Career and Life Role Aspirations of High Ability Women Undergraduates

Laura-Lynne McBain and Lorette K. Woolsey University of British Columbia

Résumé

Cette étude exploratoire et descriptive part d'un questionnaire biodémographique associé à une variation de la technique à grille répertorielle de Kelly (1955), en vue d'examiner leurs aspirations quant aux rôles (carrière, foyer, famille et personnel) que se proposent un groupe de femmes extrêmement capables, engagées dans des études du deuxième cycle. Il en ressort que ces femmes désiraient se consacrer à une carrière relativement exigente pendant les cinq années à venir. La pulpart préféraient jouer un rôle professionnel. Elles semblaient être surtout fortement désireuses de s'actualiser, leur critère étant essentiellement fonctions de leurs accomplissements. Dans l'ensemble, les attitudes relatives à la poursuite de leur rôle ne paraissaient affectées d'aucun conflit. Les données supportent la théorie récente selon laquelle le conflit mariage/carrière diminue d'importance chez les femmes. Les résultats de cette étude sont utiles aux conseillers et enseignants dont la clientèle comprend des femmes d'aptitudes supèrieures désireuses de combiner des rôles multiples d'une manière qui leur permette de développer pleinement leur potentiel.

Abstract

This exploratory and descriptive 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 undergraduates. The results showed that these women aspired to relatively high level full-time careers for the next five-year period of their lives. Their most preferred roles were professional roles. They appeared to be most strongly influenced by a desire for personal growth, which they seemed to construe mostly in terms of achievement. On the whole, they seemed to be conflict-free in their attitudes toward their projected life roles. The data support more recent theory on the diminishing importance of the career-marriage conflict for women. The results of this study are useful to counsellors and educators working with high ability women who are seeking to combine multiple roles in a manner which allows for maximum development of potential.

Interest in the career psychology of women has exploded over the past several years and the resultant increase in research and theory has begun to fill the gaps in our understanding of women's occupational involvement (Fitzgerald & Crites, 1980). Many lacunae remain, however, and in this time of rapid social change it has become increasingly important to monitor trends in women's career choices, expectations, preferences, and aspirations. Career counsellors of women need to remain up-to-date in their attitudes and knowledge in order to provide useful services to their female clients.

Although women's participation in higher education and the work-force has steadily increased (Carnegie Commission on Higher Education, 1973; Statistics Canada, 1977, 1981; Women's Bureau, Labour Canada, 1980), women still appear to be underutilizing their potential in terms of occupational preference, earning power, and level of achievement (O'Leary, 1974; Sutherland, 1978; Women's Bureau, Labour

Canada, 1980, 1981). Why is it that women still do not appear to be utilizing their career potential fully?

Some 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 to the extent to which she is capable within her chosen field.

Past and present sex role expections have contributed to women's lowered career aspirations. Considerable numbers of bright women have either chosen no careers at all or careers far below their level of ability (Fitzgerald & Crites, 1980). Back in the 1960's, Ohlsen (1968) suggested that girls and women had been socialized to be more concerned about success in love, marriage, and family than with the choice of and success in an occupation. His interviews with intellectually gifted women undergraduates supported this suggestion. While all of the women interviewed had been encouraged to do graduate work because of their talents, they clearly stated that they were not willing to jeopardize their success as homemakers by pursuing careers outside the home.

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—it is a concern shared by both women and men. Rather than viewing fear of success as a motive, it may be viewed instead 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). However, fear of success may affect women's career aspirations more than those of men because many more occupations, including the more prestigious and higher paying ones, are traditionally male.

The phenomenon of home/career conflict, a frequently occurring topic in the literature, has been cited as a crucial factor in women's career involvement (Farmer, 1971, 1978; Farmer & Bohn, 1970; Hall, 1975; Hall & Gordon, 1973; O'Leary, 1974, 1977; Stake, 1979). Women have traditionally been seen in the roles of wife, mother, and homemaker and, until recently, the majority of women have lived their lives primarily in these roles. For many women, the recent addition of career roles to traditional home roles brought with it both practical and pychological role conflict as they sought to fulfil both the time and energy demands and

the psychological expectations for each and every one of the roles they occupied. As women increasingly enter the paid labour force, these traditional role definitions and expectations are shifting. This study was an attempt to examine a potential shift in women's role expectations.

As previously stated, the majority of women do not achieve highly in careers. However, some women do aspire to and pursue higher level occupations. What is it, then, about the way they construe themselves and their careers that supports their high aspirations? Answers to this question could be helpful in attempts to raise the aspiration and achievement levels of underachieving women.

It seemed important, in designing the current study, to limit participants to 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 respondents 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. The purpose of this exploratory and descriptive study was to gather from this group of 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.

