at best limiting in its scope. Terminology more enhancing to women's abilities would use words such as "full", "abundant", or "intense" and would thus describe this pattern in positive rather than in negative or deviant terms.

Zytowski (1969) went on to cite evidence that the "unusual" patterns of participation are seemingly caused by extraordinary, i.e., traumatic, events in childhood. The farther away from the cultural stereotype the woman's occupational choice is, the more likely it is that she has experienced particular pressures which predispose her to this choice. For example, a female may decide to become an engineer in an attempt to replace a lost father. Zytowski thus described women actively commited to non-traditional careers in terms indicative of pathology. He did not once suggest that a woman's preference for such a career might be a positive choice of a fulfilling career that is very much an expression of her self concept and abilities.

These, then, are some of the attempts at formulating a theory of career development for women. They, and other current theories of career choice, are inadequate in explaining women's vocational behaviour

(Falk & Cosby, 1978; Fitzgerald & Crites, 1980). Current theories are inadequate for a number of reasons:

(1) They explain age cohort patterns as general trends, rather than as outcomes of a particular time and place.

(2) They fail to recognize the social, historical, and ideological forces impinging on these patterns.

(3) They appear to have implicit unstated biases toward an idealized and restricted view of women as mothers.

(4) They fail to recognize specific effects of prejudice and discrimination which have limited women's career choices.

Falk and Cosby (1978), upon reviewing the major current theories of career choice developed primarily on men, clearly delineated some of the issues unique to females which result in the disparity of their career development:

(1) The female at the earliest stage of development is socialized primarily by another female, usually her mother who often holds traditional views of what constitutes appropriate educational and occupational attainment.

(2) Society tends to sex-type occupations in a manner such that pressures exist to express femininity to the choice of certain occupations which are restricted both in range and status as compared to the options open to males.

(3) During the adolescent years the female may experience a serious attitudinal conflict between notions of success defined in terms of educational and occupational attainment on the one hand and marriage and motherhood on the other.

(4) Influence for attainment from others including parents,
teachers, peers, husbands, and possibly the husband's employer
often tends to encourage marriage-motherhood roles at the expense
of further educational and occupational achievements. (p. 133)

As previously stated, a coherent theory of career choice
enabling the prediction of career behaviour in women has not yet been
developed. However, specific variables which affect the career
development and choice processes of women have been identified in the
expanding body of theory and research on women's career involvement
(Fitzgerald & Crites, 1980). Along with concepts presented in existing
theories, these variables provide useful constructs which may serve as
guides in current examinations of women's career involvement. These
variables include role conflict or home/career conflict (Farmer, 1971,
1978; Farmer & Bohn, 1970; Hall, 1975; Hall & Gordon, 1973; Holahan &
Gilbert, 1979a, 1979b; O'Leary, 1974, 1977; Stake, 1979b);
encouragement/discouragement from significant others (Farmer, 1978;
Stake, 1981), including level of spouse support (Gordon & Hall, 1974;
Kundsen, 1974); non-traditional and occupational role models (O'Leary,
1977; Stake, 1981); self-esteem (Astin, 1978), including self-estimate
of competence (Stake, 1979a;1979b) and expectations of personal efficacy
(Betz & Hackett, 1981; Hackett & Betz, 1981); achievement motivation
(Marshall & Wijting, 1980), including inhibited achievement and career
motivation (Farmer, 1978; Fitzgerald & Crites, 1980); individual and
interactive effects of need for achievement, need for power, and need
for affiliation (Denmark, Tangri, & McCandless, 1978), which includes in

part the concept of fear of success (Horner, 1970, 1972); sex role self concept (O'Leary, 1977; Ory & Helfrich, 1978; Marshall & Wijting, 1980; Yanico & Hardin, 1981); perceived compatibility between feminity and competence (O'Leary, 1974; Dewey, 1977; Laws, 1978); and degree of commitment to career (Hennig & Jardim, 1977). These variables are discussed in more detail in the sections which follow.

Variables Affecting the Career Development of Women

Achievement Motivation

An examination of the literature on achievement motivation reveals a theoretically consistent body of data which allows predictions of achievement behaviour as a function of the strength of achievement motive in men. However, the achievement data for women are sparse, inconsistent, and contradictory compared with the data for men (Denmark, Tangri, & McCandless, 1978; Fitzgerald & Crites, 1980; Greenglass, 1982; O'Leary, 1974; Stein & Bailey, 1973). Stein and Bailey (1973) summarized the work of McClelland et al. (1953) who initially proposed the most well known theory of achievement motivation. McClelland viewed achievement motivation as a fairly stable motive to be competent, to strive for success in any situation in which there are standards of excellence. Support for this concept is found quite consistently in studies of men but not in studies of women.

One theory put forth for the inconsistent results between women and men is that while men's achievement behaviour is motivated primarily by achievement needs, women's achievement behaviour is motivated by affiliative needs. The literature contains several variations on this basic theme.

Hoffman (1972) theorized that while men are motivated by mastery strivings and by a desire to achieve a standard of excellence, women are motivated primarily by a desire for love and social approval. Hoffman claimed that the roots of this phenomenon are in current childrearing patterns in which girls, as compared to boys, receive less parental encouragement for independence, more parental protectiveness, and less pressure to establish an identity separate from the mother. Girls, therefore, engage in less independent explorations of the environment and hence do not develop the necessary skills and confidence in their own abilities. They instead continue to be dependent on others and to get what they need by pleasing others.

Stein and Bailey (1973) found no empirical evidence to support Hoffman's notion that women work for social approval. They argued instead that women do indeed strive for excellence, but that they choose to do so in the social arena. Their needs for achievement may be met in the social sphere without threat of affiliative loss because this sphere has been defined as appropriate for women.

Yet another explanation is that of vicarious achievement orientation (Lipman-Blumen & Leavitt, 1976) in which a person may satisfy achievement needs through a relationship with a significant

other who is directly achieving. An example of this orientation is provided by Tangri's (1975) study of Traditionals and Innovators. Traditional subjects in her study seemed to have projected their achievement needs onto their future husbands.

Horner's (1970, 1972) work on the motive to avoid success offers another possible explanation. To account for the fact that there appeared to be some differences between women's and men's behaviour in achievement contexts she hypothesized that women fear success because they expect that success in achievement situations, i.e., in spheres other than home and family, will result in negative consequences, such as social rejection and the feeling of losing one's femininity. Horner (1972) used a projective technique in which subjects were asked to write stories in response to verbal cues. The females in this study responded to the cue, "After first term finals, Anne finds herself at the top of her medical school class." The cue for the male subjects was, "After first term finals, John finds himself at the top of his medical school class." She found that 65% of the women responded with stories high in fear of success imagery, compared with fewer than 10% of the men.

Horner's original work was followed by both a multitude of studies on fear of success and by many arguments about her methodology and interpretations (Cherry & Deaux, 1978; Esposito, 1977; Feather, 1974; Illfelder, 1980; Lockheed, 1975; Monahan, Kuhn, & Shaver, 1974; Robbins & Robbins, 1973; Stake, 1976; Topol & Reznikoff, 1979; Tresemer, 1976; Zuckerman & Wheeler, 1975). Two of these studies in particular have provided strong evidence that fear of success is not a motive, but

is instead a representation of people's stereotyped reactions to women, and to men too, who achieve in a gender-inappropriate setting.

The first study, conducted by Monahan, Kuhn, and Shaver (1974) used a projective technique similar to Horner's. However, in their study, both males and females were asked to tell stories about both Anne and John. When talking about Anne, the men told even more stories indicating fear of success (68%) than did the women (51%). Stories about John contained less fear of success imagery, with 21% of the men and 30% of the women indicating negative consequences for John. These results indicate that fear of success may be reflecting cultural sterotypes about a woman's success in a traditionally "male" career, i.e., medicine.

Cherry and Deaux (1978) extended this idea one step further. If gender-inappropriate behaviour is the key for triggering fear of success imagery, then the same should occur when a man is successful in a gender-inappropriate field. The results of their study supported this hypothesis. They found that both men and women wrote stories containing fear of success imagery when writing about a man in a non-traditional field for men, i.e., nursing, and when writing about a woman in a non-traditional field for women, i.e., medicine.

The results of these last two studies indicate that fear of success is not just a female phenomenon, but is a concern shared by both men and women. Rather than viewing fear of success as a motive, it can perhaps be more accurately described as a representation of men's and women's stereotyped reactions to others whose behaviours violate

traditional gender roles (Greenglass, 1982). Fear of success may affect women's career aspirations more, though, because many more occupations are traditionally male than are traditionally female. In addition, as previously stated, traditionally male occupations tend to be much higher in prestige and income level than traditionally female occupations.

In summary, then, the data do indicate that some, and perhaps the majority of women do work for social approval, experience achievement vicariously through others, strive for success socially, and "fear success" in gender-inappropriate career roles. However, this should not be interpreted to mean that women's achievement behaviour is fundamentally different from that of men or that the differences outweigh the similarities. Quite clearly, both women's and men's achievement and career behaviour are influenced by sex role socialization, but the inhibition on a woman's choice involves a wider and more powerful range of occupations (i.e., traditionally male occupations range from welder to prime minister).

Not all women are underachievers occupationally. Some women display a pattern of achievement behaviour that is essentially the same as the typical pattern for men. Female achievers, state Unger and Denmark (1975), "have not resigned (themselves) to the culturally defined role of woman as someone who can experience success only vicariously through her husband or some other male figure" (p. 136). For example, in Tangri's (1975) study, although one-third of her sample were Traditionals who achieved vicariously, one-third were Role Innovators with fairly high, and non-traditional, occupational

aspirations of their own. Also, in Horner's (1972) original work, 35%
of the women responded positively when writing stories about a woman in
a non-traditional field and thus did not display fear of success.

Studies of women who have achieved highly in the professional
sphere have shown that some women do display achievement behaviour
essentially the same as the achievement behaviour of men (Adams, 1979;
Birnbaum, 1975; Hennig & Jardim, 1977). Hennig & Jardim (1977) studied
twenty-five women successful in top management positions in industry and
business across the United States. By adolescence these women had
clarified and strengthened their self concepts and had set for
themselves ideals of achievement and independence. They had rejected
the traditional role definitions of femininity which their mothers had
tried to impose and had instead accepted femininity and traditional
expectations for marriage and motherhood on their own terms. They did
not consider their feminine role to be in conflict with career
aspirations. They planned to go to college and begin a career, and to
marry later. It is interesting to note the time differential between
this study and Super's (1957) theory. Nearly twenty years had elapsed.
Sex role ideology, particularly about women and work, had changed
dramatically in that time and so, apparently, had the career aspirations
and achievements of women.

This concludes the section on achievement motivation and its
influence on women's aspirations. A section on the individual and
interactive effects of need for achievement, need for affiliation, and
need for power follows.

Achievement, Affiliation, and Power

Need for achievement, need for affiliation, and need for power have been described as the three most central motivators of human behaviour. As primary motivators they will influence the career behaviour of women in varying ways. Their effect depends on the level of each need and on the interactions of all three with each other, with other needs, and with the female's interpretation of the situational press (Denmark, Tangri, & McCandless, 1978).

In a recent article, Harrell and Stahl (1981) described the use of a new method for measuring McClelland's trichotomy of needs - need for affiliation (nAff), need for achievement (nAch), and need for power (nPow). An approach commonly used for measurement of nAch, nAff, and nPow levels in individuals is the Thematic Apperception Test. Recognizing various problems with this approach, Harrell and Stahl proposed a new method for measuring these three needs. They applied a behavioural decision theory modelling approach to examine how individuals weight their nAff, nPow, and nAch in arriving at job choice decisions. An instrument was developed in which each subject was directed:

... to assume that he or she was seeking a new position

and that a number of jobs were available. The subject was

instructed that all of these jobs were essentially alike

as to pay, benefits, location, and so on and differed only

in the degree to which three key activities were

involved. These activities were: establishing and maintaining friendly relationships with other persons (nAff), influencing the activities or thoughts of a number of individuals (nPow), and accomplishing difficult (but feasible) goals and later receiving detailed information about your personal performance (nAch). The activities occurred either rarely, fairly often, or very often in each of the various jobs. These three factors served as the information cues that were provided to each subject on which to base his or her job choice decisions. The wording of the three cues was derived from a review of McClelland's (e.g., 1961, 1962, 1975, 1979) descriptions of the three motives. (p. 244)

Harell and Stahl employed this decision making exercise in gathering empirical data from three groups of subjects - graduate students, scientists and engineers, and management executives. All but a few subjects in each group were males. Using multiple regression analysis to determine how each subject had weighted the three needs in coming to a job choice decision, they found that the dominant motive for management executives was need for power, whereas for graduate students and scientists and engineers the dominant motive was need for achievement.

The advantage of Harrell and Stahl's approach is that the relative importance of all three needs can be measured relatively quickly and easily while subjects perform a concrete decision making

task. For the purpose of the present study, each of the needs as described above will be employed as constructs in the life role grid. Harrell and Stahl's wording will be modified to ensure brevity.

Role Conflict

The importance of role factors to women's career involvement, and the potential conflict that may arise when a woman's behaviour contradicts traditional sex role expectations, has already been noted extensively throughout the previous pages.

Traditionally women have been taught to seek personal fulfillment primarily through marriage and family roles, and have done so. Now, however, women are more likely to see their career roles as being significant sources of psychological fulfillment and are planning their life roles accordingly (Greenglass & Devins, 1982). The result is an increasing number of women who hope to have both a demanding career and a family (Gray, 1980).

The increasing entry of women into the paid labour force has meant, for most women, the addition of the role of professional to an already full slate of more traditional roles (i.e., wife, mother and homemaker). Gray (1980) summarized some of the problems and conficts encountered by many women who seek to combine demanding career and family roles:

> In recent years, there have been numerous studies
> conducted on the special problems of married professional

women. A survey of the literature in this area shows that
such women face two distinct types of problems: practical
ones and psychological ones. The practical ones involve
career restrictions resulting from factors such as limited
time, the oft-assumed primacy of the husband's career,
geographical limitations and, in the case of the woman
professor, nepotism rules. The psychological problems
include gaining the emotional support of others, dealing
with conflicting societal demands, and resolving conflicts
that arise between roles. (p. 43).

