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EFFECT OF A CAREER COUNSELLING INTERVENTION

ON WOMEN PARTICIPATING IN A

GOVERNMENT-SPONSORED EMPLOYMENT ENHANCEMENT PROGRAM.

by

Deborah Brake-Brushett

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ABSTRACT

This study was conducted to ascertain the impact of an established career counselling intervention on the career aspirations of women. Sixteen females enrolled in a government-sponsored training program participated in ten group counselling sessions. The goal of the program was to develop a greater appreciation for the full range of occupational alternatives and an enhanced understanding of the skills necessary for successful and optimum career development.

The selected career counselling program, "Shaping Your Future: Towards the Occupational Integration of Women" is an activity/discussion-based career planning program designed to increase participants' awareness of themselves and their environment. Role modelling, group discussion and guided imagery are utilized to encourage students to assess and augment relevant career planning characteristics and skills. Positive self-esteem, assertiveness, self-assessment and attitudes are among the various career and personal development themes that are explored.

This quasi-experimental study was an evaluation of an intervention using a pretest-posttest nonequivalent control group design. A questionnaire was devised to obtain the necessary research data. The instrument was designed to gather sociodemographic information, as well as information on relevant career development factors/issues including attitudes and six dependent variables: level of occupational knowledge, aspects of self, decision-making and problem-solving ability, assertiveness,

role models, and imagery/possible selves. The questionnaire was administered twice during the program: one week pre-intervention and two week's post-intervention.

Analysis of variance for repeated measures was utilized to complete a quantitative evaluation of the effect of the treatment intervention on the six dependent variables. Qualitative data on attitudes were examined to ascertain changes that may have occurred. Findings from the study suggested that the career counselling intervention had a significant influence on the participants' decision-making and problem-solving ability. There was also some noted improvement in occupational knowledge, assertiveness, and role model significance. Recommendations for practice focussed on modifications to the program while recommendations for research addressed replication of the study.

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CHAPTER 1

Introduction

Statement of Purpose

The purpose of this study was to examine the effects of a career exploration intervention on the career development of a group of women involved in a government-sponsored employment enhancement program. The career counselling intervention, "Shaping Your Future: Towards the Occupational Integration of Women" (Cahill, 1994), was designed to broaden the range of occupational options and foster the development of necessary career planning skills. The intervention was delivered over a five-week period, two sessions per week. A multimedia approach was utilized to help the participants become more aware of relevant career planning issues.

Significance and Rationale

Women are encouraged to pursue training and employment in all occupational fields including science, engineering, technology, and the skilled trades. Since many of these fields are male-dominated, women may lack knowledge of the specific occupational requirements, and they may lack confidence in their ability to achieve employment in these areas. Work environments may also need to change to support women and men.

A more balanced representation of females in all occupational areas could facilitate general economic prosperity and also contribute to improved financial, social, and emotional positions for many women. Programs are needed to encourage women to

explore the full range of career alternatives and to assist them in the domains of self-awareness, skill enhancement, and occupational knowledge. Specific interventions such as the one utilized in this research study aim to foster this level of optimum career development.

Economic Considerations

The emergence of the global economy has resulted in rapid technological advancement and a gradual shift from labour-intensive to knowledge-intensive industries. In today's economic reality the transformation of organizations from the conventional pyramid structure to a diamond-like formation (Charland, 1997) has created a need for individuals who are flexible with regard to career transitions. Hughey and Hughey (1999) described the "emerging workplace" as including multi-skilled workers who are technologically competent, interpersonal, knowledgeable, creative, self-assured, and adept at making decisions and solving problems.

Women have the capability to participate fully in this emerging workplace and they are increasingly targeted for training in the growth areas of science, engineering, and technology (Butlin and Oderkirk, 1996; Menzies, 1998; and Porter, 1991). Schaefers, Epperson, and Nauta (1997), for instance, maintain that there will be shortages of engineers, mathematicians, and scientists in the near future and that women are underrepresented in these areas. They suggest that "the small numbers of women in these fields may have negative consequences for the future workforce. Women are needed not only to fill vacant positions but also to bring new questions, ideas, and perspectives to these fields" (p. 173). Educators and employers are reaching out to women, in their efforts to obtain skilled workers in critical occupational areas. This trend can ultimately enhance the quality of this country's labour force and its

international competitiveness; however, advantages may also be obtained by the women themselves.