METHOD

Respondents

Letters of recruitment were sent to 45 women of similar high academic standing—all had received a 72% or above average in their previous year of studies (third year of the Bachelor of Commerce Program at the University of British Columbia). The letters and subsequent recruitment phone calls resulted in a response rate of 64%. At the time of the study, 26 of the 29 respondents were in the fourth and final year of the Bachelor of Commerce Program and 3 were in first year Law (combined Commerce/ Law Option). This sample provided a fairly homogeneous group in terms of interest, ability level, socioeconomic status, level of education, and working environment. Respondents ranged in age from 21 to 32 years. The modal age was 22 years, with two outliers aged 29 and 32 years.

Measuring Instruments

Two instruments (Biodemographical Questionnaire and Role Grid) were developed for the purpose of this study. The Biodemographical Questionnaire consisted of a series of questions designed to gather standard biographical data (e.g., age, marital status, ethnic designation) and to elicit information about each respondent's projected five-year plans for paid employment, graduate or professional school, relationship style/ marital status, and children.

Comprehensive multiple role life planning involves examining and establishing priorities for many different role alternatives and combinations. Therefore, to facilitate the simultaneous examination of many roles and many considerations affecting role choices, a variant of the repertory grid technique as first described by Kelly (1955) and further developed and utilized by others (e.g., Bannister & Mair, 1968; Cochran, 1978, 1981, 1983a, 1983b; Fransella & Bannister, 1977; Slater, 1976) was chosen as the main instrument for data collection. This technique is essentially a "sorting task which allows for the assessment of relationships between constructs and which yields these primary data in matrix form" (Bannister & Mair, 1968, p. 136).

The three major components of the repertory grid are elements (e.g., people, roles, political parties), constructs (bipolar concepts such as challenging-unchallenging), and a rating scale (used by respondents to rate the elements on the set of constructs). These three components and an additional component, that of rank ordering elements and constructs according to preference and importance (Cochran, 1983a, 1983b), were used in this study. Each component will be discussed separately below.

In order to provide a list of roles most relevant to the respondent population and representative of 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. Role titles used by other writers (Hall, 1972; Holahan & Gilbert, 1979a, 1979b; Super, 1980) were also considered in the selection of roles.

The twelve role titles chosen were checked for adequacy of representation in discussion with three faculty members and four graduate students from the Department of Counselling Psychology at the University of British Columbia, all of whom were knowledgeable in role-related issues. The final list of roles rank-ordered and rated by respondents included six standard roles (daughter, friend, homemaker, mother, partner/wife, and single person). In addition, personal examples of six role titles/role descriptions (community member/citizen, graduate student, personal well-being and enjoyment, profession of highest aspiration, profession of lowest aspiration, and expected profession) were elicited from each subject.

Twelve constructs were selected during a review of the Constructs. 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 10 influencing factors and the 12 bipolar constructs derived from them were:

- 1. Need for affiliation (Denmark, Tangri, & McCandless, 1978; Harrell & Stahl, 1981)—more chance for warm, friendly relations vs. less chance for warm, friendly relations.
 - 2. Need for power (Denmark, Tangri, & McCandless, 1978; Harrell

- & Stahl, 1981)—more chance to influence others vs. less chance to influence others.
- 3. Need for achievement (Denmark, Tangri, & McCandless, 1978; Harrell & Stahl, 1981)—more chance to accomplish challenging goals vs. less chance to accomplish challenging goals.
- 4. Encouragement/discouragement from significant people (Epstein, 1973; Farmer, 1978; Hennig & Jardim, 1977; Lunneborg, 1982; Rapoport & Rapoport, 1969; Stake, 1981; Stake & Levitz, 1979)—three constructs were derived: (a) more support and encouragement from partner/husband vs. less support and encouragement from partner/ husband; (b) more support and encouragement from friends, colleagues, and/or teachers vs. less support and encouragement from friends, colleagues, and/or teachers; and (c) more support and encouragement from parents and/or other family members vs. less support and encouragement from parents and/or other family members.
- 5. Perceived compatibility between femininity and competence (Dewey, 1977; Farmer, 1978; Laws, 1978; O'Leary, 1974)—closer to how I see myself as a women vs. farther away from how I see myself as a woman.
- 6. Presence of role models (Almquist & Angrist, 1971; O'Leary, 1977; Stake, 1981)—likely to know someone who does this well vs. unlikely to know someone who does this well.
- 7. Self estimate of competence/expectations of personal efficacy (Betz & Hackett, 1981; Hackett & Betz, 1981; Stake, 1979)—more competent and successful vs. less competent and successful.
- 8. Degree of commitment/investment (Hennig & Jardim, 1977; Mc-Call & Simmons, 1966; Cochran, 1983a)—more willing to invest a lot of time and energy vs. less willing to invest a lot of time and energy.
- 9. Desire for personal growth (Holahan & Gilbert, 1979a, 1979b) more opportunity for personal growth vs. less opportunity for personal growth.
- 10. Amount of enjoyment derived from role (McCall & Simmons, 1966)—more enjoyment vs. less enjoyment.