Aspiring to and being successful in a demanding career require,
as prerequisites or as concomitant activities, the resolution of role
conflict on attitudinal, psychological, and practical levels.
Accordingly, recent research on women's role conflict has focussed on
strategies for, and correlates of, coping with and resolving role
conflict (Amatea & Cross, 1981; Farmer, 1971; Farmer & Bohn, 1970;
Gordon & Hall, 1974; Gray, 1980, 1983; Hall, 1972; Stake, 1979b;
Villadsen & Tack, 1981).

Achievement-Related Encouragement

As previously discussed, a major factor in the lowered
aspirations and achievements in females is the societal expectation for
traditional sex role behaviour. Women are not supposed to be high

achievers; men are. Women, then, are the recipients of tremendous social pressure to set traditional goals.

Women who are successful in high level careers have most often received much support and encouragement to counteract the broader cultural discouragement. For example, successful women in top-level management positions in business and industry reported much consistent validation and support from their fathers for their educational and professional pursuits (Hennig & Jardim, 1977).

Counsellors and educators of women are in a good position to counteract some of the cultural pressures acting against women's achievement. Stake (1981) summarized empirical work done by herself and others which demonstrated the important role of counsellors and educators in enhancing female students' goal-setting. In each of the studies she reviewed, students' self-appraisals and goals were affected by three ingredients in the achievement setting — a supportive atmosphere, occupational role models, and assertiveness training to raise performance-self-esteem. The importance of a supportive atmosphere is discussed further here.

According to Stake (1981), females, when provided with positive information about their ability to succeed, set higher goals for themselves. She suggested that one reason for lower aspirations and goals in women is that they believe women have less potential to achieve. Thus, when provided with positive information about their own and other women's potential to succeed, they increase their own expectations for performance.

Stake and Levitz (1979) interviewed female and male college seniors about their career and family goals. Three groups were interviewed - a group of women who had high career aspirations (plannned to attend graduate, law, or medical school); and two comparisons groups - men with career goals that matched the high aspiring women, and women who expected to become full-time homemakers. Subjects were interviewed regarding the positive and negative feedback they had received from significant people in their lives. Some distinct differences were evident between the groups. The career women had received more encouragement from a number of sources including family members (other than mothers), teachers, advisors and counsellors, friends, as well as positive feedback in the form of higher grades. Career men reported more encouragement from their mothers than did the career women. In spite of having experienced less positive feedback from a number of sources, the men aspired to goals that were just ashigh as the career women. (It may be argued here that the support these men received from their mothers was a very powerful form of encouragement). Stake concluded that this pattern of findings suggests that women require more encouragement from significant others as well as from their own accomplishments before they will set higher career goals. As the societal expectation for women is traditional goal-setting, it is not surprising that career women were able to set higher goals, and thus go against the cultural expectation, only when they had received additional positive support.

The results of Lunneborg's (1982) study of women in

non-traditional careers (e.g., engineering, natural science, architecture, law, business adminstration) indicated that the careers of these women had been fostered by identification with and support of both parents, in addition to a generally strong supportive environment created by the encouragement of siblings, peers, teachers, and other adults.

These statements are similar to those of Farmer (1978) who commented on the critical role of husbands, parents, teachers, counsellors and employers in influencing whether or not a woman achieves outside the home and realizes her full career potential. Epstein (1973) and Rapoport and Rapoport (1969) also found that when the attitudes of parents and husbands are supportive of women's career aspirations, women tend to continue in non-traditional career roles.

Perceived Compatibility Between Femininity and Competence

Farmer (1978) quoted studies which reported higher measured achievement motivation in women who viewed achievement as compatible with the female sex role and lower measured achievement motivation in high ability women who were in conflict about these roles. Laws (1978) discussed the importance of "cognitive feminization" of occupations and behaviours. She stated that because adequate femininity and marriageability are so important to young women, they will not engage in behaviours interpreted as sex role incongruent. Our culture stresses

femininity at the expense of competence and it appears that women will engage in career-directed behaviours only when they are interpreted by the woman herself as appropriate for her sex role. Other authors (e.g., Dewey, 1977; O'Leary, 1974) gave evidence to support similar ideas.

Role Models

Role models provide living examples of what is possible and desirable to hope for, to work toward, and to achieve. One reason for women's limited career aspirations and achievements has been the lack of non-traditional role models. Women have been provided with many role models for family and home roles but have had limited numbers of female occupational and academic role models.

O'Leary (1977) and Almquist and Angrist (1971) noted the importance of female non-traditional role models in raising the career aspirations of women. As well, Stake (1981) summarized a number of studies which pointed to the importance of female occupational role models in women's goal setting. What may be most important for women is to have as models women who successfully combine desired career and family roles. However, the sex of the model seems less relevant when the woman is using the model only as an exemplar of an occupational role (Almquist & Angrist, 1971).

The issue of role models relates to the supportive atmosphere mentioned previously. A woman may derive much support, encouragement,

and a sense of purpose from a significant role model. Stake (1981)
stated that role models are important in two ways: (1) In seeing the
accomplishments of the role model the woman visualizes what it is
possible for her to achieve; and (2) The model is seen as understanding
what is necessary for success in his or her field of endeavor. The role
model's encouragement, therefore, has more value and meaning than
encouragement from others not as knowledgeable.

Self-Estimates of Competence and Expectations of Personal Efficacy

Stake (1979a; 1979b) examined one aspect of self esteem, which
she called the self-estimate of competence or ability to succeed in
performance settings. She measured this with the Performance-Self-
Esteem Scale (PSES) and found that in general females scored lower than
males. She suggested that this sex difference in PSES scores indicates
another reason for lower career aspirations in women; women may set
lower goals because they have less confidence than men in their ability
to succeed in high level careers. Her conclusion was that one way to
increase the career aspirations of women is to raise their performance –
self-esteem. For example, Stake and Pearlman (1980) successfully used
assertiveness training to increase PSES scores in women.

A variation on this theme is the work of Betz and Hackett (1981)
and Hackett and Betz (1981) on self-efficacy expectations. Expectations
of self-efficacy are, in short, "expectations or beliefs that one can

successfully perform a given behavior" (Hackett & Betz, 1981, p. 328).
They believed that women fail to realize their full career potential
because, largely as a result of socialization experiences, they do not
have strong expectations of self-efficacy in regard to many
career-related behaviours. They quoted the work of Krumboltz, Mitchell,
and Jones (1976) who suggested that it is one's evaluative
self-statements of performance or preferences which are primary
components in the process of career decision making.

Commitment and Investment

A high degree of career commitment has been identified as an
important variable related to women's professional success (Hennig &
Jardim, 1977). The twenty-five successful women in Hennig and Jardim's
study worked hard and established the pattern of "goal-setting,
planning, the establishment of priorities and sub-goals, and commitment
to a course of action with distracting diversions identified and
avoided" (p. 112).

Because career and family roles are demanding in terms of time,
energy, and resources required, an important consideration in multiple
role life planning is how much of the each of these one is willing to
invest in each role (Stake, 1979a; Cochran, Note 3). Overload and
exhaustion may easily result if a woman attempts to meet all role
demands (O'Leary, 1974). Therefore, in order to plan for and to live

out a life that is ordered, has meaning and is goal-directed, role priorities and subsequent plans of action must be set based on the amount of commitment and investment one feels to each role. McCall and Simons (1966) also emphasized the importance of assessing the amount of commitment and investment to each role.

Conclusion

A theme running throughout the preceding literature review is the limiting effect of sex role socialization on women's role expectations and career aspirations. Factors which may counteract the negative effects of sex role socialization have been described.

The present study will focus on the role perceptions and expectations of high ability women and will examine the perceived importance and possible effects of 12 factors which may influence, either positively or negatively, their career aspirations.

McCall and Simmons (1966) provided a useful summary of factors which determine the prominence of a role-identity. These factors include amount of self- and social support, one's degree of investment in and commitment to a role, and the intrinsic and extrinsic gratifications associated with the role. In order to keep the number of constructs to a manageable number, and because factors like self- and social support, for example, appeared to be of primary importance in

counteracting the negative effects of sex role socialization, it was

decided to exclude extrinsic factors from this study and to more

thoroughly cover the other factors discussed by McCall and Simons

(1966). The construct of enjoyment, discussed by McCall and Simons

under intrinsic gratifications, was used in this study along with 11

constructs previously discussed in this chapter, as enjoyment seemed,

intuitively, to round out the list of intrinsic gratifications.

CHAPTER III

Methodology

Subjects

A total of 29 women volunteered to participate in this study.
Their range in age was from 21 to 32 years. The modal age was 22 years;
20, or 69 %, were 22 years old, and there were two outlyers aged 29 and
32 years. Twenty-two (76%) were Anglo-European Canadians and seven
(24 %) were Chinese.

The subjects were recruited from a population of female students
who had, in their previous year of studies (third year of the Bachelor
of Commerce Program), received a 72% or above average.   Letters of
recruitment were sent to 45 women and follow-up phone calls were made to
personally request participation in the study. A 64% response rate was
obtained, with 29 women participating in the study. At the time of the
study, 26 of the subjects were in their fourth and final year of the
Bachelor of Commerce Program at the University of British Columbia and
three were in first year Law (combined Commerce/Law Option).

Measuring Instruments

The two questionnaires used in data collection were developed for
the purpose of this study. Each of the questionnaires will be discussed
separately.

1. Biodemographical Questionnaire

This questionnaire consisted of a series of questions designed to
gather standard biodemographical data (e.g. age, marital status, ethnic
designation) and to elicit information about each subject's projected
five-year plans for paid employment, graduate or professional school,
relationship style/marital status, and children. See Appendix B for the
complete list of information obtained by this questionnaire.

2. Role Grid

The role grid used in this study was a variant of the repertory
grid technique as first described by Kelly (1955) and further developed
by others (e.g., Bannister & Mair, 1968; Slater, 1976; Cochran, Note
3). This technique is essentially a sorting and rating task which
produces primary data in matrix form (Bannister & Mair, 1968).

Typically, the repertory grid technique involves subjects rating
a number of elements (e.g. people, roles, political parties) on a set of

constructs (bipolar concepts such as kind – unkind). The elements and constructs may be provided by the investigator or, alternatively, may be elicited from individual subjects. Each subject's responses are recorded on a grid, thus producing a matrix of cells in which rows represent constructs and columns represent elements (Bannister & Mair, 1968). Subsequently, a variety of statistical techniques may be utilized to examine, for example, the interrelationships between the constructs. Cochran (Note 3) has outlined numerous statistical techniques and methods for analyzing grid data.

The repertory grid methodology has been used extensively in both research (e.g., Bannister & Mair, 1968; Cochran, 1978, 1981; Long, 1982; Mair, 1966) and clinical contexts (e.g. Bannister, 1960; Slater, 1976; Cochran, Note 3).

The reliability and validity of this methodology have been tested in a wide range of studies. The grid, though, is a variable technique, not a test, and may be cast in many different forms with any number of different types of elements and constructs. Therefore, as stated by Bannister and Mair (1968), since "there is no such thing as the grid, there can be no such thing as the reliability of the grid" (p. 156). Specific reliability coefficients may be obtained, though, for each specific application of the grid method and for each of the grid measures used. Bannister and Mair (1968) report that studies of construct relations yield reliability coefficients within the range of .60 to .80.

Mair (1966) conducted a study in which she assessed the validity of grid scores as measures of meaningful relations between constructs.

She used a dictionary to select synonyms or near synonyms to serve as constructs. Because a dictionary is a normative index of commonly agreed upon meanings, two adjectives, when used as constructs in a grid completed by a number of people, should be highly positively related. The correlations among constructs in her study closely reflected normative meanings, indicating that correlations between constructs are good measures of relations between constructs.

The above studies, and others summarized by Bannister and Mair (1968), indicate that grid scores, when used as measures of relationships between constructs, are sufficiently reliable and valid for the purpose of this study.

The present study also made use of the additional grid measures of role preference rankings, preferability (based on the rank ordering of average role sums), construct importance rankings, centrality (derived from interrelationships between constructs), and conflict (e.g., conflict ratio.) Reliability and validity studies have not been done for these measures, although there is precedence for their use (Cochran 1978, 1981; Cochran, Note 3). The grid method itself is sound and well-established and appeared to be very appropriate for the exploratory purposes of this study.

As described above, the three major components of the repertory grid methodology are elements (roles, in this study), constructs, and a rating scale. Cochran (Note 3) has made use of an additional component, that of a rank ordering of elements and constructs according to preference and importance, respectively. This additional component, as

well as the three main components, were used in the present study and
are discussed separately on the pages which follow.

Roles. In order to provide a list of roles most relevant to the
subject population and to adequately represent as broad a range of roles
as possible, 12 roles were chosen from the three main areas of role
activity described by Hall and Hall (1979): work and career roles, home
and family roles, and personal roles. The list of roles given as
examples by Hall and Hall included: partner, parent, manager, author,
neighbour, daughter, sister, friend, community member, self (a person),
church member, and grandparent.

Role titles used by other writers and investigators were also
considered in the selection of roles for this study. Super (1980)
defined a career as the "combination and sequence of roles played by a
person during the course of a lifetime" (p. 282). The nine major roles
described by Super included: child (including son and daughter),
student, "leisurite" (one engaged in a leisure-time activity), citizen,
worker, spouse, homemaker, parent and pensioner. Combinations of major
life roles used as frameworks in empirical investigations of role
conflict have included wife role, employee role, mother role, housewife
role (Hall, 1972) and professional, spouse, parent, and self as
self-actualized person (Holahan & Gilbert, 1979a, 1979b).

The list of twelve roles chosen for use in this study was checked
for adequacy of representation in discussion with three faculty members
from the Department of Counselling Psychology at the University of

British Columbia and with four graduate students in Counselling Psychology, all of whom were knowledgeable in role-related issues. The final list of roles rank-ordered and rated by subjects included six standard roles (daughter, friend, homemaker, mother, partner/wife, and single person) and six personal examples of the following role titles or role descriptions: community member/citizen, graduate student, personal well-being and enjoyment, profession of highest aspiration, profession of lowest aspiration, and expected profession.

The role of self (a person) or self as self-actualized person was not used as a role. The concept of self-actualization was instead used as a construct upon which all of the roles were evaluated (self-actualization was operationalized as "personal growth"). Self-actualization or personal growth may occur in any or all of the roles, and not just in the somewhat illusive role of self. The role of single person was included as it was thought that a number of women in the sample would choose to remain single over the subsequent five year period, and not to take on the role of partner/wife. Personal well-being and enjoyment was chosen as a description of the role labelled "leisurite" by Super (1980). Because a major purpose of this study was to examine career aspirations, the professional role was divided into three levels of aspiration: profession of highest aspiration, profession of lowest aspiration, and expected profession.