Women appear to be increasingly more aware of the potential benefits of the many "nontraditional" and "high tech" occupations and the limitations of numerous stereotypical female jobs (e.g., low salaries and poor advancement potential). Research (e.g., Aylward, 1990; Coyle-Williams and Maddy-Bernstein, 1990; Evelo, Jessell and Beymer, 1991; Greene and Stitt-Gohnes, 1997; Shuchat, 1982) has demonstrated, however, that significant numbers of females continue to resist or ignore occupational fields that have a primarily male workforce. Sharpe (1992) stated that although the number of women in the labour force continues to increase, most female workers are concentrated in a small number of low paying traditional jobs in the fields of medicine and health, clerical, and service. Long (1995) pointed out that "while 6 out of every 10 women are in the paid labour force, 58% of Canadian women work in clerical, sales, or service occupations" (p. 1). Butlin and Oderkirk (1996) in their review of the 1993 Canadian Survey of Labour and Income Dynamics found that "over 80% of all female paid employees working full-time were concentrated in just six types of occupations, clerical (32%), management and administration (16%), nursing and therapy (11%), services other than protective services (10%), teaching (8%), and sales (6%)" (p. 7).

A labour market overview demonstrates that during 1999 there was a 2.3% increase in employment for men primarily in the areas of manufacturing, wholesale trade, and professional, scientific, and technical services. Women also made gains in employment in the manufacturing sector; however, the other principal employment sectors were health care and social assistance, two traditionally female-dominated categories (Statistics Canada, 2000). Menzies (1998) stated that "only a small percentage of young women are choosing occupations in the natural sciences such as

mathematics and engineering, and these are important sectors in the KBES (knowledge-based economy and society)" (p. 3).

Waddoups and Assane (1993, cited in Sterrett, 1999) referred to the over-representation of women in secondary and subordinate primary segments of the labour market. They noted that few women make upward steps towards the more advantageous independent primary segment that has the best paying jobs with choice working conditions and highest worker autonomy (e.g., professional, managerial, technical, and supervisory positions). Students and women account for the majority of minimum wage earners in the country (Statistics Canada, 1998b) and women, particularly female single parents and those less skilled, experience less upward mobility than men (Statistics Canada, 1998a).

Gender stereotyping and occupational segregation have been shown to be powerful influences in determining career choices for women. "Deeply rooted socialization processes perpetuate rigid sex role perceptions that limit career options" (Brown and Brooks, 1996, p. 318). The Organization for Economic Co-operation and Development (OECD, 1998), in their study of the future of female-dominated occupations, asserted that:

Occupational segregation excludes women from occupations which are associated with the greatest prestige, power, and highest incomes. These occupations are generally "reserved" for men. More generally, female-dominated occupations are undervalued either in terms of salary, career prospects or social status. (p. 9)

Miller and Budd (1999) suggest that there are three reasons for the perseverance of occupational segregation: (a) some occupational requirements are more applicable for one gender (e.g., muscular strength); (b) gender-oriented expectations and beliefs (e.g.,

socialization) define occupational suitability and job prerequisites by gender rather than ability; and (c) early socialization fosters occupational segregation and diminishes the individual's interest in occupations that are generally the domains of the opposite sex (p. 18). Bartholomew and Schnorr (1994) affirmed that the predominance of women within a narrow range of occupations and women's "underemployment" can have serious economic and psychological consequences for the individual. They endorsed efforts that support women in realizing their full potential.

Tomaskovic-Devey (1990, cited in Sterrett, 1999) maintained that women compare their career successes to that of other women rather than to men, therefore, they often fail to identify occupationally-related gender inequities. Shu and Marini (1998) have suggested that although there has been a decline in occupational sex segregation over the last few decades, it continues to represent a major social problem mainly because of the role it plays in perpetuating the gender wage gap. Wage disparity is one of the most conspicuous differences in the economic realities of men and women.