Rating Scale. Respondents were requested to rate each role according to each construct using a five-point scale (2, 1, 0, -1, -2). For example, if a respondent rated a role according to the construct more chance to accomplish challenging goals vs. less chance to accomplish challenging goals, a rating of 2 or 1 would indicate that the respondent felt that the role would provide her with a lot more opportunity to accomplish challenging goals or somewhat more opportunity, respectively. A rating of -2 or -1 would indicate a great deal less chance to accomplish challenging goals or somewhat less chance, respectively. A rating of 0 would indicate an inbetween stance.

Rank Ordering of Roles and Constructs. In order to gather information about respondents' role preferences and judgements about construct

importance, respondents 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 respondent would mark the most preferred role with a 1 and the least preferred role with a 12.

Data Collection

The Biodemographical Questionnaire, the Role Grid, and verbal instructions for their administration were tested for clarity and ease of administration in a pilot study using as respondents four female graduate students in Counselling Psychology.

In six groups ranging from two to eight respondents (one person was tested individually), main study respondents completed testing in approximately one hour. After a brief introduction to the study, respondents completed the Biodemographical Questionnaire and Role Grid. Respondents were guided through these instruments by the researcher reading aloud the instructions and by clarifying any questions respondents had during this process.

RESULTS AND DISCUSSION

In this section, respondents' projected five-year plans for professional and graduate student roles, relationship style/marital status, and children will be outlined, followed by a discussion of the results obtained in the investigation of each of four research questions. The statistical techniques and methods of interpretation used in the analysis of the repertory grid data followed primarily the conventions outlined by Cochran (1983a, 1983b).

Projected Five-Year Plans

Professional and graduate student roles. All 29 respondents planned to work and/or attend school full-time during the subsequent five years of their lives. Twenty-one of the 29 respondents (72%) planned to attend graduate or professional school during this time.

Each respondent had been requested to think about the type of paid work she planned to do during the subsequent five years of her life and to divide her professional considerations into three categories: (a) the highest level position she would aim for, (b) the lowest level position she would accept or settle for, and (c) the position in which she really expected to work. Each of the stated aspirations in these three categories was given rank on the Socioeconomic Index for Occupations in Canada (Blishen & McRoberts, 1976). All stated occupational aspirations for all respondents fell between the ranks of 9 and 63. They were, then, a very homogeneous group in terms of level of occupational aspiration—they were all aiming for positions near the top of Blishen's scale within five years. Some examples of positions they expected to hold in the next five years

were: articling student/lawyer in a law firm, labour/industrial relations officer, supervisor or manager (chartered accounting firm), semi-senior or senior staff accountant (C.A. firm), staff C.A., personnel administrator, branch manager (bank), middle management (marketing), middle management (financial firm), real estate executive, and manager (retail operation).

Relationsip style/marital status. Twenty-seven respondents (93%) were single at the time of the study (including 1 respondent who was divorced/ separated) and 2 respondents (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 1 (3.5%) was uncertain.

Twenty-eight respondents (96.5%) had no children at the time of the study and 1 respondent (3.5%) had 2 children. Twenty-four respondents (83%) stated that they planned not to have children in the next five-year period, 3 respondents (10%) stated that they planned to have 1 child, and 2 respondents (7%) stated that they planned to have 2 children during the subsequent five-year period. The total percentage, then, of respondents planning to be parents in the next five-year period was 20.5%.

TABLE 1 Group Preference Ranks of Roles Based on Means and Standard Deviations of Role Preference Ranks

	Mean Preference	Group		
Role	Rank ¹	SD	Preference Rank²	
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	

¹ Each role received a preference rank from each of the 29 subjects. These ranks were averaged for each role to obtain a mean preference rank for the group.

² Obtained by rank ordering the mean preference ranks, with 1 being the most preferred role on average and 12 being the least preferred role on average.

The Research Questions

Question 1: Role importance. What are the most and least preferred life roles in this group of women?

Each role in the grid received two ranks, one for preference (expressed preference based on actual rank orderings of role preference) and one for preferability (potential preference based on numerical ratings given to each role when rated according to the 12 constructs). Role preference was assessed by examining and comparing these two rank orderings. See Table 1 for the derivation of group preference ranks and Table 2 for the derivation of group preferability ranks.

TABLE 2 Group Preferability Ranks of Roles Based on Means and Standard Deviations of Role Sums

Role	Mean Role Sum¹	SD	Group Preferability Rank²
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

¹ Role sums were calculated for each subject by adding the 12 numerical ratings given for each of the 12 roles. Subsequently, a mean role sum for the group was calculated for each role. As the rating scale ranged from 2 to -2, and each role was rated according to 12 constructs, the range of possible role sums and hence, mean roles 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.