Constructs. The twelve constructs used in this study were selected during a review of the literature on career development and

choice. In this review, particular attention was paid to factors

hypothesized to or empirically found to influence the process and

content of women's career choices. The aim of selecting constructs in

this manner was to cover a broad range of issues thought to be important

by researchers on the career development of women. See Table 1 for a

list of constructs and the derivation of each construct from influencing

factors discussed in the literature.

Rating Scale and Forms. Subjects were requested to rate each

role according to each construct using a 5-point rating scale which

employed the following format:

More chance to accomplish   . . . . .   Less chance to accomplish
challenging goals   challenging goals

Subjects indicated their rating of each role by circling the dot which

best represented their perceptions of and expectations for themselves

within the role. For example, if a subject rated a role according to

the above construct, circling either the first or second dot on the left

would indicate that the subject felt that the role would provide her

with a lot more opportunity to accomplish challenging goals or somewhat

more opportunity, respectively. Circling the dot farthest to the right

would indicate a great deal less chance to accomplish challenging goals,

circling the dot second from the right would indicate somewhat less

chance, and circling the middle dot would indicate an inbetween stance.

The dots correspond to the numerical ratings of 2, 1, 0, -1, and -2 when

moving from left to right. See Appendix C, Part C for a sample of the

rating form that was completed for each role.

Table 1

Derivation of Constructs from Factors Discussed in the Literature

Influencing Factors	As Stated in the Literature	Constructs
need for affiliation	"establishing and maintaining friendly relationships with other persons" (Harrell & Stahl, 1981, p. 243) Also: Denmark, Tangri, & McCandless (1978)	1. more chance for warm, friendly relations vs less chance for warm, friendly relations
need for power	"influencing the activities and thoughts of a number of individuals (Harrell & Stahl, 1981, p. 243) Also: Denmark, Tangri & McCandless (1978)	2. more chance to influence others vs less chance to influence others
need for achievement	"accomplishing difficult (but feasible) goals and later receiving detailed information about your personal performance" (Harrell & Stahl, 1981, p. 243) Also: Denmark, Tangri, & McCandless (1978)	3. more chance to accomplish challenging goals vs less chance to accomplish challenging goals

Table 1 contd...

Influencing Factors	As Stated in the Literature	Constructs
encouragement/ discouragement from significant people	Epstein (1973); Farmer (1978); Hennig & Jardim (1977); Lunneborg (1982); Rapoport & Rapoport (1969); Stake (1981); Stake & Levitz (1979)	4. more support & encouragement from partner/husband vs less support & encouragement from partner/husband
		5. more support & encouragement from friends, colleagues &/or teachers vs less support & encouragement from friends, colleagues &/or teachers
		6. more support & encouragement from parents &/or other family members vs less support & encouragement from parents &/or other family members
perceived compatibility between femininity and competence	Dewey (1977); Farmer (1978); Laws (1978); O'Leary (1974)	7. closer to how I see myself as a woman vs farther away from how I see myself as a women

Table 1 contd...

Influencing Factors	As Stated in the Literature	Constructs
role models	Almquist & Angrist (1971); O'Leary (1977); Stake (1981)	8. likely to know someone who does this well vs unlikely to know someone who does this well
self-estimate of competence/expectations of personal efficacy	Betz & Hackett (1981); Hackett & Betz (1981); Stake (1979)	9. more competent & successful vs less competent & successful
degree of commitment/ investment	Henning & Jardim (1977); McCall & Simons (1966); Cochran, Note 3	10. more willing to invest a lot of time & energy vs less willing to invest a lot of time & energy
desire for personal growth	Holahan & Gilbert (1979a, 1979b)	11. more opportunity for personal growth vs less opportunity for personal growth
amount of enjoyment derived from role	McCall & Simons (1966)	12. more enjoyment vs less enjoyment

Rank Ordering of Roles and Constructs. In order to gather

information about subjects' role preferences and judgements about

construct importance, subjects were asked to rank order roles and

constructs in order of preference and importance, respectively. For

example, in completing the numerical rank ordering of roles, a subject

would mark the most preferred role with a "1" for "most important" and

the least preferred role with a "12" for "least important". See

Appendix C, Part A for a sample of the form on which roles were rank

ordered and Appendix C, Part B for a sample construct rank ordering

form.

Grid Measures Employed in this Study

A variety of methods and statistical techniques may be used to

interpret the life role grid (see Cochran, Note 3 for a review of these

measures). The measures used in this study were drawn from Cochran's

review. Each measure is described separately here and is discussed

again in Chapter Four in the context of the results.

Preference and Preferability. Subjects' rank ordering of roles

in terms of personal importance was an expression of their actual role

preferences. Cochran (Note 4) has coined the term "preferability" to

refer to "the potential for something to be preferred "(p. 20). This

potential may be determined by calculating a role sum for each role.

The role sum is the sum of the ratings of each role according to each construct. Once calculated, these role sums may be rank ordered. The role with the highest score, i.e., the role that is viewed most positively, is given a rank of "one". A rank of "two" is given to the role with the next highest score. This procedure is continued until all roles receive a preferability rank. Each role in the role grid thus receives two ranks, one for preference and one for preferability. Congruence between these two rank orderings may be checked by visual inspection and by calculating a rank order correlation (Spearman's coefficient of rank correlation).

Construct Importance Ranks and Centrality. Subjects' rank ordering of constructs in terms of personal importance was a direct expression of their valuing of constructs. To determine whether or not the most valued constructs actually played key roles in the evaluation of life role alternatives, centrality ranks may be calculated and compared with the importance ranks.

Centrality is determined by construct interrelationships. A central construct has many strong relations and a peripheral construct has few and weak relations (Cochran, Note 3). Thus, a central construct may be said to be the most important construct in the meaning scheme of a decider. As a detailed explanation of the derivation of centrality ranks is provided in Chapter Four, the calculations will not be discussed here. Congruence between importance ranks and centrality ranks may be determined by visual inspection and by the calculation of a

rank order correlation (Spearman's coefficient of rank correlation).

Interrelationships Between Constructs. The grid technique allows for the assessment of relationships between constructs. These relationships are important because a construct's meaning involves, in part, the other constructs to which it is related. A more complete understanding of an individual's or a group's construction of alternatives (in this case, of life role alternatives) may be developed through the examination of construct relationships (Cochran, Note 3). The statistical techniques used to evaluate these relationships are described in detail in Chapter Four.

Indicators of Conflict. Three measures of conflict were utilized in this study: significant negative relationships between constructs, the conflict ratio, and the visual inspection of role sums.

The poles of a grid are aligned with positive to positive and negative to negative, so any significant negative correlation between two constructs defines a conflict. A negative correlation means that the positive pole of one construct is lined up with the negative pole of another construct (Cochran, Note 3). For example, in the following illustration, need for achievement and need for affiliation are in conflict. Roles that provide more opportunities to accomplish challenging goals are construed as providing fewer opportunities for warm, friendly relationships.

	Graduate student	Highest aspiration	Expected profession	Partner/wife	Personal well-being	Daughter	Friend	Lowest aspiration	Citizen	Mother	Single person	Homemaker	
Positive Characteristic													**Negative Contrast**
more chance to accomplish challenging goals	2	2	1	1	1	0	0	-1	-1	-1	-2	-2	less chance to accomplish challenging goals
more chance for warm friendly relations	-2	-2	-1	-1	-1	0	0	1	1	1	2	2	less chance for warm friendly relations

For example, this person says that the role of graduate student allows her much more chance to accomplish challenging goals (2) but very little chance for warm, friendly relationships (-2). The role of homemaker is the reverse. Therefore, conflict is indicated here.

The conflict ratio is a measure of the extent of harmony or conflict in construct relationships. As such, it is an indicator of conflict in the overall construing of life role alternatives. The ratio is computed by squaring and adding all negative correlations between

constructs and then dividing this sum by the overall sum of squared correlations between constructs. A high score indicates a high degree of conflict and ambivalence within a decision scheme and a low score indicates a low degree of conflict and ambivalence (Cochran, Note 3).

The role sums may also be examined for indications of conflict. Roles with positive role sums are viewed positively and roles with negative role sums are viewed negatively. The positive expectations of role enactment increase as the positivity of the role sum increases. For example, a role sum of 24 would indicate extremely positive expectations. Alternatively, the negative expectations of role enactment increase as the negativity of the role sum increases. For example, a role sum of -24 would indicate extremely negative expectations. Conflict woud be indicated, then, if an individual planned to take on, or was actually in a role, which was viewed very negatively. Indications of conflict, then, may be derived by an examination of the role sums for negativity. As well, the role sums for each role may be examined to see if the overall pattern of role preferences is congruent with itself and with value priorities expressed in construct importance rankings and centrality.

Data Collection and Procedures.

The biodemographical questionnaire, the life role grid, and the verbal instructions for their administration were tested for clarity and

ease of administration in a brief pilot study. Four female graduate students in Counselling Psychology were used as subjects in the pilot study.

In six groups ranging from two to eight subjects (one person was tested individually), subjects completed testing in approximately one hour. After a brief introduction to the study (Appendix A), subjects completed the Biodemographical Questionnaire (Apprendix B) and the Role Grid (Appendix C). Subjects were guided through these instruments by the researcher stating aloud the instructions and the questions in the instrument and by clarifying subjects' questions (see Appendix D for these verbal instructions).

CHAPTER IV

Results

The results of this study are presented in this chapter in five

main sections. The first section discusses the projected five-year

plans of the 29 subjects for professional and graduate student roles,

relationship style/marital status, and children. Each of the last four

sections present the results obtained in the investigation of each of

the four proposed research questions.

Projected Five-Year Plans

Professional and Graduate Student Roles. All 29 subjects planned

to work and/or attend school full-time during the subsequent five years

of their lives. Twenty-one of the 29 subjects (72%) planned to attend

graduate or professional school during this time and 8 subjects (28%)

had no plans for graduate or professional school. All subjects were

asked which graduate or professional programs they would consider

entering if they were to go on. The results of this question are shown

in Table 2.

Table 2

Graduate or Professional Programs Considered

Program	N	%
Chartered Accountancy	12	34.3
MBA	12	34.3
Law School	6	17.1
MSc (Business Administration)	4	11.4
M.A. (Psychology)	1	2.9
Total	35[a]	100.0

[a]Total is 35 as 6 of the 29 subjects were considering 2 different program options.

Each subject was requested to think about the type of paid work
she was planning on doing during the subsequent five years of her life.
She was then asked to divide her professional considerations into three
categories: (1) the highest level profession toward which she would
aspire, i.e., the highest level position she'd aim for; (2) the lowest
level profession toward which she'd aspire, i.e., the lowest level
position she'd accept or settle for; and (3) the profession or position
in which she really expected to work. The group results for this task
are presented in Tables 3, 4, and 5.

Each of the stated aspirations in the three categories (highest
aspiration, lowest aspiration, and expected position) was matched with
the socioeconomic index for occupations in Canada (Blishen & McRoberts,
1976) and was given a rank within this scale. Using 1971 Canadian
census data, Blishen used income level, educational status, and a
prestige variable to rank order 500 Canadian occupations. The stated
occupational aspirations of all subjects in this study all fell between
the ranks of nine and 63. They were a very homogeneous group in terms
of occupational aspirations. They were all aiming for positions near
the top of the scale within five years.

Relationship Style/Marital Status. Twenty-seven subjects (93%)
were single at the time of the study (including one woman who was
divorced/separated) and two subjects (7%) were married or living with a
partner. When asked about their five-year plans, 12 (41%) stated that
they planned to remain single, 16 (55%) said they planned to be married
or living with a partner, and one (3.5%) was uncertain.

Table 3

Subjects' Highest Professional Aspirations for
Subsequent Five Year Period

Professional Position	N	%
Articling student/lawyer in quality law firm	2	6.9
Commercial loans manager or project banker in international department of major bank	1	3.4
Corporate loan office, i.e., work at head office of financial institution and be in charge of a portfolio of companies	1	3.4
Foreign exchange manager, banking	1	3.4
Industrial relations supervisor, resource industry	1	3.4
Marketing manager for consumer product in Western Canada	1	3.4
Marketing manager for entire division of large corporation	1	3.4
Management position dealing with labour law and employee relations	1	3.4
Manager, C.A. firm	7	24.1
Manager, financial services – department in government or private company	1	3.4
Manager, personnel department/labour relations	2	6.9

Own & operate own business
  Retail business
  Computer technology, medicine
	2	6.9

Partner, consulting firm in management information systems (computers)	1	3.4

Table 3 contd....

Professional Position	N	%
Partner, C.A. firm	3	10.3
Regional manager, personnel division of major company	1	3.4
Senior staff accountant (C.A.)	1	3.4
Vice-president, real estate sales or land development	1	3.4
Western region operations research - transporational/logistics	1	3.4
Total	29	99.3[a]

[a]This percentage is slightly less than 100 due to rounding error.

Table 4

Subjects' Lowest Professional Aspirations for
Subsequent Five Year Period

Professional Position	N	%
Articling	1	3.4
Branch manager, bank or financial institution	3	10.3
Commercial loans officer, international department of a bank	1	3.4
Credit officer, banking	1	3.4
Employment counsellor, federal government	1	3.4
Field work, operations research	1	3.4
General accountant, company, industrial, or financial institution	3	10.3
Junior officer – financial services, government or private company	1	3.4
Labour relations or personnel officer	3	10.3
Manager, retail store in Vancouver	1	3.4
Middle management marketing position	2	6.9
Programmer, computer firm	1	3.4
Salesperson for a consumer product of a region	1	3.4
Senior accountant, C.A. firm	3	10.3
Senior in a public accounting firm	1	3.4
Staff C.A., C.A. firm	3	10.3
Work in business in a non-law capacity, commerce-related, e.g., management trainee	2	6.9
Total	29	99.3[a]

[a]This percentage is slightly less than 100 due to rounding error.