Although exhibiting a declining trend, the wage gap, or gender earnings differential, continues to be a major issue for Canadian women. Statistics Canada (1999) highlights the following:

- Controlling for work history and job-related responsibilities, data analysis indicates that women's average hourly wage rate is about 84% - 89% of the man's average. (p. 32)

- The gender pay gap is smallest for single, never married men and women (96%) and largest for married men and women (77%). (p. 22)

- Relative to educational attainment, the gender pay gap is lowest among university graduates (85%). (p. 23)

- The overcrowding of females into relatively low-paying occupations

explains part of the gender wage gap. (p. 31)

- Discrepancies in the wages for women and men have been attributed to a variety of factors. Some of the more significant ones include full-year, full-time work experience (explaining almost 12%), educational level/ field of study (nearly 6%), tenure (up to 5%), job-related duties (5%), occupation (almost 9%), and industry (approximately 11%). (pp. 29-32)

- Consideration of multiple variables, such as those indicated above, explains only a portion of the gender earning differential, one-half to three-quarters of the gender wage gap cannot be explained. (p. 32)

- Discrimination towards women in the labour market has been identified as a primary element for the "unexplained" segment of the gender wage gap. (p. 13)

Educational Considerations

Women are obtaining more university degrees. In a study of gender equality indexes, Status of Women Canada (1997) found that between the period 1981 and 1994 there was an increase in the number of degrees Canadian women were obtaining in female-dominated, gender-neutral and male-dominated fields of study (in Newfoundland and Labrador the trends were similar). The study suggested that although "the increases in male and neutral fields reflect a move towards greater gender balance, the increase in female fields is toward greater imbalance" (p. 33).

The value of education in career development is undisputed. Butlin and Oderkirk (1996) maintain that there is a correlation between educational attainment and occupational remuneration, occupational prestige, and opportunities for autonomy and authority in the workplace. A report by Human Resources Development Canada (1996)

suggested that "skill, as measured by a worker's level of education and work experience, translates into jobs and higher earnings" (p. 3). HRDC underscores the significance of educational attainment:

> It pays to be educated. The education premium is calculated by comparing those with a university degree to those with nine to thirteen years of schooling. Earnings of university-educated men and women relative to those with less education increased significantly during 1981-1993. In 1993, the mean earnings for those with a university degree was approximately double that for those with nine to thirteen years of schooling, yielding an education premium of $21,300 for men and $14,900 for women. (p. 3)

Hoyt (1997) suggested that career counsellors need to encourage individuals to pursue some form of post-secondary education as a means of increasing the likelihood of obtaining a job in the primary labour market. He submitted that "high school leavers not headed for four-year college or university (need) to secure some set of high-level, specific occupational skills at the post-secondary sub-baccalaureate level ... if they are to function effectively in the emerging information-oriented, knowledge-based occupational society" (p. 3). While counsellors already promote universities as a valuable educational alternative, Hoyt contends that technical and vocational institutions as well as community colleges should be offered as appropriate post-secondary options for many students.

Inherent in the general educational goal of optimum individual development is the need to provide opportunities for appropriate career counselling, self-assessment, and skill development. While it is important that both male and female students receive this type of assistance, it is also necessary to recognize the demand for specific career counselling interventions that address the unique career concerns of girls and women

(Betz, 1992; Brown and Brooks, 1991; Herr and Cramer, 1996; Reixach, 1995; Smith and Leduc, 1992). According to Eccles (1987) a comprehensive career counselling strategy demands that females be made aware of the broad spectrum of occupational and educational options. The counsellor needs to provide complete and accurate information, support, and analysis of the potential costs and benefits of various choices.

Influences in Women's Career Development

The literature identifies a number of influences that can affect the nature of women's career aspirations (e.g., desire for female-dominated, gender-neutral or male-dominated occupations) and career progression. An effective career counselling intervention must acknowledge the impact of these factors and provide clients with the skills necessary to avoid or mitigate the negative influences as well as the skills needed to exploit the positive influences. The following subsection contains a brief profile of selected internal and external factors, and Chapter Two provides a more thorough review.