A visual inspection of Tables 1 and 2 revealed that the preferability rank ordering was congruent with the preference rank ordering. The Spearman rank correlation coefficient computed on these two rank orderings was .82 (significant, p < .01, two-tailed test). This high correlation indicated a strong relationship between respondents' stated role

² Obtained by rank ordering the roles according to the mean role sums. The highest mean was ranked 1, that is, the most preferable role according to the role sums, and the lowest mean was ranked 12, that is, the least preferable role according to the role sums.

preferences and potential preferences based on the ratings of roles according to each of the twelve constructs.

The six most preferred roles in this group of women were expected profession, personal well-being and enjoyment, profession of highest aspiration, friend, partner/wife, and graduate student. The six least preferred roles were daughter, community member/citizen, profession of lowest aspiration, single person, mother, and homemaker. Please refer to Tables 1 and 2 for the exact ranks for each role.

Question 2: Construct importance. Which constructs are most important to this group of women in their evaluation of life role alternatives?

Construct importance was assessed in two ways. First of all, construct importance ranks, a direct expression of respondents' valuing of constructs, were averaged to obtain a mean rank for each construct for the group. These means were then rank ordered to obtain an importance rank for each construct for the group. The results of these calculations are presented in Table 3. Secondly, in order to determine whether or not the most valued constructs actually played key roles in the evaluation of life role alternatives, centrality ranks were calculated and compared with importance ranks.

TABLE 3 Group Importance Ranks of Constructs Based on Means and Standard Deviations of Construct Importance Ranks

Construct	Mean Importance Rank	SD	Group Importance Rank ¹
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, teachers	7.3	2.5	7
Commitment/investment	7.4	3.0	8
Support: parents, 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

¹ Obtained by rank ordering the constructs according to the mean importance ranks, with 1 being the most important construct on average and 12 being the least important construct on average.

		TABLE 4 Deriving Centrality Ranks													Relation to Most	
Con.	structs	1	2	3	4	5	Cons.	tructs ¹	8	9	10	11	12	in Common Scores ²	Central Construct ³	Centrality Ranks ⁴
1.	Achievement	X	64	26	5	32	23	37	16	26	53	25	41	348	64	2
2.	Personal growth		\mathbf{X}	37	23	41	42	38	21	19	51	38	47	421	100	1
	Support: partner			\mathbf{X}	22	28	30	21	21	12	23	28	41	289	37	9
4.	Affiliation				\mathbf{X}	24	41	11	12	3	9	22	16	188	23	10
5.	Support: friends, colleagues, teachers					X	31	34	24	17	34	28	33	326	41	6
6.	T .						X	27	20	10	35	33	44	336	42	5
7.	Power							\mathbf{X}	17	23	41	25	35	309	38	7.5
8.	Support: parents, other family members								X	7	22	22	30	212	21	11
9.	Role model									\mathbf{X}	26	13	21	177	19	12
10.	Self-estimate of competence/success										X	37	48	379	51	3
11.	Degree of fit with view of self as a woman											X	40	311	38	7.5
12.	Commitment/investment												X	396	47	4

TADIT 4

C-----

¹ These scores for construct pairs represent mean variance-in-common scores. Decimals have been rounded to present whole numbers.

² Mean variance-in-common scores were added for each construct in this first step in deriving centrality ranks. The construct with the highest sum (421—personal growth) is the most central construct.

³ The relationship of each construct to the most central construct was assessed by its variance-in-common with the central construct.

⁴ Centrality ranks were obtained by rank ordering constructs according to their relation to the most central construct.

Centrality is determined by construct interrelationships. A central construct has many strong relations and a peripheral construct has few and weak relations (Cochran, 1981). Thus, a central construct may be said to be the most important construct in the meaning scheme of a decider. These interrelationships will be discussed in more depth in the next section (Question 3), where the calculation of variance-in-common scores, from which constant relations are derived, is described in detail. The derivation of centrality ranks is shown in Table 4.

The comparison of centrality ranks (Table 4) with respondents' original rank orderings of constructs (Table 3) served as a check on the original importance rankings. A visual inspection of the two rank order lists revealed that the lists were very similar in their ordering of constructs. However, one construct did move down in importance when assessed in terms of centrality ranks-affiliation moved from fifth most important to tenth most important construct.

The Spearman rank correlation coefficient computed on the two lists was .73 (significant, p < .01, two-tailed test). This high correlation indicated a strong relationship between the group's original rank ordering of construct importance and the rank ordering derived from grid centrality ranks.

The most important construct to this group of women, as measured by importance and centrality ranks, was personal growth. The more central a construct is, the more strongly it will influence life role decisions. For this group of respondents, then, the most important consideration in the evaluation of life role alternatives was the opportunity for personal growth provided by the role, followed by the opportunity for achievement.