Table 5

Subject's Expected Professional Positions for
Subsequent Five Year Period

Professional Position	N	%
Accountant for a company, not very high up	1	3.4
Articling student/lawyer in law firm	3	10.3
Branch manager, bank	1	3.4
Commercial banker	1	3.4
Labour/industrial relations officer	3	10.3
Loans officer, consumer & small business loans	1	3.4
Manager, C.A. firm	2	6.9
Manager, operations research – transportation/ logistics	1	3.4
Manager, retail operation in British Columbia	1	3.4
Marketing department of consumer product company	1	3.4
Middle management, financial firm	1	3.4
Middle management, marketing (probably limited to Western Canada)	1	3.4
Personnel administration, government or medium-sized company	1	3.4
Product line manager (of one product)	1	3.4
Real estate executive	1	3.4
Semi-senior staff accountant (C.A.)	1	3.4
Senior staff accountant, C.A. firm	1	3.4
Staff C.A. for a firm	1	3.4

Table 5 contd....

Professional Position	N	%
Supervisor, C.A. firm	3	10.3
Supervisor, public accounting firm	1	3.4
Supervisor, some department in financial services - government or private company	1	3.4
Systems development (computers), in a consulting capacity	1	3.4
Total	29	99.0[a]

[a]This percentage of slightly less than 100 is due to rounding error.

Children. Twenty-eight subjects (96.5%) had no children at the time of the study and one subject (3.5%) had two children (this woman was 32 years old and was separated/divorced). When asked about their five-year plans, 24 subjects (83%) stated that they planned not to have any children in the next five year period. The subject who already had two children stated that she planned not to have any more children in the next five years. Three subjects (10%) stated that they planned to have one child and two subjects (7%) stated that they planned to have two children during the subsequent five year period. The total percentage, then, of subjects planning to have children in the next five year period was about 20%.

The following four sections present the results obtained in the investigation of each of the four proposed research questions. These investigations involved various analyses of the 12 x 12 repertory grids produced by the 29 subjects. See Appendix E for an example of a repertory grid completed by one subject. The statistical analyses utilized in answering each question will be discussed separately in each of the following sections.

Role Importance (Question 1)

The results obtained in the investigation of the question, "How does this group of women rank order life roles in terms of personal importance?" are presented in this section.

The role preference ranks were averaged to obtain an average ranking for each role for the group. These averages were then rank ordered to obtain a preference rank for each role for the group. The results of these calculations are presented in Table 6.

The six most important or most preferred roles for this group of women were, in order of preference: expected profession, personal well-being and enjoyment, profession of highest aspiration, friend, partner/wife and graduate student. The six least important roles, in descending order of preference, were: daughter, community member/citizen, profession of lowest aspiration, single person, mother, and homemaker.

Another way of assessing role preference is to look at the preferability ranks. A role sum was calculated for each subject by adding up the 12 numerical ratings given for each role. As the rating scale ranged from 2 to -2, and each role was rated according to 12 different constructs, the range of possible role sums was 24 to -24. A role which received a role sum of 24 would be highly positively valued and a role which received a role sum of -24 would be valued very negatively. See Appendix E for the calculation of role sums for one subject.

After calculating the 12 role sums for each subject, an average role sum for the group for each of the 12 roles was calculated. These averages were then rank ordered to obtain preferability ranks for the group. These findings are presented in Table 7.

Table 6

Group Preference Ranks of Roles Based on
Means and Standard Deviations of Role Preference Ranks

Role	Mean Preference Rank	SD	Group Preference Rank[a]
Expected profession	3.4	1.7	1
Personal well-being and enjoyment	3.4	2.2	2
Profession of highest aspiration	4.2	2.5	3
Friend	4.6	2.4	4
Partner/Wife	5.0	2.8	5
Graduate student	5.3	3.3	6
Daughter	6.3	2.5	7
Community member/citizen	7.9	2.5	8
Profession of lowest aspiration	8.5	2.6	9
Single person	9.2	2.2	10
Mother	9.7	3.1	11
Homemaker	10.5	1.5	12

[a]Obtained by rank ordering the average rankings of roles, with "1" being the most preferred role on average and "12" being the least preferred role on average.

Table 7

Group Preferability Ranks of Roles Based on
Means and Standard Deviations of Role Sums

Role	Mean Role Sum[a]	SD	Group Preferability Rank[a]
Profession of highest aspiration	15.7	4.7	1
Expected profession	13.5	5.0	2
Friend	12.8	5.3	3
Graduate student	12.6	4.5	4
Partner/Wife	11.1	3.7	5
Personal well-being and enjoyment	10.9	5.6	6
Community member/citizen	8.2	7.1	7
Mother	5.5	10.4	8
Profession of lowest aspiration	3.2	10.3	9
Single person	2.7	7.4	10
Daughter	2.4	5.7	11
Homemaker	−10.3	8.2	12

[a]Range of possible means was 24 to −24.

[b]Obtained by rank ordering the roles according to the average role
sums. The highest mean was ranked "1", i.e., the most preferable role
according to the role sums, and the lowest mean was ranked "12", i.e.,
the least preferable role according to the role sums.

A visual inspection of Tables 6 and 7 reveals that the preferability rank ordering is consistent with the preference rank ordering. A rank order correlation calculated between these two rank orderings produced a correlation coefficient of .82 (significant at the .01 level, two-tailed test). This is a very high correlation and indicates a very strong relationship between subjects' stated role preferences and potential preferences based on the ratings of roles according to each of the twelve constructs.

Construct Importance (Question 2)

The results obtained in the investigation of the question, "How does this group of women rank order constructs in terms of personal importance?" are presented in this section.

The construct importance ranks were averaged to obtain an average ranking for each construct for the group. These averages were then rank ordered to obtain an importance rank for each construct for the group. The results of these calculations are presented in Table 8.

For this group the six most important constructs were, in order of importance: opportunity for personal growth, opportunity to accomplish challenging goals (achievement), enjoyment, self-estimate of competence and success, opportunity for warm, friendly relations (affiliation), and support and encouragement from partner. The six least important constructs, in order of descending importance, were:

Table 8

Group Importance Ranks of Constructs Based on
Means and Standard Deviations of Construct Importance Ranks

Construct	Mean Importance Rank	SD	Group Importance Rank[a]
Personal growth	2.9	1.7	1
Achievement	3.4	2.5	2
Enjoyment	4.2	2.3	3
Self-estimate of competence & success	4.6	2.6	4
Affiliation	5.5	2.8	5
Support: partner	6.5	2.7	6
Support: friends, colleagues &/or teachers	7.3	2.5	7
Commitment/investment	7.4	3.0	8
Support: parents &/or other family members	7.6	2.3	9
Degree of fit with view of self as a woman	8.7	3.4	10
Power	9.0	2.8	11
Role model	11.0	1.4	12

[a]Obtained by rank ordering the constructs according to the average rankings of constructs, with "1", being the most important construct on average and "12" being the least important construct on average.

support and encouragement from friends, colleagues, and/or teachers,

willingness to invest time and energy in the role (commitment/

investment), support and encouragement from parents and/or other family

members, degree of fit with view of self as a woman, opportunity to

influence other people (power), and knowing someone else who does well

in the role (role model).

Construct importance may also be assessed by examining the

centrality ranks of the constructs as determined by construct

interrelationships. These interrelationships are discussed in depth in

the next section, Interrelationships Between Constructs (Question 3),

where the calculation of variance-in-common scores, from which construct

relations are derived, is described in detail.

The derivation of centrality ranks is shown in Table 9. The

first step in determining centrality was to add up the mean

variance-in-common scores for each construct. The construct with the

highest sum (personal growth) is the most central construct in the grids

of this group. The relationship of each construct to the most central

construct was assessed by its variance-in-common with the most central

construct. Constructs were rank ordered according to their relation to

the most central construct. The centrality ranks of constructs are

shown more clearly in Table 10.

The comparison of centrality ranks (Table 10) with subjects'

original rank orderings of constructs (Table 8) served as a check on the

original importance rankings. A visual inspection of the two rank order

lists indicates that the lists are very similar in their ordering of

Mean Variance-in-Common Scores

	Achievement	Personal growth	Support: partner	Affiliation	Support: friends, colleagues, teachers	Enjoyment	Power	Support: parents &/or family members	Role model	Self-estimate of competence & success	Degree of fit with view of self as a woman	Commitment/investment	Sums of Mean Variance-in-Common Scores[a]	Relation to Most Central Construct[b]	Ranks[c]
Achievement	X	64	26	5	32	23	37	16	26	53	25	41	348	64	2
Personal growth		X	37	23	41	42	38	21	19	51	38	47	421	100	1
Support: partner			X	22	28	30	21	21	12	23	28	41	289	37	9
Affiliation				X	24	41	11	12	3	9	22	16	188	23	10
Support: friends, colleagues, teachers					X	31	34	24	17	34	28	33	326	41	6
Enjoyment						X	27	20	10	35	33	44	336	42	5
Power							X	17	23	41	25	35	309	38	7.5
Support: parents &/or other family members								X	7	22	22	30	212	21	11
Role model									X	26	13	21	177	19	12
Self-estimate of competence & success										X	37	48	379	51	3
Degree of fit with view of self as a woman											X	40	311	38	7.5
Commitment/investment												X	396	47	4

[a]Mean variance-in-common scores were added for each construct in this first step in deriving centrality ranks. The construct with the highest sum (personal growth) is the most central construct.

[b]The relationship of each construct to the most central construct was assessed by its variance-in-common with the central construct.

[c]Constructs were rank ordered according to their relation to the most central construct.

Table 9

Deriving Centrality Ranks

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Table 10

Centrality Ranks of Constructs

Construct	Centrality Rank[a]
Personal growth	1
Achievement	2
Self-estimate of competence & success	3
Commitment/investment	4
Enjoyment	5
Support: friends, colleagues &/or teachers	6
Power	7.5
Degree of fit with view of self as a woman	7.5
Support: partner	9
Affiliation	10
Support: parents &/or other members	11
Role model	12

[a]See Table 9 for the derivation of centrality ranks. Constructs are ordered according to their relation to the most central construct (personal growth).

constructs. The one construct that did move down in importance, when assessed in terms of centrality ranks, was affiliation. It moved from fifth most important construct, i.e., one of the six most important, to tenth most important, i.e., one of the six least important constructs. This will be discussed in more detail in the next section, Interrelationships Between Constructs (Question 3).

A rank order correlation calculated between the two lists resulted in a correlation coefficient of .73 (significant at the .01 level, two-tailed test). This is a high correlation and indicates a strong relationship between subjects' original rank orderings of construct importance and the rank ordering derived from grid centrality ranks.

A central construct has many strong relationships with other constructs and a peripheral construct has few and weak relations (Cochran, Note 3). The more central a construct is, the more strongly it will influence role preferences, and hence the more strongly it will influence life role decisions. This group of subjects, then, appear to be strongly motivated by a desire for personal growth. This will be discussed in more detail in the next section (Question 3).

Interrelationships Between Constructs (Question 3)

The results obtained in the investigation of the question, "For this group how are the constructs related on average?" are presented in this section.

For each subject the ratings of roles according to each construct were cast in grid form. This yielded one 12 x 12 grid for each subject. As the same 12 elements (i.e., role titles or descriptions) were rated by each subject according to each of the 12 constructs, inferences about the relationships between constructs for each subject could be inferred from the correlations between constructs.

Each subject's ratings on each pair of constructs were correlated using a Pearson product-moment correlation. This yielded one correlation matrix for each subject. To assess the interrelationships between constructs across subjects the absolute value (maintaining sign) of each correlation for each subject was squared and multiplied by 100 yielding a variance-in-common score for each pair of constructs (see Cochran, Note 3 for a full description of this procedure). Average variance-in-common scores and standard deviations were then computed for the group of 29 subjects on each pair of constructs. Each of the average variance-in-common scores was tested for significance using the t-test formula of mean minus zero divided by the standard error of the mean. A level of significance of $p < .05$ was accepted because of the exploratory nature of this study. Because 66 significance tests were done, the Bonferroni inequality for multiple comparisons (Dunn, 1961; Marascuilo & Levin, 1983) was used in order to split the risk of a Type I error across the 66 tests. The average variance-in-common scores are reported in Table 11.

Use of variance-in-common scores in analyses of repertory grid data, although it represents a non-standard application of inferential

statistics (with respect to assumptions of independence), is justified by precedent (Bannister & Mair, 1968; Cochran, 1978, 1981; Cochran, Note 3) and by the exploratory nature of this study. Interpretations of the results must, therefore, be made tentatively, bearing these cautions in mind.

An examination of Table 11 reveals that almost all of the construct pairs were significantly related. Of the 66 significance tests done only seven construct pairs were found to be not significantly related. The construct pairs which were not significantly related were: affiliation - achievement, affiliation - power, affiliation - support: parents and/or other family members, affiliation - role model, affiliation - self-estimate of competence and success, enjoyment - role model, and support: parents and/or other family members - role model.

A more illuminating discussion of these construct relationships involves an examination of the strength of the relationships. A simple guide to the strength of the relationships is to consider a variance-in-common score over 50 as indicative of a strong relationship, a score between 26 and 49 as moderate, and a score below 25 and still significant as mild or weak. Tables 12 through 17 show the strength of each construct's relationships to each of the other constructs.

The strongest relationships were between personal growth, achievement, and self-estimate of competence and success (see Tables 12 & 13). These three constructs were all strongly related to each other. They were, in fact, the only three constructs with such strong relationships (i.e., with variance-in-common scores over 50).

Table 11

Average Interrelationships Between Constructs

	Achievement	Personal growth	Support: partner	Affiliation	Support: friends, colleagues, teachers	Enjoyment	Power	Support: parents &/or family members	Role model	Self-estimate of competence & success	Degree of fit with view of self as a woman	Commitment/investment
Achievement	X	64*	26*	5	32*	23*	37*	16*	26*	53*	25*	41*
SD	X	26	28	21	23	24	26	22	23	25	28	28
Personal growth		X	37*	23*	41*	42*	38*	21*	19*	51*	38*	47*
SD		X	30	29	27	29	25	25	18	31	30	28
Support: partner			X	22*	28*	30*	21*	21*	12*	23*	28*	41*
SD			X	24	27	24	21	27	16	24	24	27
Affiliation				X	24*	41*	11	12	3	9	22*	16*
SD				X	25	24	21	25	20	24	31	20
Support: friends, colleagues, teachers					X	31*	34*	24*	17*	34*	28*	33*
SD					X	23	25	24	22	23	36	26
Enjoyment						X	27*	20*	10	35*	33*	44
SD						X	22	26	19	31	27	23
Power							X	17*	23*	41*	25*	35*
SD							X	19	24	25	26	22
Support: parents &/or other family members								X	7	22*	22*	30*
SD								X	12	24	29	26
Role model									X	26*	13*	21*
SD									X	23	18	25
Self-estimate of competence & success										X	37*	48*
SD										X	36	28
Degree of fit with view of self as a woman											X	40*
SD											X	33
Commitment/investment												X
SD												X

Note: For each subject the 12 constructs were intercorrelated. The absolute value (maintaining sign) of each correlation was squared and multiplied by 100 to compute a variance-in-common score for each pair of constructs. Average variance-in-common scores and standard deviations were then computed for the group of 29 subjects. The above scores represent these means and standard deviations. Decimals are rounded off to present whole numbers.