Internal/Intrinsic Factors

The following are examples of internal or intrinsic factors that can influence the career development of women:

1. Attitudes and values, that are influenced greatly by socialization processes within the environmental context (Betz and Fitzgerald, 1987; Farmer, 1985; Gottfredson, 1981) can correlate with a female's self-understanding (Osipow and Fitzgerald, 1996; Super, 1990), career exploration (Kerka, 1995), and the career decision-making process (Vermeulen and Minor, 1998). Gender role attitudes (Ex and Janssens, 1998; Hansen,

1997; Rainey and Borders, 1997) and occupational sex-typing can have a limiting effect on women's career aspirations and progress (Davey, 1993; Helwig, 1998; Miller and Budd, 1999; O'Neal Weeks and Pryor Porter, 1983; Shepard and Hess, 1975; Shinar, 1975).

2. Multiple roles and role conflict illustrate a unique aspect of a female's career development; the reality of women's primary responsibility for the home and family (Cook, 1993; Kerka, 1991; Super, 1957). Achieving a satisfactory balance between work, family and other roles is important (Bartholomew and Schnorr, 1994; Farmer, 1997: McCracken and Weitzman, 1997) as are ways of identifying and resolving role conflict issues (Carlson, 1999; Loerch, Russel, and Rush, 1989; Sinacore-Guinn, Akcali, and Fledderus, 1999).

3. Aspects of self, self-awareness, self-esteem, self-efficacy, and overall self-concept play an instrumental role in women's career development (Gottfredson, 1981; Super, 1980). High self-esteem (Blustein and Noumair, 1996), strong self-efficacy beliefs (Betz and Hackett, 1981; Hackett, Betz, O'Halloran and Romac, 1990; Niles and Sowa, 1992) self-confidence (Lucas, 1997) and assertive behaviours (Rainey and Borders, 1997) have been identified as enabling influences for women. Reixach (1995) suggested that socioeconomically disadvantaged women often have low self-concepts because they feel isolated, unsupported and discriminated against.

4. Career awareness and knowledge is essential for understanding the current labour market (Hoyt and Hughey, 1997; McAuley, 1998) and for effective career planning (Brown and Brooks, 1991; Herr and Cramer, 1996). Access to up-to-date-information has been a problem for some women (Taylor and Pope, 1986; Vermeulen and Minor, 1998).

External /Extrinsic Factors

The following external or extrinsic factors have been identified as influential in women's career development:

1. Socialization and gender bias have been noted in the development of a number of career-related issues, including career aspirations (Astin, 1984; Herr and Cramer, 1996), career orientation (Miller and Budd, 1999), and self-concept (Reixach, 1995). Early sex-role training can cause women and girls to underestimate their abilities, especially in the areas of mathematics and science (Bartholomew and Schnorr, 1995; Weiler, 1996) and lower their expectations for success (Eccles, 1987; Hackett and Betz, 1981). Occupational stereotyping (Brown and Brooks, 1996; Greene and Stitt-Gohnes, 1997; Helwig, 1998; Shu and Marini, 1998) and organizational bias (Cook, 1993; Davidson and Gilbert, 1993; Silcox and Cummings, 1999), as a result of socialization practices, have been shown to limit or inhibit women's career development.

2. Family influences, particularly parental expectations (Helwig, 1998) and parental support (Blustein, 1997; Sinacore, Healy, and Hassan, 1999) are critical components in a female's career development. The family environment can influence women's career aspirations (Hackett, Esposito and O'Halloran, 1989; Herbert, 1986) and career decision-making (Whiston, 1996). The nature of the maternal relationship may be important to a daughter's attitudes and subsequent career development (Ex and Janssens, 1998; Hackett, 1997; Rainey and Borders, 1997; Way and Rossman, 1996).

3. Significant others (e.g., friends, peers, counsellors, teachers, and occupational role models) represent important sources of information and support for females (Davey and Stoppard, 1993; Farmer, 1985, 1997; Walsh and Osipow, 1983), especially for those women pursuing careers in male-dominated occupations (Murrell, Frieze and Frost, 1991; Silcox and Cummings, 1999). Counsellor bias has, however, been an issue for

some clients and researchers (Cook, 1993; Greene and Stitt-Gohnes, 1997; Hansen and Harless, 1988; Hughey and Hughey, 1999; Nevill and Schleckler, 1988; Ward, 1995).