Question 3: Interrelationships between constructs. For these high ability women, how are constructs related on average?

Interrelationships between constructs are important because a construct's meaning involves, in part, its relation to other constructs (Cochran, 1983a). Interrelationships were assessed by examining the mean variance-in-common scores for constructs pairs. Each respondent's ratings on each pair of constructs were correlated using a Pearson productmoment correlation. The absolute value (maintaining sign) of each correlation was squared and multipled by 100 to compute a variance-incommon score for each pair of constructs. Mean variance-in-common scores and standard deviations were then computed for the group of 29 respondents. Each of the mean variance-in-common scores was tested for significance. The .05 level of significance was used 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 divide the probability of type I error across the 66 tests. Thus, the maximum experimentwise type I error probability was ≤ .05. The results of these calculations are presented in Table 5.

TABLE 5
Average Interrelationships Between Constructs

										Constr	ucts			
Constructs		1	2	3	4	5	6	7	8	9	10	11	12	
1. Achievement	M	X	64*	26*	5	32*	23*	37*	16*	26*	53*	25*	41*	
	SD	\mathbf{X}	26	28	21	23	24	26	22	23	25	28	28	
2. Personal growth	M		\mathbf{X}	37*	23*	41*	42*	38*	21*	19*	51*	38*	47*	
	SD		\mathbf{X}	30	29	27	29	25	25	18	31	30	28	
3. Support: partner	M			\mathbf{X}	22*	28*	30*	21*	21*	12*	23*	28*	41*	
	SD			\mathbf{X}	24	27	24	21	27	16	24	24	27	NOTE The L
4. Affiliation	M				\mathbf{X}	24*	41*	11	12	3	9	22*	16*	NOTE. The above scores represent
	SD				\mathbf{X}	25	24	21	25	20	24	31	20	and standard deviations for con-
5. Support: friends,	M					\mathbf{X}	31*	34*	24*	17*	34*	28*	33*	struct pairs. Decimals have been rounded off to present whole num-
colleagues, teachers	SD					\mathbf{X}	23	25	24	22	23	36	26	bers.
6. Enjoyment	M						X	27*	20*	10	35*	33*	44*	* $p < .05$ (two-tailed) using the
	SD						\mathbf{X}	22	26	19	31	27	23	Bonferroni inequality procedure
7. Power	M							\mathbf{X}	17*	23*	41*	25*	35*	(Dunn, 1961: Marascuilo & Levin 1983) in which the maximum ex-
	SD							\mathbf{X}	19	24	25	26	22	perimentwise type I error proba-
8. Support: parents, other	M								\mathbf{X}	7	22*	22*	30*	bility for all 66 significance tests
family members	SD								\mathbf{X}	12	24	29	26	is $\leq .05$.
9. Role model	M									\mathbf{X}	26*	13*	21*	
	SD									\mathbf{X}	23	18	25	
10. Self-estimate of	M										\mathbf{X}	37*	48*	
competence/success	SD										\mathbf{X}	36	28	
11. Degree of fit with view	M											\mathbf{X}	40*	
of self as a woman	SD											\mathbf{X}	33	
12. Commitment/investment	M												\mathbf{X}	
	SD												\mathbf{X}	

As noted in Table 5, almost all of the construct pairs were significantly related. In order to examine and discuss the relationships in a more meaningful way, construct interrelationships were also assessed in terms of strength. Following Garrett's (1966) discussion of the conventions surrounding the interpretation of correlation coefficients in terms of degree of relationship and Cochran's (1983a, 1983b) use of variance-in-common scores in assessing the strength of interrelationships between constructs. the following simple guide to the strength of construct relationships was chosen for use in this study: a variance-in-common score over 50 was considered to be indicative of a strong relationship, a score between 26 and 29 was indicative of a moderate relationship, and a score below 25 and still significant was indicative of a weak relationship.

The strongest relationships were found between personal growth, achievement, and self-estimate of competence and success. 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 variancein-common scores over 50). The weakest relationships were evidenced for the relationships of affiliation, role model, and support from parents and/or other family members. These three constructs were, on the whole, only weakly or not significantly related to the other constructs. The constructs of power; 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.

As previously discussed, personal growth was on average the most central construct for this group, followed by achievement and selfestimate 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 viewed personal growth predominantly in terms of achievement. Their beliefs about their ability to succeed seemed to strongly influence the contexts in which they planned to achieve and thus to grow as persons. Their confidence in themselves as competent professionals was indicated by their role preferences (Tables 1 & 2) and their stated five-year professional 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.

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 from parents and/or other family members, power, self-estimate

of competence, achievement, and role model. This pattern of relationships indicated that these women viewed affiliation (i.e., the opportunity for warm, friendly relationships) as fun, but not particularly useful for personal growth or for getting ahead in achievement contexts.