*Significant at the .05 level (two-tailed test) using the Bonferroni inequality procedure (Dunn, 1961; Marascuilo & Levin, 1983) in which the experiment-wise error rate for all 66 significance tests is $\leq$ .05 (i.e., probability of Type I error is < .05).

The weakest relationships were evidenced by the relationships of affiliation, role model, and support from parents and/or other family members (see Tables 13 & 14). These three constructs were, on the whole, only weakly related to the majority of the other constructs and/or not significantly related to a few constructs.

The constructs of powers, enjoyment, support from partner, support from friends, colleagues, and/or teachers, commitment/investment and degree of fit with view of self as a woman showed moderate to weak relationships with most other constructs (see Tables 15, 16, & 17).

As previously discussed, personal growth was on average the most central construct for this group, followed by achievement and self-estimate of competence. All other constructs revolved around the construct of personal growth. As personal growth was very strongly related to achievement (note the very large variance-in-common score of 64 between these two constructs) and strongly related to self-estimate of competence (variance-in-common score of 51), it can be said that on average this group of women view personal growth predominantly in terms of achievement. Their beliefs about their ability to succeed strongly influence the contexts in which they choose to achieve and thus to grow as persons. Their confidence in themselves as competent professionals was indicated by their role preferences (Tables 6 & 7) and their stated five year professional aspirations (Tables 3, 4, & 5). Three of their six most preferred roles were professional roles (i.e., profession of highest aspiration, expected profession, and graduate student) and, as a group, they aspired to relatively high level careers.

Table 12

Strength of Relationships Between Constructs
(Personal Growth and Achievement)

		Variance-in-Common Scores
Personal Growth		
Strongly related to	Achievement	64*
	Self-estimate of competence and success	51*
Moderately related to	Commitment/investment	47*
	Enjoyment	42*
	Support: friends, colleagues, teachers	41*
	Power	38*
	Degree of fit with view of self as a woman	38*
	Support: partner	37*
Weakly related to	Affiliation	23*
	Support: parents, other family members	21*
	Role model	19*
Achievement		
Strongly related to	Personal growth	64*
	Self-estimate of competence and success	53*
Moderately related to	Commitment/investment	41*
	Power	37*
	Support: friends, colleagues, teachers	32*
	Support: partner	26*
	Role model	26*
Weakly related to	Degree of fit with view of self as a woman	25*
	Support: parents, other family members	16*
	Enjoyment	23*
Not significantly related to	Affiliation	5

Note: A strong relationship is indicated by a variance-in-common score over 50, a moderate relationship by a score between 26 and 49, and a weak relationship by a score under 25 (but still significantly related).

*Significant at the .05 level using the Bonferroni inequality procedure.

Table 13

Strength of Relationships Between Constructs
(Self-Estimate of Competence and Success and Affiliation)

		Variance-in-Common Scores
Self-Estimate of Competence and Success		
Strongly related to	Achievement	53*
	Personal growth	51*
Moderately related to	Commitment/investment	48*
	Power	41*
	Degree of fit with view of self as a woman	37*
	Enjoyment	35*
	Support: friends, colleagues, teachers	34*
	Role model	26*
Weakly related to	Support: partner	23*
	Support: parents, other family members	22*
Not significantly related to	Affiliation	9
Affiliation		
Moderately related to	Enjoyment	41*
Weakly related to	Support: friends, colleagues, teachers	24*
	Personal growth	23*
	Support: partner	22*
	Degree of fit with view of self as a woman	22*
	Commitment/investment	16*
Not significantly related to	Support: parents, other family members	12
	Power	11
	Self-estimate of competence and success	9
	Achievement	5
	Role model	3

Note: A strong relationship is indicated by a variance-in-common score over 50, a moderate relationship by a score between 26 and 49, and a weak relationship by a score under 25 (but still significantly related).

*Significant at the .05 level using the Bonferroni inequality procedure.

Table 14

Strength of Relationships Between Constructs
(Role Model and Support: Parents, Other Family Members)

		Variance-in-Common Scores
Role Model		
Moderately related to	Achievement	26*
	Self-estimate of competence and success	26*
Weakly related to	Power	23*
	Commitment/investment	21*
	Personal growth	19*
	Support: friends, colleagues, teachers	17*
	Degree of fit with view of self as a woman	13*
	Support: partner	12*
Not significantly related to	Enjoyment	10
	Support: parents, other family members	7
	Affiliation	3
Support: Parents, Other Family Members		
Moderately related to	Commitment/investment	30*
Weakly related to	Support: friends, colleagues, teachers	24*
	Self-estimate of competence and success	22*
	Degree of fit with view of self as a woman	22*
	Personal growth	21*
	Support: partner	21*
	Enjoyment	20*
	Power	17*
	Achievement	16*
Not significantly related to	Affiliation	12
	Role model	7

Note: A strong relationship is indicated by a variance-in-common score over 50, a moderate relationship by a score between 26 and 49, and a weak relationship by a score under 25 (but still significantly related).

*Significant at the .05 level using the Bonferroni inequality procedure.

Table 15

Strength of Relationships Between Constructs
(Power and Enjoyment)

		Variance-in-Common Scores
Power		
Moderately related to	Self-estimate of competence	41*
	Personal growth	38*
	Achievement	37*
	Commitment/investment	35*
	Support: friends, colleagues, teachers	34*
	Enjoyment	27*
Weakly related to	Degree of fit with view of self as a woman	25*
	Role model	23*
	Support: partner	21*
	Support: parents, other family members	17*
Not significantly related to	Affiliation	11
Enjoyment		
Moderately Related to	Commitment/investment	44*
	Personal growth	42*
	Affiliation	41*
	Self-estimate of competence and success	35*
	Degree of fit with view of self as a woman	33*
	Support: friends, colleagues, teachers	31*
	Support: partner	30*
	Power	27*
Weakly related to	Achievement	23*
	Support: parents, other family members	20*
Not significantly related to	Role model	10

Note: A strong relationship is indicated by a variance-in-common score over 50, a moderate relationship by a score between 26 and 49, and a weak relationship by a score under 25 (but still significantly related).

*Significant at the .05 level using the Bonferroni inequality procedure.

Table 16

Strength of Relationships Between Constructs
(Support: Partner and Support: Friends, Colleagues, Teachers)

		Variance-in-Common Scores
Support: Partner		
Moderately related to	Commitment/investment	41*
	Personal growth	37*
	Enjoyment	30*
	Degree of fit with view of self as a woman	28*
	Support: friends, colleagues, teachers	28*
	Achievement	26*
Weakly related to	Self-estimate of competence and success	23*
	Power	21*
	Affiliation	22*
	Support: parents, other family members	21*
	Role Model	12*
Support: Friends, Colleagues, Teachers		
Moderately related to	Personal growth	41*
	Self-estimate of competence and success	34*
	Power	34*
	Commitment/investment	33*
	Achievement	32*
	Enjoyment	31*
	Support: partner	28*
	Degree of fit with view of self as a woman	28*
Weakly related to	Support: parents, other family members	24*
	Affiliation	24*
	Role model	17*

Note: A strong relationship is indicated by a variance-in-common score over 50, a moderate relationship by a score between 26 and 49, and a weak relationship by a score under 25 (but still significantly related).

*Significant at the .05 level using the Bonferroni inequality procedure.

Table 17

Strength of Relationships Between Constructs
(Commitment/Investment and Degree of Fit with
View of Self as a Woman)

		Variance-in-Common Scores
Commitment/Investment		
Moderately related to	Self-estimate of competence and success	48*
	Personal growth	47*
	Enjoyment	44*
	Support: partner	41*
	Achievement	41*
	Degree of fit with view of self as a woman	40*
	Power	35*
	Support: friends, colleagues, teachers	33*
	Support: parents, other family members	30*
Weakly related to	Affiliation	16*
	Role Model	21*
Degree of Fit with View of Self as a Woman		
Moderately related to	Commitment/investment	40*
	Personal growth	38*
	Self-estimate of competence and success	37*
	Enjoyment	33*
	Support: partner	28*
	Support: friends, colleagues, teachers	28*
Weakly related to	Power	25*
	Achievement	25*
	Support: parents, other family members	22*
	Affiliation	22*
	Role model	13*

Note: A strong relationship is indicated by a variance-in-common score over 50, a moderate relationship by a score between 26 and 49, and a weak relationship by a score under 25 (but still significantly related).

*Significant at the .05 level using the Bonferroni inequality procedure.

Affiliation, on the other hand, was a comparatively peripheral construct in the meaning-schemes of these women. The only construct to which it was moderately related was enjoyment. It was only weakly related to five of the other constructs, and was not significantly related to support: parents and/or other family members, power, self-estimate of competence, achievement, and role model. This pattern of relationships indicates that these women view affiliation (i.e., the opportunity for warm, friendly relationships) as fun but not particularly useful for getting ahead in achievement contexts. This pattern of relationships becomes even more evident when information from the construct importance rankings (Table 8) and from the centrality ranks (Table 10) is added. Affiliation was the fifth most important construct on average according to the original construct importance rankings. This would indicate that affiliation is fairly important to this group of women in the context of roles. However, an examination of the centrality ranks reveals that affiliation dropped in importance to position number 10. Hence, although they said that affiliation was important to them, when they actually performed the task of evaluating roles according to each of the constructs affiliation came out as one of the least important considerations.

Conflict (Question 4).

Each of the three parts of Question 4 are concerned with the measurement of conflict. The first part of Question 4 was concerned

with the measurement of overall conflict in the construing of life role alternatives. This part of the question read, "What is the overall level of conflict for this group, i.e., to what extent are construct relationships in harmony or in conflict?"

A conflict ratio was computed for each subject by squaring and adding all the negative correlations between constructs and then dividing this sum by the overall sum of squared correlations between constructs. Subsequently, the average conflict ratio for the group was computed. The mean conflict ratio was .049 (standard deviation of .069). This means that about 5% of the variance-in-common among constructs was negative or conflicting. This is a very low level of conflict indicating that for the group as a whole construct relationships are quite harmonious. It may thus be said that on average this group is conflict-free in its overall construing of life role alternatives. Their decisional schemes reflect very little ambivalence.

The second part of Question 4 was concerned with conflict between any specific pairs of constructs. This question read, "For this group, do any of the constructs conflict with each other in the overall construing of life role alternatives?" The mean conflict ratio of .049 indicated that there was very little conflict between constructs in general. An examination of the relationships between construct pairs as measured by the variance-in-common scores (Table 11) revealed that there were no negative relationships between constructs. This absence of negative relationships between constructs indicated that there were no conflicts between specific pairs of constructs. This is another

indicator of a clearly formulated decision scheme characterized by the absence of ambivalence and conflict.

The third part of Question 4 was concerned with potential or actual role conflict. This part of the question read, "As judged by the role sums, for which roles is conflict indicated?" To answer this question the average role sums for the group (Table 7) were examined for negativity and for congruence of the overall pattern of role preferences (as per role sums) with itself and with value priorities expressed in construct importance rankings and centrality.

The only role viewed negatively was that of homemaker (mean role sum was -10.3). This negative score indicates that on an average the women in this group expect negative consequences in the role of homemaker. As this role received both preference and preferability ranks of 12 this negative view of homemaker is congruent with the overall pattern of role preferences.

The rest of the roles were viewed with varying degrees of positivity. The roles of profession of highest aspiration and expected profession were the most positively viewed, with mean role sums of 15.7 and 13.5, respectively.

The pattern of role preferences according to the role sums was congruent with the group's strong valuing of personal growth linked to achievement. The two most preferred roles (profession of highest aspiration and expected profession) are roles which will enable them to realize their most central values (desire for personal growth and achievement).

These women did not appear to anticipate conflict in the living out of their most preferred life plans. No matter how the grid was analyzed, direct attitudinal conflict could not be found. However, the makings of conflict may be seen in comparing the role sums of profession of highest aspiration (15.7), expected profession (13.5), partner/wife (11.1), mother (5.5), and homemaker (-10.3) and speculating what life will be like for these women when they are actually simultaneously in these career and family roles. As the preferred professional roles really do not have a rival in terms of importance, conflict may occur when additional roles, with their demands for limited time, energy, and resources, are assumed.

CHAPTER V

Discussion of Results and Conclusions

Discussions and Conclusions

This exploratory study used a biodemographical questionnaire and a variant of Kelly's (1955) repertory grid technique to examine the life role aspirations (career, home and family, and personal) of a group of high ability women in Commerce and Law and to describe how their role perceptions and expectations seemed to influence their career aspirations. The most salient results, the ones which added most significantly to the shape, colour, and texture of the overall pattern of findings, have been drawn out for discussion in this chapter.

The women in this group, almost unilaterally, were aspiring to relatively high level demanding careers for the next five year period of their lives. All of their stated career aspirations were near the top of the scale on the socioeconomic index for occupations in Canada (Blishen & McRoberts, 1976). Previous theory and research (e.g. Horner, 1970, 1972; Ohlsen, 1968) had put forth the idea that even, and perhaps particularly, intellectually gifted women will lower their aspirations for success in achievement contexts because such success conflicts with

traditional sex role expectations and threatens success in more affiliative contexts (i.e., love, marriage, family). In addition, the literature had indicated that home/career conflict or role conflict was a crucial factor affecting women's career involvement and that it often contributed to lowered career aspirations (Farmer, 1971, 1978; Farmer & Bohn, 1970; Hall, 1975; Hall & Gordon, 1973; O'Leary, 1974, 1977; Stake, 1979b).

Bearing these findings of previous research in mind, one of the original purposes of the present study was, if possible, to divide the subjects into two groups based on aspiration level (i.e., higher aspiring vs lower aspiring). Comparisons would then have been made between the two groups based on aspects of role construal and conflict. This was, of course, not possible because of uniformly high aspirations of virtually all the subjects.