4. Socioeconomic status (SES) can influence attitudes and values and restrict or expand a female's career expectations, opportunities, and planning (Osipow and Fitzgerald, 1996). Females from high SES backgrounds have numerous advantages and tend to pursue the more lucrative and prestigious male-dominated fields (Hannah and Kahn, 1989; Pulkkinen, Ohranen, and Tolvanen, 1999; Shu and Marini, 1998) while educational costs may prove to be an insurmountable obstacle for many low SES females (Davey, 1993; Davey and Stoppard, 1993; Luzzo and Hutcheson, 1996).

The preceding review has described some of the internal and external influences that can adversely or favourably affect a woman's career-related perceptions and behaviour. The remainder of the chapter will provide term definitions, research questions, and limitations of the study.

Definition of Terms

Aspiration -- A particular educational or occupational goal that a person desires to obtain (Wiseman, 1983).

Career Development -- The evolving of a career over time as result of the interaction of psychological, sociological, educational, economic, and accidental factors that individuals experience (Hoyt, 1991, as cited in Hiebert, 1992).

Career Intervention -- Any activity (treatment or effort) designed to enhance a person's career development or to enable that person to make more effective career decisions (Spokane 1991, cited in Herr and Cramer, 1992).

Internal/Intrinsic Factors -- Environmental or situational influences affecting an

individual's career choice and development.

External/Extrinsic Factors – Personal characteristics affecting an individual's career choice and development.

Traditional/Female-Dominated Occupation – With respect to women's career development, this term refers to those jobs where the significant majority of the labour force is female or where 66% or more of the workers are women.

Nontraditional/Male-Dominated Occupation – With respect to women's career development, this term refers to those occupations that have a primarily male workforce or jobs in which 33 1/3% or fewer of the workers are women. (Note: The term "nontraditional" is currently perceived by some organizations and individuals as intrinsically restrictive; women may avoid certain occupations simply because the accompanying "nontraditional" label can suggest dissuasive or intimidating qualities (e.g., challenge, sexual harassment, high effort/ability, high stress, etc.). For purposes of this research the author will use "nontraditional"only in instances where it is has been utilized as a descriptive term for specifically referenced theories or studies.)

Research Questions

Analysis of the research data will be based on the pretest/posttest results of the questionnaire that was developed for the study. An appraisal of changes in each participant's perceptions, attitudes, and behaviours will be conducted using the following research questions:

1. Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's level of occupational knowledge?

2. Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's level of self-awareness, self-esteem, and/or self-efficacy?

3. Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's level of decision-making and problem solving abilities?

4. Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's level of assertiveness?

5. Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's emphasis on role models?

6. Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's emphasis on imagery/possible selves.

7. Are there differences between the pretest and posttest responses of the treatment and control groups with regard to the participant's attitudes?

Limitations of the Study

1. The study will focus on the responses of female Social Assistance recipients living in a developed, urban area; therefore, results can only be generalized to similar samples.

2. The research-specific questionnaire is not a well-tested, standardized measure. Further reliability and validity studies will be needed to ensure the appropriateness of the

instrument for analysing the effects of the career counselling intervention.

Chapter Summary

In this chapter, economic and educational aspects of women's reality were discussed and details of today's knowledge-based economy were provided. Statistics, government documents, and research analysis provide evidence of the progress made towards labour market equality; however, they also disclose information on certain issues that continue to impede or inhibit the career development of women (e.g., occupational segregation and the wage gap). A variety of additional internal and external influences were also introduced.

Many of the career counselling strategies aimed at addressing internal and external issues in women's career development have focussed on the enhancement of career awareness, self-knowledge, self-esteem, self-efficacy, assertiveness, and decision making ability. Role modelling, in particular, is viewed as an important catalyst in expanding occupational alternatives. The career counselling program "Shaping Your Future: Towards the Occupational Integration of Women" consolidates all of these counselling strategies in an effort to augment the career exploration process for girls and women. While the program was originally designed to address the unique career needs of young women living in rural areas, it is felt by the researcher to be a comprehensive and valuable resource for the occupational planning of all females.