Question 4: Conflict. What is the level of decisional conflict for this group in regard to life role alternatives for the next five-year period of their lives?

Decisional conflict was assessed by examining conflict among and between constructs and by assessing conflict between roles as indicated by the role sums. First of all, a conflict ratio was computed for each respondent 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 (SD .069). This meant that about 5% of the variance-in-common among constructs was negative or conflicting. This was a very low level of conflict and indicated that for the group as a whole construct relationships were quite harmonious—there was very little conflict among constructs in general. An examination of the relationships between construct pairs as measured by the mean variance-in-common scores (Table 5) revealed that, on average, there were no negative relationships between constructs. This absence of negative relationships between constructs indicated that there was no conflict between specific pairs of constructs. The low level of conflict among constructs in general and the absence of conflict between specific construct pairs were indicators of clearly formulated decisional schemes characterized by the absence of ambivalence and conflict.

To assess conflict between roles the mean role sums for the group (Table 2) 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 ranks and centrality. The only role viewed negatively was that of homemaker (mean role sum was -10.3). This negative score indicated that on average the women in this group expected negative consequences if they were to assume 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, on average, were viewed with varying degrees of positivity. The roles of profession of highest aspiration and expected profession were the most positively valued, 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) were roles which would have enabled 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 was not found.

SUMMARY AND CONCLUSIONS

Previous theory and research (e.g., Horner, 1970, 1972; Ohlsen, 1968) had suggested that even, and perhaps particularly, intellectually gifted women lower their aspirations for success in achievement contexts because such success conflicts with traditional sex role expectations and threatens success in more affiliative contexts (e.g., 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, 1979).

Lowered aspirations due to conflict with traditional sex role expectations and home/career conflict appeared, from the results of this study, to be outdated concepts with which to approach the study of these high ability women. They were an essentially homogeneous group in terms of conflict-free high level career aspirations. No evidence of direct attitudinal conflict about life roles and, more specifically, about their high career aspirations was found.

Personal growth was on average the most central construct in this group's role contrual, followed by achievement and self-estimate of competence and success. The strong relationship of personal growth to achievement and to self-estimate of competence 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 were friend, partner/wife, and personal well-being and enjoyment, indicating that they were planning lives balancing the personal and the professional.

Affiliation was a relatively peripheral construct 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).

The fact that affiliation was moderately related to enjoyment, and that the essentially affiliative roles of friend and partner/wife were among the six most preferred roles indicated that these women did enjoy and value warm, friendly relationships. It is possible, though, that they had learned, in their socialization into the world of business, that demonstrated professional competence and desire and ability to achieve are more effective passports to successful careers 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 relationships 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)

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 many contradictory findings. 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 in 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 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 a function of educators and counselors than the perceptions of women themselves, especially of young women. (Yogev, 1983, p. 224)

A limitation of this study was that it did not include men of similar ability, level of education, and professional field. Had men been included. it may have been found that the women in this study were more similar to their male peers in terms of career aspirations and values than to more traditional women. Shann (1983) found no significant differences in the career plans of women and men completing professional training in the male-dominated fields of business, law, and medicine. Differences were found, though, in plans for the accommodation of family responsibilities women were significantly more likely than men to plan for the addition of marriage and child care roles to their career roles.

Many of the women in the present study planned to marry (55%) and to have children (20.5%) while continuing with full-time careers over the next five years. It is possible that role overload may become a problem as they seek to meet the time and energy demands of a multitude of roles. However, the practical concerns and resultant role strain (Greenglass, 1985) that has affected the majority of married working women 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 role conflict they may also have more environmental supports (e.g., easy access to quality daycares in their places of employment) and may thus not experience role conflict on a practical level.

This was, of course, an exploratory and descriptive study and so the results must be interpreted accordingly. The results are limited in generalizability to very similar groups of high ability women within the same age range, and possibly to women in business or other male-dominated careers. As well, the results are limited to the 12 roles and 12 constructs selected for use in this study. Had different roles and constructs been used or had subjects selected their own roles and constructs, the pattern of results may have been different.

The results of this study underscore the importance of monitoring closely the current trends in the attitudes, expectations, and attainments of women. The authors surmise that, in the 1980's, ability level and life choices, with their subsequent differences in social environment, have more effect on level of occupational aspiration than does gender.