Lowered aspirations due to conflict with traditional sex role expectations and home/career conflict appeared, from the results of this study, to be totally alien and outdated concepts with which to approach the study of these high ability women. They were an essentially homogenous group in terms of conflict-free career aspirations. They seemed to be "marching to the beat of a different drum" (their own!). When the grids were examined for conflict (using negative relationships between constructs, the conflict ratio, and the role sums), no evidence of direct attitudinal conflict about life roles and more specifically, about their high career aspirations, could be found.

Another significant finding of this study was that the most

central value and motivating factor for these women appeared to be their desire for personal growth. Personal growth (opportunity for personal growth) was on average the most central construct in this group's role construal, followed by achievement (opportunity to accomplish challenging goals) and self-estimate of competence and success (likelihood of competence and success in the role). The strong relationship of personal growth to achievement (variance-in-common of 64) and to self-estimate of competence (variance-in-common of 51) indicated that these women viewed personal growth predominantly in terms of achievement and that they relied heavily on their own evaluations of themselves.

Their most central values for personal growth and achievement, along with their beliefs about their competence and ability to succeed, seemed to strongly influence the contexts in which they planned to achieve and to grow as persons. Their confidence in themselves as competent professionals was indicated by their role preferences and stated career aspirations. Three of their six most preferred roles were professional roles (i.e., profession of highest aspiration, expected profession, and graduate student) and, as a group, they aspired to relatively high level careers. The remaining three of their six most preferred roles, although secondary in importance to their preferred careers, were friend, partner/wife, and personal well-being and enjoyment, indicating that they were planning lives balancing the personal and the professional.

The next finding that is of interest is the relatively peripheral

position of affiliation (opportunity for warm, friendly relations) in

the meaning scheme of this group of women (importance rank of 5,

centrality rank of 10, weakly or not significantly related to the

majority of the other constructs). This finding, combined with the

previously stated pattern of findings,is in contrast to previous

research and theory which has suggested that affiliative concerns are

primary motivators for women (Hoffman, 1972; Horner, 1970, 1972; Stein &

Bailey, 1973). This discrepancy may perhaps be accounted for by the

fact that these are highly competent and independent women who want to,

take pleasure in, and can achieve their goals through their own

efforts. Being warm and friendly may not be salient considerations for

them because they do not have to enlist the help of others to meet their

needs. In addition, most of these women are at a life stage and in life

situations where "practical" (in contrast to psychological) role

conflict is not a strong factor.

It seems important to note here that these comments in regard to

affiliation do not mean that these women are not, or cannot be, warm and

friendly. Observations of their interactions with each other and with

the questionnaire administrator just prior to and after data collection

sessions revealed a group of friendly, out-going, and interested women.

The fact that the opportunity for warm, friendly relations was

moderately related to enjoyment, and that the essentially affiliative

roles of friend and partner/wife were among the six most preferred roles

seems to indicate that these women do enjoy and value warm, friendly

relationships. It is possible, though, that they may have learned, in

their socialization into the world of business, that demonstrated professional competence and desire and ability to achieve are more effective passports to success than are being warm and friendly. This would be consistent with Hennig and Jardim's (1977) description of successful women in business:

> Embedded in the relationshps they established was an issue
> of critical importance to their future management success:
> they already recognized, probably without even questioning
> why, that it was possible to develop working relationships
> with men on a basis of competence and intellectual
> ability, that they did not need to base relationships on
> personal ties or even necessarily on liking. Where two
> men might hold positions on a football team, work together
> successfully during the game and dislike each other
> throughout, in quite different circumstances they used the
> same approach. (p. 111)

Another finding of note is the relative lack of importance (importance rank of 12) and centrality (centrality rank of 12) of the construct role model (knowing someone else who does well in the role). Previous research has emphasized the importance of role models to women's career achievement (Almquist & Angrist, 1971; O'Leary, 1977; Stake, 1981). In accounting for this discrepancy, several possibilities come to mind. The first is that the list of 12 constructs provided in this study may indeed have been 12 very important constructs to this group of women. When prioritized, though, knowing someone else who does

well in the role may have been seen by this group as the least important of 12 very important constructs. In addition, knowing someone else who does well in the role is a fairly limited interpretation of the concept of role model. For example, for the purpose of their study, Basow and Howe (1980) defined a role model as "someone whose life and activities influenced the respondent in specific life decisions. This influence can be either positive (e.g., the subject actively wants to be like someone) or negative (the subject actively does not want to be like someone)" (p. 559). If, for the purpose of the present study, role model had been operationalized in both positive and negative terms and as wanting or not wanting to be like someone, two constructs would have been used for the concept of role model (i.e., knowing and wanting to be like someone who is/has been in the role; knowing and not wanting to be like someone who is/has been in the role). One or both of these expanded definitions of a role model may have been ranked as more important than the definition that was used in this study.

Another possible explanation for the relative lack of importance of knowing someone else who does well in the role is that this particular group of women may not need or value modelling after others. They are a highly capable, select group of women. It is a methodological mistake to regard women as a homogenous group and it may be a mistake to write about careers for "women". Rather, one might write about the careers of high ability women in business careers. In their strength and confident self-reliance they may be charting their own individual courses into new territory.

Evidence to support this hypothesis of strong independence and self-reliance may be found in an examination of the centrality ranks of constructs (Table 10). The five most important constructs, in descending order of centrality, are: personal growth, achievement, self-estimate of competence and success, commitment/investment, and enjoyment. The nature of these constructs indicate that these women rely most heavily on themselves and their own beliefs, and make choices based primarily on their own needs. They appear to set clear goals to which they are commited in arenas which will meet their needs for personal growth and achievement. They seem to do so because they believe they will be competent and successful in these pursuits and that they will enjoy themselves in the process. Any encouragement, support, and modelling that they anticipate receiving from others (construct centrality ranks of 6, 9, 11, and 12) seems to be secondary in importance to their primary belief in and encouragement of themselves.

The relative unimportance of support and encouragement from others is demonstrated in the following findings. The constructs of support and encouragement from friends, colleagues and/or teachers (centrality rank of 6), support and encouragement from partner (centrality rank of 9), and support from parents and/or other family members (centrality rank of 11) are less central considerations which are only moderately, weakly, or not significantly related to the other constructs. These findings do not lend support to the contention that support from significant others is important in women's career involvement and that it is an important factor in raising career

aspirations (Epstein, 1973; Farmer, 1978; Rapoport & Rapoport, 1969; Stake, 1981; Stake & Levitz, 1979). A number of factors may account for this discrepancy. The first and most obvious, again, is that these women are a select, highly capable group of women who, because of their strong beliefs in their own abilities, do not value or require the support and encouragement from others in order to aspire to and to attain high level career goals. Alternatively, they may have received, and may continue to receive from significant others a great deal support for achievement-related pursuits. It is possible that this support may be taken for granted even though it may have been a significant factor in the development of their high aspirations.

Another finding of interest was that the construct degree of fit with view of self as a woman was relatively low in importance (group importance rank of 12) and in centrality (7.5) and was only moderately and weakly related to the other constructs. This would seem to indicate that these women have achieved a "cognitive feminization" of their occupational aspirations. They did not seem to be concerned with ensuring that their behaviour fell within the "appropriate" range of behaviour for women. What seemed to be more important to them was what they would enjoy doing, what would stimulate their growth, and what they would be good at as whole human beings. This finding is consistent with recent reformulations of the origins and development of a sense of femininity or masculinity:

The characteristics of self that men and women use to
confirm the sense of their own gender identity focus on

those attributes and behaviours they manifest, value, or

are called upon to possess at their particular stage of

life development, and may often be quite different than

those they employ in assessing others, even of the same

sex and age. (Spence & Sawin, Note 5, p. 41)

Another interesting finding is that the construct of power

(opportunity to influence other people) is fairly low in importance

(importance rank of 11) and in centrality (7.5) and is only moderately

and weakly related to the most other constructs (not significantly

related to affiliation). This finding would seem to indicate that the

opportunity to influence other people is not an important motivator for

these women. This may be contrasted with the results of Harrell and

Stahl's (1981) study which indicated that the dominant need for business

executives in their study was power and that the dominant need for

graduate students was achievement. The present study used wording very

similar to that of Harrell and Stahl (1981) for power and achievement.

However, Harrell and Stahl looked only at the needs for achievement,

affiliation, and power, and all but a few of the subjects in their study

were men. It would be interesting to do a study similar to the present

one with both women and men and to compare the two groups.

One explanation which may account for the relative lack of

importance of the opportunity to influence other people to these women

is that they appear to be motivated primarily by needs for personal

growth and achievement. They seem to be placing primary emphasis on the

development of successful careers because it is personally satisfying

for them to do so. Lips (1981), in her extensive discussion of power, emphasized that the desire to influence others is only one aspect of the power motive. Another important aspect of power is "the feeling that one is having an impact on the environment" (p. 25). Had this additional aspects of power also been used as a construct, it is possible that it would have been ranked much higher in importance.

Limitations

Several factors limit the generalizability of these results and suggest a cautious and tentative interpretation of the findings.

The subject group was limited in age, number, and level of ability. The majority of subjects were 22 years of age. Had the study been done on a group of business women of say age 35, the results may have been significantly different.

The 29 subjects who participated in this study were recruited on a volunteer basis from a pool of 45 potential subjects with grade averages of 72% and above. Borg and Gall (1979) state that volunteers tend to be higher in intelligence and need for achievement than non-volunteers. The results of this study may have been affected by this factor, in that the 16 non-participants may have been somewhat lower in intelligence and ability and lower in need for achievement than the participants. The non-participants may, then, have had lower career aspirations and more central aspirations for more traditional role combinations.

The results, then, are limited in generalizability to very similar groups of high ability women within the same age range, and possibly to women in business careers.

The results are also limited to the 12 roles and 12 constructs selected for use in this study. Had different roles and constructs been used or had the subjects selected their own roles and constructs, the pattern of results may have been significantly different.

Another limitation is the fact that this was a study of perceptions and projections into the future. It was an examination of what subjects believed their lives would be like during the subsequent five year period. Common sense tells us that the future is not always what one expects, so data relying on such anticipations has to be interpreted accordingly.

In summary, the results of this study must be regarded as exploratory and tentative, bearing these limitations in mind.

Implications for Theory and Practice

The results of this exploratory and descriptive study add to the body of theory and research on women and career development. As discussed in the previous section, the results of this study have limited generalizability to other groups of women. That is, the results may be most safely generalized only to very similar groups of women (e.g. similar level and type of education, ability level, age range).

A strength of this study was that it controlled for ability level and type and level of education and thus did not treat all women as if they were the same. This may be contrasted with a study comparing female professors and secretaries. Such a study would have ignored the important variables of ability level and social milieu. Professors and secretaries undoubtedly experience very different socialization processes as direct results of the career choices they have made. Their potentials and attitudes are thus developed in vastly different ways.

To date, the overwhelming majority of studies on women's career development have treated all women as if they were the same. Now, perhaps more than any other time in history, women are not all the same. With the ever-increasing effect of the women's movement and it's resultant increase in opportunities and experiences for women, more women, and the author suspects particularly more women of high ability, are expecting and planning for rewarding careers.

For the group of women in this study and perhaps for others who, like them, are on the leading edge of social change, Super's (1963a) following comments are directly applicable:

> In expressing a vocational preference, a person puts into
> occupational terminology his idea of the kind of person he
> is; that in entering an occupation, he seeks to implement
> a concept of himself; that in getting established in an
> occupation he achieves self actualization. The occupation
> thus makes possible the playing of a role appropriate to
> the self concept. (p. 1)

Change all the "he's", "his's", and "himself's" in the above quotation
to "she's", "her's", and "herself's" and the result is a summary of what
the women in this study seemed to be doing in their expression of career
choices. Personal growth appeared to be extremely important to them.
It was, in fact, the most central construct around which all other
constructs revolved. Personal growth was viewed primarily in terms of
career achievement, indicating that career roles are central to their
self concepts.

These results are contrary to the tenets of previous theories of
women's career development which purport that women's central roles are
those of wives, mothers and homemakers (Psathas, 1968; Super, 1957,
Zytowski, 1969) and that conflict is experienced when women move out of
these roles and place more emphasis on careers (Hall & Gordon, 1973;
Horner, 1970, 1972; O'Leary, 1974). These women certainly do not appear
to fear success or to experience conflict about their choices. They
seem instead to be actively seeking success. Their chosen career roles,
which are relatively non-traditional roles for women, are not viewed as
gender inappropriate.

The women in this study seemed to demonstrate a pattern of career
aspirations and values probably more similar to the modal patterns for
men of similar ability than to the patterns of other women.

The results of this study underscore the importance of monitoring
closely the current trends in the attitudes, expectations, and
attainments of women. In addition, the author suspects that ability
level and life choices, with their subsequent differences in social

environment, have more effect on level of occupational aspiration than does gender.

In addition to these theoretical implications the results have practical implications for counsellors and educators of high ability women. The women of this study may serve as role models for other women of high ability who are currently underachieving. Information about the apparent conflict-free goal-setting of the women in this study may encourage other women to set, and to believe they can attain, higher career goals.

As well, the ease with which these women seemed to set high career goals is important updating information for counsellors and educators who want to keep abreast of current trends and expectations in order to provide up-to-date information to their clients.

The findings of this study are consistent with the contemporary view of working and professional women which emerged during the 1970's. Yogev (1983), upon reviewing modern theory and research in the field of the personality of professional and working women, offered a framework with which to understand the contradictory findings in this field. The pattern of theory and research which emerged in the 1960's viewed professional women as lacking femininity, violating sex role stereotypes, and having personality disturbances. The contemporary view which surfaced during the 1970's during the continuing period of rapid change in women's social and cultural roles, views professional women in a normative light and is indicative of the rapid change in the attitudes of and toward working and professional women. The results of the

present study would seem to lend support to the following statement:

> Data on career aspirations imply that the career-marriage
> conflict is rapidly diminishing in importance. Its
> persistence as an issue for discussion is more function of
> educators and counsellors than the perceptions of women
> themselves, especially of young women. (p. 224)

Recommendations for Future Research

The results of this study suggest several directions for future research. After compiling the results of this study, the author, having been brought up to date in her own attitudes about and expectations for women's potential and actual career development, was left with two questions. Given that these women seemed, refreshingly, to contradict the findings of previous research, one obvious yet simple question was, "How did they get this way?".