CHAPTER 2

Review of Related Literature

Introduction

Existing theories of career choice and development provide a frame of reference for practitioners and researchers, a foundation for further study and discussion, as well as a basis for the development of more effective counselling interventions. Accepting that there is no one comprehensive theory to explain the career development of women, the first major section of this chapter will present an overview of several theories containing concepts considered to be relevant to the present research. The second major segment of the chapter will provide information and empirical studies germane to significant issues in women's career development, namely career aspirations and choice, factors influencing women's career development, and career counselling strategies.

Career Development Theories

In the past, career development theories had predominately focussed on the occupational selection and occupational progress of males. More recent theoretical designs have, however, attempted to describe the career-related behaviours of both men and women, and the possible differential impact of personal and environmental factors on career aspirations, choices, and behaviours. Addressing the similarities and differences that may exist in career development and gender through research is

important to ensure the suitability of intervention efforts aimed at fostering maximum motivation and achievement.

Herr and Cramer (1996) maintain that although commonality exists across theoretical perspectives it is the particular approach or emphasis that makes each theory unique. They have organized prominent career development theories into five categories:

1. Trait and factor, actuarial, or matching approaches that view individuals as having unique patterns of abilities, or traits, that can be measured objectively and linked with specific occupational requirements.

2. Decision theories that place a primary emphasis on an individual's decision making process, evaluating the costs and benefits associated with presenting alternatives.

3. Situational, sociological, or contextual approaches that underscore the influence of environmental factors on an individual's career choice and the interaction and accommodation of social, physical, and cultural elements.

4. Psychological approaches that maintain that an individual's personality (e.g., one's internal motives) will have a fundamental influence on occupational choice, choosing occupations that satisfy personal needs.

5. Developmental approaches to career development that emphasize the process of choice, life stages, and the career-related issues and concerns occurring throughout the lifespan. (pp. 157-208)

Donald E. Super's Developmental, Life Span Approach is important to the study

of career development. Herr and Cramer (1996) described the theory as "an integrative one, stressing the interaction of personal and environmental variables in career development" (p. 309). Super's theory emphasizes the importance of an individual's self-concept to career development; "one really has a constellation of self-concepts, some of which may be positive and some negative" (Super cited in Freeman, 1993, p. 258). His approach also stressed the developmental aspect of vocational development. Super (1990) proposed that the process was lifelong, beginning early and proceeding along a continuum until late in life. Individuals would progress through a series of stages. Solomone (1996) summarized the five-stage process: (a) growth or development from birth to age fourteen with three substages, fantasy, interest, and capacity; (b) exploration covering the period from age fifteen to twenty-four with the substages, tentative, transition, and trial; (c) establishment or development from ages twenty-five to forty-four with two substages, trial and stabilization; (d) maintenance or development from age forty-five to sixty-four; and (e) decline that includes development from age sixty-five on with two substages, deceleration and retirement (p. 175).

Super's initial consideration of the unique aspects of women's career development came about at a time when the majority of women were either full-time homemakers, or employed in gender-segregated, often lower-paying, jobs. Super (1957) developed the following classification of women's career patterns: (a) the stable homemaking career pattern characterizing women who marry while in, or shortly after leaving, school and who have no significant work experience; (b) the conventional career

pattern characterizing women who work outside the home only until marriage; (c) the

stable working career pattern (e.g., women who work continuously over the life span and

for whom work is their "career"); (d) the double-track career pattern characterizing

women who combine home and work roles; (e) the interrupted career pattern

characterized by a return to the work world later in life; (f) the unstable career pattern

describing an irregular and repeated cycle of home versus work involvement; and (g) the

multiple-trial career pattern that, similar to the same male pattern, consists of an unstable

job history.

Over time Super's developmental theory has been refined and expanded to

include fourteen fundamental postulates and additional consideration of characteristics

particularly relevant to women's career development. Super (1980) acknowledged a

need to address the issues of role conflict and stereotyping. In his Life-Span Life-Space

approach to career development and, his Life-Career Rainbow model, he recognized the

personal and situational determinants associated with career development and

specifically addressed the conflicts and demands often associated with multiple roles

(Brown and Brooks 1996; Cook, 1994).