References

- Almquist, E. M., & Angrist, S. S. (1971). Role model influences on college women's career aspirations. Merrill-Palmer Quarterly, 17, 263-279.
- Bannister, D., & Mair, J. M. (1968). The evaluation of personal constructs. New York: Academic
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. Journal of Counseling Psychology, 28, 399-410.
- Blishen, B. R., & McRoberts, H. A. (1976). A revised socioeconomic index for occupations in Canada. Canadian Review of Sociology and Anthropology, 13, 71-79.
- Canter, R. J. (1979). Achievement-related expectations and aspiration in college women. Sex Roles, 5, 453-470.
- Carnegie Commission on Higher Education. (1973). Opportunities for women in higher education. New York: McGraw-Hill.
- Cherry, F., & Deaux, K. (1978). Fear of success versus fear of gender-inappropriate behavior. Sex Roles, 4, 97-101.
- Cochran, L. R. (1978). Construct systems and the definition of social situations. Journal of Personality and Social Psychology, 36, 733-740.
- Cochran, L. (1981). Contruing and acting toward others. Social Behavior and Personality, 9, 37-40.
- Cochran, L. R. (1983a). Framing career decisions: An introduction to the career grid. Unpublished manuscript.
- Cochran, L. (1983b). Seven measures of the ways that deciders fram their career decisions. Measurement and Evaluation in Guidance, 16, 67-77.

- Denmark, F. L., Tangri, S. S., & McCandless, S. (1978). Affiliation, achievement, and power: A new look. In J. A. Sherman & F. L. Denmark (Eds.), The psychology of women: Future directions in research (pp. 393-460). New York: Psychological Dimensions.
- Dewey, C. R. (1977). Vocational counseling with women: A non-sexist technique. In E. I. Rawlings & D. K. Carter (Eds.), Psychotherapy for women: Treatment toward equality (pp. 207-220). Springfield, Ill.: Charles C. Thomas.
- Dunn, O. J. (1961). Multiple comparisons among means. Journal of the American Statistical Association, 56, 52-64.
- Epstein, C. F. (1973). Positive effects of multiple negative: Explaining the success of black professional women. American Journal of Sociology, 78, 921-935.
- Farmer, H. S. (1971). Helping women to resolve the home-career conflict. Personnel and Guidance Journal, 49, 795-801.
- Farmer, H. S. (1978). What inhibits achievement and career motivation in women? In L. W. Harmon, J. M. Birk, L. E. Fitzgerald, & M. F. Tanney (Eds.), Counseling Women (pp. 159-172). Monterey, Calif.: Brooks/Cole.
- Farmer, H. S., & Bohn, M. J. (1970). Home-career conflict reduction and the level of career interest in women. Journal of Counseling Psychology, 17, 228-232.
- Fitzgerald, L. F., & Crites, J. O. (1980). Toward a career psychology of women: What do we know? What do we need to know? Journal of Counseling Psychology, 27, 44-62.
- Fottler, M. D., & Bain, T. (1980). Managerial aspirations of high school seniors: A comparison of males and females. Journal of Vocational Behavior, 16, 83-95.
- Fransella, F., & Bannister, D. (1977). A manual for repertory grid technique. New York: Academic Press.
- Garrett, H. E. (1966). Statistics in psychology and education. New York: David McKay Company,
- Greenglass, E. R. (1982). A world of difference: Gender roles in perspective. Toronto: John Wiley & Sons.
- Greenglass, E. R. (1985). A social-psychological view of marriage for women. International Journal of Women's Studies, 8, 24-31.
- Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. Journal of Vocational Behavior, 18, 326-339.
- Hall, D. T. (1972). A model of coping with role conflict: The role behavior of college educated women. Administrative Science Quarterly, 17, 471-486.
- Hall, D. T. (1975). Pressures from work, self, and home in the life stages of married women. Journal of Vocational Behavior, 6, 121-132.
- Hall, D. T., & Gordon, F. E. (1973). Career choices of married women: Effects on conflict, role behavior, and satisfaction. Journal of Applied Psychology, 58, 42-48.
- Hall, F. S., & Hall, D. T. (1979). The two-career couple. Don Mills, Ont.: Addison-Wesley.
- Haller, A. O., Otto, L. B., Meier, R. F., & Ohlendorf, G. W. (1974). Level of occupational aspiration: An empirical analysis. American Sociological Review, 39, 112-121.
- Harrell, A. M., & Stah, M. J. (1981). A behavioral decision theory approach for measuring McClelland's trichotomy of needs. Journal of Applied Psychology, 66, 242-247.
- Hennig, M., & Jardim, A. (1977). The managerial woman. Garden City, New York: Anchor Press.
- Hoffman, L. W. (1972). Early childhood experiences and women's achievement motives. Journal of Social Issues, 28, 129-155.
- Holahan, C. K., & Gilbert, L. A. (1979a). Conflict between major life roles: Women and men in dual career couples. Human Relations, 32, 451-467.
- Holahan, C. K., & Gilbert, L. A. (1979b). Interrole conflict for working women: Careers versus jobs. Journal of Applied Psychology, 64, 86-90.
- Horner, M. S. (1970). Femininity and successful achievement: A basic inconsistency. In J. M. Bardwick, E. Douvan, M. S. Horner, & D. Gutman (Eds.), Feminine personality and conflict (pp. 45-74). Belmont, Calif.: Brooks/Cole.
- Horner, M. S. (1972). Toward an understanding of achievement-related conflicts in women. Journal of Social Issues, 28, 157-176.