In a culture which, until recently at least, has socialized women to place primary importance on the roles of wife, mother, and homemaker, these women have managed to chart relatively non-traditional courses for themselves. The present study was exploratory in nature and provided a brief description of this group of women. More detailed, in-depth studies of this population of women are suggested to develop a more comprehensive picture of this interesting population.

An interview study, based on Flanagan's (1954) critical incident technique, with subjects drawn from the same population of women would

be valuable in determining the critical events, event characteristics, and personal characteristics which enhanced and inhibited the self-actualization and career development of women like these. The elucidation of factors critical to the maximum development of the potential of high ability women who are actually using their abilities at a level commensurate with their potential would be invaluable for counsellors and educators of other high ability women who are currently underachieving.

A second question arising from the results of the study was, again put very simply, "Will these women stay this way?". At the time of the study they were quite clearly placing primary emphasis on the attainment of career goals. They anticipated no problems or conflicts in the living out of their most preferred life plans.

Follow-up studies done on this same group of women at say five year intervals could monitor their development and answer the following questions:

(1) Will they actually attain the five-year career goals toward which they are aiming (or will they in fact attain higher goals!)? If they do, what factors enhanced and inhibited this goal attainment?

(2) Will they continue to set and to attain high level career goals? What factors enhance and inhibit their continuing high aspirations and goal attainment?

(3) Will role conflict increase when they actually enter the roles planned for? For example, for those planning to be simultaneously in the roles of professional, partner/wife, and mother will the experience of role conflict increase?

Previous research (Amatea & Cross, 1981; Gray, 1980, 1983) has indicated that women of other age cohorts who have actually combined the roles of professional career woman, wife, and mother have experienced increased stresses and strains when attempting to fulfill the demands of multiple roles. Of particular note are the findings of Rosenbloom (cited in Hennig & Jardim, 1977) in her study of women who were simultaneously married and employed in middle management jobs. It was found that "for these women coping with the conflicts which arose between their married role and their job role was the major energy absorber of their lives" (p. 119). The majority of the women stated that they had had to decide which of the two roles was to have priority and then they had had to learn to live with that decision. Most of them thought they would eventually have to give up one of the roles since, if they remained in business they would try to advance as far as possible, and would not continue to have the time and energy to meet the demands of wife and worker.

Rosenbloom's study was done in 1965. Nearly twenty years have elapsed since then and times - attitudes, expectations, opportunities - have changed. Will the women who participated in the present study (and the women of their generation) continue to contradict the findings of previous research by successfully combining major life roles with a minimum of conflict? It would be very encouraging if they do and would indicate a very significant shift in social sanctions. If they do combine multiple roles successfully it would be important to determine the combination of internal and external factors which contribute to their success.

An important point to note here is that role conflict is an experience that may be viewed in a number of different ways. Is it attitudinal, or psychological, or is it a practical problem of trying to meet the demands of multiple roles? The practical concerns that have until recently affected the majority of women attempting to combine a number of challenging roles may be changing too. We do not know what the environment will be like for the generation of women represented in this study. As well as having no attitudinal conflict they may also have more environmental supports (e.g. easy access to quality daycares at their places of employment, financial ability to pay for housekeeping and meal preparation) and may thus not experience role conflict on a practical level.

(4) If and when role conflict does arise how do these women resolve the conflict?

Hall (1972) developed a model of coping with role conflict based on the behaviour of college educated women. While his model is very useful in understanding role conflict and coping style in general, he did not differentiate ability and performance levels of the women beyond the rough measure of college education. The particular conflicts which arise for high ability women in business will very likely call for specific coping strategies not dealt with within this general model.

Ward (Note 6) is compiling the results of a study of women's inter- and intra-role conflicts. She is using a critical incident method (Flanagan, 1954) to develop a classification scheme for both types of conflict and for coping strategies. Her sample included a

fairly heterogeneous group of women. A similar study conducted with the present sample of high ability professional women at a time when conflicts are likely to arise (e.g., within the first year or so of marriage or childbirth when the woman is simultaneously working in a demanding career) could tease out the special conflicts and coping styles of this particular group. The findings of such a study would be useful for counsellors of high ability professional women who are experiencing role conflict and are seeking effective strategies for conflict resolution.

Other interesting and useful studies which could follow from the present study include the following. Using the same or a very similar methodology, a study could be conducted with all the students in next year's graduating class in Commerce. Several different comparisons (of aspiration level, ability level, role construal and conflict) could be made. For example, the results obtained for women and for men could be compared. The author suspects that the patterns of aspirations and values for the highest aspiring men and women would be very similar.

Studies similar to the present study could be done on different groups of women to provide data with which to compare the women of this study with other groups of women. For example, women who, when graduating from high school, e.g., four years earlier, had the same high marks could be compared. Such a study could compare the role construal and conflicts of women who had pursued different lifestyle options since their graduation from high school. The different lifestyle or career options could include women who had entered and were now graduating from

different university programs in science, social work, education, and nursing, women who had done shorter training courses (e.g., lab technician, legal secretary), and women who had become full-time homemakers. The results of these studies would fill a few more gaps in our understanding of career development of women of high ability.

In conclusion, the results of this study seem to have sketched a picture of a group of strong, confident, independent women who are career-committed and conflict-free in their attitudes toward their five-year plans. They anticipated no problems or conflicts in the living out of their most preferred life plans. It may be speculated that conflict will be more likely to occur when they actually enter the roles planned for. However, they may continue to plan for and to get what they want with a minimum of conflict.

It remains to be seen what will happen with and for these women over the next five, ten, or fifteen years of their lives. They are a very interesting group of women from which we have much to learn both now, as they set out with their strong, independent, and confident attitudes, and in the future as they develop and maintain careers and personal lives that are, hopefully, an expression of all that they are and can be as gifted human beings.

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APPENDIX A

INTRODUCTION TO THE STUDY

My name is Laura-Lynne McBain. I am a graduate student completing my M.A. in Counselling Psychology here at the University of British Columbia. In this study I hope to learn more about your experiences as women in this time of rapidly changing roles, expectations, and opportunities for both women and men. As high ability women who will, within the next year, be graduating and embarking on a new phase of your lives, you can provide useful information about the process of career and life planning. This information will be helpful to educators and counsellors of talented women. In addition, as you complete this questionnaire, you may discover some interesting things about yourselves and about where you are at in terms of your own plans for the future.

Your participation in this study would be very much appreciated. However, I want to make it clear that participation is totally voluntary and that all information gathered is strictly confidential. You may withdraw from the study at any time or refuse to answer any questions. Participation or withdrawal will in no way affect your marks or your standing within your program. If you do choose to participate, your

completion of the questionnaire will be assumed to be your consent to do so. To ensure confidentiality please do not write your names on any of the forms.

All necessary data will be gathered today. The forms will take approximately 60 minutes to complete. I will go through the questionnaire with you in a step-by-step manner, giving you verbal instructions for each question or task as we come to it. I will ask you, first of all, for some biographical data and for some information about your plans for the next five years of your life. Then I will ask you to think about and to rank order, in terms of personal importance to you, 12 specific roles and 12 factors which may influence your role choices. Finally, I will ask you to rate each of the roles in terms of each of the factors. This may seem somewhat ambiguous to you right now, but each task will become clear as I give you more detailed instructions.

Although some individual results may be reported, the bulk of the results will be reported on a group basis. If you would like to know more about the results of this study please contact me after Christmas and I will provide you with more information.

Thank you very much for your participation.

APPENDIX B

BIODEMOGRAPHICAL QUESTIONNAIRE

Biographical Information

1. Do you plan to work in the paid labour force in the 5 years
    following your graduation?

    Yes _____   No _____

    If not, what do you plan to do instead? e.g., travel, school,
    full-time homemaking, etc._____
    _____

2. If you were to work during the 5 years following your graduation:

    a. What would be the highest level profession toward which you
        would aspire? _____
        _____
        _____

        Would this be a full-time _____ or a part-time _____ position?

    b. What would be the lowest level profession toward which you would
        aspire? _____
        _____
        _____

        Would this be a full-time _____ or a part-time _____ position?

    c. In what profession would you really expect to work? _____
        _____
        _____

        Would this be a full-time _____ or a part-time _____ position?

3. Do you have plans for graduate or professional school within the 5
    years following your graduation?

    Yes _____   No _____

    If yes, which program do you plan to enter?
    _____

    If no, which program would you consider entering if you were to
    enter a graduate or professional program?
    _____

4. Current marital status   Single   _____
                                Married   _____
                                Common-Law   _____
                                Divorce/Separated _____
                                Other   _____

5. Within the 5 years following my graduation I plan to be:
                                Single   _____
                                Married   _____
                                Common-Law   _____
                                Divorce/Separated _____
                                Other   _____

6. Number of children now _____

    Do you plan to have children in the next 5 years?

                    Yes _____   No _____

    If yes, how many? _____

7. Your present age _____

8. Current program option _____

9. Place of Birth _____

    Number of years you've been a resident of Canada _____

    What ethnic designation would you give yourself? Please indicate
    one of the following:

    Anglo-European Canadian   _____
    Chinese   _____
    East Indian   _____
    French Canadian   _____
    Native Indian (Canadian)   _____
    Other   _____ (please indicate _____)

APPENDIX C

ROLE GRID

Part A - Roles

Importance

_____ Community member/Citizen _____

_____ Daughter

_____ Friend

_____ Graduate Student _____

_____ Homemaker

_____ Mother

_____ Partner/Wife

_____ Personal well-being
         and enjoyment _____

_____ Profession of
         highest aspiration _____

_____ Profession of
         lowest aspiration _____

_____ Profession you
         expect to work in _____

_____ Single person

Note: When rank ordering the roles in order of personal importance, let
       "1" indicate most important and "12" least important.

Part B - Considerations

The following is a list of 12 factors which may be important considerations in evaluating life role possibilities. Please rank order them in order of personal importance to you, with "1" being most important and "12" being least important.

_____ Opportunity to accomplish challenging goals

_____ Opportunity for personal growth

_____ Support & encouragement from partner

_____ Opportunity for warm, friendly relations

_____ Support & encouragement from friends, colleagues, and/or teachers

_____ Enjoyment

_____ Opportunity to influence other people

_____ Support and encouragement from parents and/or other family members

_____ Knowing someone else who does well in the role

_____ Likelihood of competence and success in the role

_____ Degree of fit with view of self as a woman

_____ Willingness to invest time and energy in the role

Part C - Rating Form

As a _____ I expect that I would have/be:

More chance to accomplish challenging goals	• • • • •	Less chance to accomplish challenging goals
More opportunity for personal growth	• • • • •	Less opportunity for personal growth
More support & encouragement from partner	• • • • •	Less support & encouragement from partner
More chance for warm, friendly relations	• • • • •	Less chance for warm, friendly relations
More support and encouragement from friends, colleagues and/or teachers	• • • • •	Less support and encouragement from friends, colleagues and/or teachers
More enjoyment	• • • • •	Less enjoyment
More chance to influence others	• • • • •	Less chance to influence others
More support and encouragement from parents and/or other family members	• • • • •	Less support and encouragement from parents and/or other family members
Likely to know someone who does this well	• • • • •	Unlikely to know someone who does this well
More competent and successful	• • • • •	Less competent and successful
Closer to how I see myself as a woman	• • • • •	Farther away from how I see myself as a woman
More willing to invest a lot of time & energy	• • • • •	Less willing to invest a lot of time & energy

Note: Each subject completed one of these forms for each of the 12 roles.

APPENDIX D

VERBAL INSTRUCTION FOR COMPLETION OF

BIODEMOGRAPHICAL QUESTIONNAIRE AND ROLE GRID

I. Introduction to the Study

"Please turn to the face sheet of the questionnaire now as I begin reading." (Read face sheet of questionnaire, thus introducing the study).

II. Biodemographical Questionnaire

"Now please turn the page to the page entitled Biographical Information. This section asks some very specific questions, some of which may require a bit of thinking. I'll go through the questions one by one and ask you to answer them as I explain them. Please stop me for clarification if what I'm asking you to do doesn't make sense after I've completed the explanation for each question."

"Question #1: DO YOU PLAN TO WORK IN THE PAID LABOUR FORCE IN THE FIVE YEARS FOLLOWING YOUR GRADUATION?"

"Please put a check mark beside either YES _____ or NO _____".

"If you answered NO to this question please answer the next question, which reads: IF NOT, WHAT DO YOU PLAN TO DO INSTEAD? e.g., TRAVEL, SCHOOL, FULL-TIME HOMEMAKING, etc."

"If you answered YES please just wait a minute until I explain the next question."

Pause, then, "Is everyone ready to go onto question #2?"

"Question #2 has three sections to it — (a), (b), and (c). What I will ask you to do here is to think about the kind of paid work you are planning on doing during the five year period immediately following your graduation from the B. Com. Program (i.e., this Spring; for those not graduating this Spring, the five year period after May, 1983). Even if you answered NO in the previous question above, I'd still like you to answer this question in the hypothetical sense. Therefore, I have worded the question IF YOU WERE TO WORK DURING THE FIVE YEARS FOLLOWING YOUR GRADUATION ... WHAT WOULD BE THE HIGHEST LEVEL PROFESSION TOWARD WHICH YOU WOULD ASPIRE, etc.... Before you write anything down, I'd like you to take some time to think about your career options for the five year period following your graduation. A number of possibilities may come to mind as you think about the range of positions you'd consider working in. I'd like you try to divide your professional considerations into three categories:

(a) The highest level profession toward which you would aspire, that is, the highest level position you'd aim for;

(b) The lowest level profession toward which you would aspire, that is, the lowest level position you'd accept or settle for;

(c) The profession or position in which you really expect to

work....during the five years following your graduation. I'd like you

to be as specific as possible when answering this question, that is, I'd

like you to write down specific job titles and the general type of

business or organization you'd like to work in. I'm not in Commerce,

but I'd like to give you some examples of how I think you might answer

this question. For (a) WHAT WOULD BE HIGHEST LEVEL PROFESSION TOWARD

WHICH YOU WOULD ASPIRE?, someone who wanted to work in banking might

answer "regional manager, bank" or "director of retail banking for

Southwestern B.C.". For (b) WHAT WOULD BE THE LOWEST LEVEL PROFESSION

TOWARD WHICH YOU WOULD ASPIRE?, they might answer "loans manager, bank";

and for (c) IN WHAT PROFESSION WOULD YOU REALLY EXPECT TO WORK? they

might answer "branch manager, bank". Someone wanting to work in the

retail area might say that the highest level position they'd aim for in

five years is "manager (for Western Canada) of department store ladies'

wear department"; the lowest level position they'd accept or settle for

would be "ladies wear department manager, department store"; and the

position they really expect to work in is "manager of ladies wear for

the Vancouver area". These are just examples. I want you to think

about and to write down what fits for you personally. In addition, for

each of parts (a), (b), and (c) please place a check mark beside either

full-time _____ or part-time _____ in answer to the question WOULD THIS

BE A FULL-TIME _____ OR PART-TIME _____ POSITION? Please take some time

now to think about and to record your answers to this question." Allow

a few minutes for Ss to complete this question individually. Check at

intervals to be sure people aren't having problems completing this question. Give a one minute warning prior to moving onto question #3, then, "O.K., I'd like to move on to question #3 now."

"Question #3 reads, DO YOU HAVE PLANS FOR GRADUATE OR PROFESSIONAL SCHOOL WITHIN THE FIVE YEARS FOLLOWING YOUR GRADUATION? Please place a check mark beside either YES _____ or NO _____, then turn the page to the second part of Question #3. If you are in Law, mark YES (already in a program). IF you answered YES to the first part of Question #3, please write in the space provided the name of the graduate or professional program you plan to enter. IF you answered NO the first part of Question #3, please write in the space provided the name of the PROGRAM YOU WOULD CONSIDER ENTERING IF YOU WERE TO ENTER A GRADUATE OR PROFESSIONAL PROGRAM during the five years following your graduation from your current undergraduate program. Please complete Question #3 now. Pause, then, "O.K., I'd like to move on to Question #4 now."

"For Question #4, CURRENT MARITAL STATUS, please place a check mark in the appropriate space after SINGLE, MARRIED, DIVORCED/SEPARATED, COMMON-LAW, OR OTHER." Pause, then:

"Again, for Question #5, please place a check mark in the appropriate space in answer to the question WITHIN THE 5 YEARS FOLLOWING MY GRADUATION I PLAN TO BE -- SINGLE, MARRIED, DIVORCED/SEPARATED, COMMON-LAW, or OTHER." Pause, then:

"For Question #6, please write in the space provided, the NUMBER OF
CHILDREN (you have) NOW. Then please check either YES _____ or NO _____
in response to the question, DO YOU PLAN TO HAVE CHILDREN IN THE NEXT
FIVE YEARS? If you answered YES to this question please write in the
number of children you plan to have during the next five years."

"Question #7. Please write YOUR PRESENT AGE in the space provided."

"Question #8. CURRENT PROGRAM OPTION. Please enter in the space
provided the program option you are in in the B. Com. program." (Also
have people write in expected date of graduation from current program.)

"Question #9." Read off of questionnaire. Pause briefly, then, "When
you have completed this question please turn the page to Part A –
Roles."

III. Role Grid

Part A – Roles. While you're filling out this page I'd like you
to try to imagine your life during the five years following this
Spring. There are a number of roles which you may be considering as you
think ahead to where you'll be, who you'll be, what you'll be doing, and
who you'll be doing it with. On this page I have listed, in
alphabetical order, 12 roles which are possible considerations. I'm

going to briefly describe each of the roles and have you write in your

own personal examples for six of them. I am aware that you may not

choose to be in all of these roles in the five years following your

graduation, but I'd like to know something about how important each of

these roles is to you."

"The first role listed is COMMUNITY MEMBER or CITIZEN. This role

includes a broad range of activities. Some specific examples are

neighbour, member of a political party such as the NDP, member of a

specific antinuclear group, softball coach, president of a student body,

volunteer worker for a specific organization. Please take a minute to

think about one specific activity that fits into this category and is

personally relevant to you. When you have thought of one, write it down

in the space provided."

Pause to give people time to think and write, then: "Next is

DAUGHTER. This role includes all that you think, feel and do as a

daughter. When thinking about this role it may help to think about your

relationship with your parents -- what you do with them; how you feel

when you're with them, etc."

"The role of FRIEND includes all that you do as a friend. When

thinking about this role for yourself it may help to think about your

most important friend and what you do with that person, how you feel

when you're with that person, and so on."

"For the role of GRADUATE STUDENT I'd like you to use as your

personal example the name of the graduate or professional program you

recorded in the Biographical Information Questionnaire. For example, if

you wrote down that you were considering the Master of Science in Business Administration program, your graduate student role would be M.Sc. Student. Please take some time now to write in your specific graduate student role in the space provided."

"HOMEMAKER includes all the activities associated with running a home, e.g., all types of housework, arranging for repairs, etc., basically anything that you would do as a homemaker."

"MOTHER includes all that you would think, feel, and do as a mother, e.g., play with your children, worry about them when they get home late, help them with schoolwork, look after a child when he or she is sick, etc."

"PARTNER/WIFE includes all that you would do and be as a wife or primary partner, e.g., all that you would do or be if you were legally married or living with a partner in a common-law marriage."

"PERSONAL WELL-BEING AND ENJOYMENT is actually a whole category of activities which may include hobbies (e.g., antique collector), personal growth activities (e.g., journal writer, meditator), sports (e.g., tennis player), socializing (e.g., party-goer, dancer). Take a few minutes to think about what you do for personal well-being and enjoyment and then write down the one most important activity that you do in this category."

"The next three roles are PROFESSION OF HIGHEST ASPIRATION, PROFESSION OF LOWEST APIRATION, and PROFESSION YOU EXPECT TO WORK IN. For these I'd like you to use the jobs identified in the Biographical Information Questionnaire. Please take a minute now to transfer the job

titles (from question #2 in Biographical Information) to the spaces to the right of these three professional roles."

"The role of SINGLE PERSON includes all that you would be or do as a single person. For the purpose of this study, a single person is someone who is not legally married or living with a primary partner in a common-law marriage."

"Now I would like you to think about the next five years of your life and to consider how important each of these 12 specific roles will be to you during this five-year period. That is, if everything works out the way you want it to, what will be the most and least important roles to you? Take some time now to rank order these roles in order of personal importance to you, with "1" being most important and "12" being least important. This may be one of the most difficult sections to complete as it's often very hard to choose between roles, especially if several are very important. Feel free to experiment with this a bit -- you may need to use your erasers to try out different orderings." Allow a few minutes for people to complete this task. Check at intervals to be sure everyone is able to do it. Give a one minute warning prior to moving on to next section, then, "Please turn the page now, to Part B - Considerations."

Part B - Considerations. "The following is a list of 12 factors which may be important considerations in evaluating life role possibilities. Please rank order them in order of personal importance to you, with "1" being most important and "12" being least important. The third consideration is "support & encouragement from partner" -

partner here means spouse, not business partner. Again, you may find it difficult to rank order these especially if several seem very important. However, please take some time now to give each of these considerations a separate numerical ranking from 1 to 12." Pause to allow subjects time to complete this task. Check at intervals to be sure no one is stuck. Give a one minute warning prior to moving on to Part C.

Part C - Rating Form. "Now please turn to the first page of Part C. This is the last section of the questionnaire. Part C is basically 12 identical pages. At the top of each page is a sentence stem reading, "AS A _____ I EXPECT THAT I WOULD HAVE/BE". Into each of these blank spaces I will ask you to transfer your personal examples of each of the roles as listed in Part A - Roles. For example, for the first role of COMMUNITY MEMBER/CITIZEN, if you had listed soccer coach as your personal example of this role you would enter the words soccer coach in the blank space on the first page of Part C. The sentence stem would then read: AS A soccer coach I EXPECT THAT I WOULD HAVE/BE.... Please refer back to Part A - Roles now to check what your personal example for COMMUNITY MEMBER/CITIZEN was, and then write this example in the blank space on the first page of Part C." Pause while subjects complete this task, then: "The next two pages are for the roles of DAUGHTER and FRIEND. These have both been typed in for you, so just flip past these pages for now. The fourth page is for the role of GRADUATE STUDENT. Please write in your personal example now." Pause while Ss complete this task, then, "The next three pages are for the

roles of HOMEMAKER, MOTHER, and PARTNER/WIFE. These have been typed in for you, so just flip past these pages for now." Check to be sure Ss are turning pages appropriately, then, "The next page is for the PERSONAL WELL-BEING AND ENJOYMENT ROLE. Please write in your personal example now." Pause will Ss complete this task, then, "The next three pages are for the three professional roles. Please transfer into these blank spaces the job titles of your PROFESSION OF HIGHEST ASPIRATION, PROFESSION OF LOWEST ASPIRATION, and the PROFESSION YOU EXPECT TO WORK IN." Pause while Ss complete this task, then, "Finally, the last page of Part C is for the role of SINGLE PERSON and this has been typed in for you."

"Please turn back to the first page of Part C now. The final task I'll be asking you to complete is to evaluate or rate each of the 12 roles according to each of 12 considerations. This may seem kind of complicated and frustrating at first, but I'll ask you to bear with me as I explain it to you. It may take longer to complete the first couple of pages but you'll speed up as you get more practise."

"Each of the considerations in Part B - Considerations has been placed on a continuum in Part C for the purpose of rating. For example, OPPORTUNITY TO ACCOMPLISH CHALLENGING GOALS may be seen on a continuum with MORE CHANCE TO ACCOMPLISH CHALLENGING GOALS on one end of the continuum and LESS CHANCE TO ACCOMPLISH CHALLENGING GOALS on the other end of the continuum. For all of the considerations the MORE end of the continum is on the left-hand side of the page, and the LESS end of the continuum is on the right-hand side of the page. If you were rating the

role of soccer coach and you felt that this role provided you with many

opportunities to accomplish challenging goals you would circle the dot

under VERY on the left-hand side of the page and closest to the words

MORE CHANCE TO ACCOMPLISH CHALLENGING GOALS. If this role provided

little chance for accomplishing challenging goals you would circle the

dot under VERY on the right-hand side of the page and closest to the

words LESS CHANCE TO ACCOMPLISH CHALLENGING GOALS. If the role seems in

between in terms of accomplishing challenging goals, circle the dot in

the middle, under the word INBETWEEN. Similarly, if the role seems only

slightly to one end of the continuum or the other, circle the

appropriate dot under SOMEWHAT."

"In completing this task it may help you to read the sentence stem

first and then circle the appropriate dot. For example, when rating the

role of soccer coach, first read to yourself: "AS A soccer coach I

EXPECT THAT I WOULD HAVE .... MORE CHANCE TO ACCOMPLISH CHALLENGING

GOALS ... LESS CHANCE TO ACCOMPLISH CHALLENGING GOALS." Then circle the

appropriate dot. The word HAVE works for the first eight

considerations, then the word BE is most appropriate. For example, for

the ninth consideration the sentence would read, AS A soccer coach I

EXPECT THAT I WOULD BE .... LIKELY TO KNOW SOMEONE WHO DOES THIS WELL

.... UNLIKELY TO KNOW SOMEONE WHO DOES THIS WELL. For the tenth

consideration, the sentence would read, AS A soccer coach I EXPECT THAT

I WOULD BE .... MORE COMPETENT AND SUCCESSFUL .... LESS COMPETENT AND

SUCCESSFUL."

"I want to emphasize that each page of Part C is totally separate

from the rest of the questionnaire. I want you to evaluate each role separately as an entity unto itself, that is, <u>you are not comparing roles here</u> — you are evaluating <u>each</u> role, by <u>itself</u>, according to each of the considerations on the page. Also, please judge each role for <u>yourself</u> — how you would be if you were in this role in the five years following this Spring."

"Please complete this section now. Feel free to ask me for clarification if you get stuck while you're doing it. Please let me know when you get to the role of SINGLE PERSON. There is a complication with one of the considerations that I'll need to explain when you get to it."

<u>Pause and allow time for Ss to complete this task. Assist where necessary. When enough people arrive at SINGLE PERSON read these instructions</u>:

"Rating the role of single person according to 'amount of support and encouragement from partner' is somewhat complicated as it's a bit complex to imagine being both a single person and a partner or wife at the same time. In doing this item, consider partner to be a current husband/partner, and ex-husband/partner, or a husband/partner-to-be. Please just make a note of how you looked at this one, e.g., by crossing out the word partner and writing in ex-husband, fiancé, or whatever you think the case may be for you in five years time. I congratulate you for being able to bend your minds around this one! When you've finished please hand your questionnaires and pencils in to me. I'd love to discuss your reactions to the questionnaire after everyone is finished,

if anyone is interested in doing that. Thank-you very much for your participation."

Most Important Construct / Positive Characteristic	Most Preferred Role	1. Graduate student	2. Highest profession	3. Expected profession	4. Partner/wife	5. Personal well-being	6. Daughter	7. Friend	8. Lowest profession	9. Citizen	10. Homemaker	11. Single person	12. Mother	Least Preferred Role	Negative Contrast
1. More competent & successful		2	2	2	0	0	0	0	-1	0	0	0	0		Less competent & successful
2. More chance to accomplish challenging goals		2	2	2	0	0	0	0	-1	1	-1	0	0		Less chance to accomplish challenging goals
3. More personal growth		2	2	2	0	0	0	0	-1	0	-1	0	1		Less personal growth
4. Closer to view of self as a woman		1	2	2	0	0	0	0	-1	-1	-2	0	0		Farther away from view of self as a woman
5. More partner support		2	1	1	1	0	0	0	0	-2	-1	-1	0		Less partner support
6. More enjoyment		1	2	1	2	2	1	1	-2	0	0	-1	0		Less enjoyment
7. More opportunity to influence others		0	2	2	0	1	0	1	-1	2	-2	0	0		Less opportunity to influence others
8. More parent/family support		1	1	1	0	0	2	0	0	-2	-1	0	0		Less parent/family support
9. More friend, colleague support		2	1	1	0	0	0	1	0	-1	0	0	0		Less friend, colleague support
10. More chance for warm, friendly relations		1	0	0	1	2	2	1	0	1	0	0	0		Less chance for warm, friendly relations
11. More willing to invest time and energy		2	2	2	0	0	0	0	-1	-2	-2	0	0		Less willing to invest time and energy
12. Likely to know someone who does this well		2	2	2	1	1	1	0	1	2	1	1	1		Unlikely to know someone who does this well
Least Important Construct		18	19	18	5	6	6	4	-7	-2	-9	-1	2		

Role Sums[a]

[a]Each role sum is obtained by totalling the numbers in each column.