- Kelly, G. (1955). The psychology of personal constructs. New York: Norton.
- Laws. J. L. (1978). Work motivation and work behavior of women: New perspectives. In J. A. Sherman & F. L. Denmanr, (Eds.), The psychology of women: Future directions in research (pp. 285-348). New York: Psychological Dimensions.
- Lunneborg, P. W. (1982). Role model influencers of nontraditional professional women. Journal of Vocational Behavior, 20, 276-281.
- McCall, G. J., & Simmons, J. L. (1966). Identities and interactions. New York: Free Press.
- Marascuilo, L. A., & Levin, J. R. (1983). Multivariate statistics in the social sciences: A researcher's guide. Monterey, Calif.: Brooks/Cole.
- Monahan, L., Kuhn, D., & Shaver, P. (1974). Intrapsychic versus cultural explanations of the "fear of success" motive. Journal of Personality and Social Psychology, 29, 60-64.
- Ohlsen, M. M. (1968). Vocational counseling for girls and women. Vocational Guidance Quarterly, 17, 124-127.
- O'Leary, V. E. (1974). Some attitudinal barriers to occupational aspirations in women. Psychological Bulletin, 81, 809-826.
- O'Leary, V. E. (1977). Toward understanding women. Monterey, Calif.: Brooks/Cole.
- Rapoport, R., & Rapoport, R. N. (1969). The dual career family. Human Relations, 22, 3-30.
- Shann, M. H. (1983). Career plans of men and women in gender-dominant professions. Journal of Vocational Behavior, 22, 343-356.
- Slater, P. (1976). The measurement of intrapersonal space by grid technique. Vol. I. Explorations of intrapersonal space. Toronto: John Wiley & Sons.
- Stake, J. E. (1979). Women's self-estimates of competence and the resolution of the career/ home conflict. Journal of Vocational Behavior, 14, 33-42.
- Stake, J. E. (1981). The educator's role in fostering female career aspirations. Journal of the National Association for Women Deans, Administrators, and Counselors, 45, 3-10.
- Stake, J. E., & Levitz, E. (1979). Career goals of college women and men and perceived achievement-related encouragement. Psychology of Women Quarterly, 4, 151-159.
- Statistics Canada. (1977). Degrees, diplomas and certificates awarded by universities 1975 (catalogue no. 81-211). Ottawa: Author.
- Statistics Canada. (1981). Universities: Enrolment and degrees 1979 (catalogue no. 81-204). Ottawa: Author.
- Stein, A. H., & Bailey, M. M. (1973). The socialization of achievement orientation in females. Psychological Bulletin, 80, 345-346.
- Super, D. E. (1980). A life-span, life-space approach to career development. Journal of Vocational Behavior, 16, 282-298.
- Sutherland, S. L. (1978). The unambitious female: Women's low professional aspirations. SIGNS: Journal of Women in Culture and Society, 3, 774-794.
- Women's Bureau, Labour Canada. (1980). 1978-79 Women in the labour force. Part I. Participation. Ottawa: Author.
- Women's Bureau, Labour Canada. (1981). 1978-79 Women in the labour force. Part II. Earnings of women and men. Ottawa: Author.
- Yogev, S. (1983). Judging the professional woman: Changing research, changing values. Psychology of Women Quarterly, 7, 219-234.

About the Authors

Laura-Lynne McBain is a doctoral student in the Department of Counselling Psychology at the University of British Columbia. Her main professional and research interests are the psychology of women and, more specifically, the career psychology of women.

Lorette K. Woolsey is a faculty member in the Department of Counselling Psychology at the University of British Columbia. Her professional and research interests include the psychology of women. She is currently conducting research on same-sex friendship and kinship relation-

Requests for reprints may be addressed to Lorrette K. Woolsey, Department of Counselling Psychology, Faculty of Education, University of British Columbia, 5780 Toronto Road, Vancouver, B.C. V6T 1L2.

Preparation of this article was supported in part by Social Sciences and Humanities Research Council of Canada Doctoral Fellowship no. 453-84-0442 to Laura-Lynne McBain.

The authors wish to acknowledge and thank Larry R. Cochran for his valuable assistance with the repertory grid technique used in this study and Sharon E. Kahn for her helpful suggestions in regard to the discussion of findings within the context of current theory and research.

This study was based on a master's thesis completed by the first author and supervised by the second author at the University of British Columbia. An eariler version of this paper was presented at the Canadian Psychological Association Section on Women and Psychology, Winnipeg, Manitoba, June 1983.