> His life-span, life-space approach advanced the notion that the work role is not
>
> the only role to which counselors need to attend (Super, 1980). Rather, persons
>
> live in multiple-role environments in which work roles, family roles, educational,
>
> and community roles vary in their demands on and significance for different
>
> persons and within different developmental periods. (Herr, 1997, p. 239)

Super's (1990) Archway of Career Determinants was a modification of the Life-Career Rainbow model. It depicted an assortment of personal, psychological, sociological, and economic career influences. Herr (1997) indicated that the model reflected:

> How the status of natural resources, the economy, the family, and other
>
> environmental factors influence the development of aptitudes, interests, and
>
> values; how these are integrated at various life stages; how, ultimately, the
>
> person, the decision-maker, brings all of these personal and social forces together
>
> and organizes them in terms of concepts of self and of roles in society. (p. 240)

The notions of sub-stages, transition, and recycling have also been synthesized into Super's life stages (Freeman, 1993; Salomone, 1996) making the theory more germane to women. Osipow and Fitzgerald (1996) affirmed the utility of Super's categorization of women's career vocational patterns and maintained that Super was accurate in his determination that family issues play an undisputable role in women's career development.

Osipow and Fitzgerald (1996) suggested that most of the research conducted to examine the basis and utility of Super's developmental life-span theory has been supportive. Studies such as that directed by Vetter (1973) have assessed the validity of Super's career patterns for women and reinforced its usefulness. Gianakos (1999) found that Super's career choice patterns: stable, conventional, multiple-trial, and unstable were

useful in interpreting variations in career decision-making self-efficacy. An Australian study of 226 individuals, who were in the process of considering or implementing a career change, provided additional support for Super's notion of career stages and his concept of recycling. The study by Smart and Peterson (1997) reaffirmed Super's supposition that individuals will cycle through the full set of career stages a second time when progressing through a career change.

Smart (1998), in another Australian study, investigated the usefulness of Super's career stage theory and analysed the relationship between career stages and attitudes toward work for a group comprising one thousand professional women. The results of the study supported Super's theory in that there was a variance of patterns relating to attitudes toward work across the life stages of exploration, establishment, and maintenance. In accordance with Super's premise, the exploration stage for the participants was found to be distinguished by uncertainty, instability and a desire to achieve accord between self and career; the establishment stage was marked by efforts to attain work and personal stability; and finally, the maintenance stage supported Super's contention that during this time individuals seek to preserve their career successes and their sense of self.

Super's Life Career Rainbow formed the theoretical basis for the study of a career-development assessment and counselling model by Super, Osbourne, Walsh, Brown and Niles (1992). Among other things, the model incorporated Super's emphasis on life stages, life-space, life roles, values, and environmental influences. Various

assessment tools were utilized to help individuals understand their developmental status

and the probable career development tasks that can transpire at each stage of the life

cycle. Fouad (1992) described the model as a "marriage between the best of differential

methods and an implementation of developmental theories of career choice" (p.81).

Blustein (1997) utilized Super's (1980) Life-Career Rainbow as a basis for the

unfolding of a context-rich perspective of career exploration across the life roles. In his

discussion Blustein indicated that Super's reflections on life roles/multiple roles,

adaptability, and social and cultural influences help to clarify or emphasize important

areas of exploratory behaviour, acknowledging the role of context in career exploration.

Like Super, Gottfredson (1981), in her Model of Occupational Aspiration:

Circumscription and Compromise, also underscored the importance of one's self-concept

in career development. She considered self-concept to be a dominant component in the

career behaviour and choice of children and adolescents; individuals choose occupations

that are in keeping with their self-image. According to Gottfredson the self-concept

comprises a number of career-oriented elements including gender, social background,

intelligence, and vocational interests, competencies, and values. Suggesting that an

individual's general cognitive growth is accompanied by an ever-changing and maturing

view of the self, Gottfredson (1981) outlined a four-stage process of development

wherein circumscription and compromise take place: (a) orientation to size and power

(three to five years) - children develop an awareness of adult roles; (b) orientation to sex

roles (six to eight years) - children develop an awareness of gender norms; (c) orientation

to social valuation (nine to thirteen years) - children develop an awareness of social class

and intellectual differences; and (d) orientation to internal, unique self (fourteen years

and more) - children develop an awareness of individual interests, values and

competencies (p. 555).

Gottfredson (1981) asserted that as children cultivate enhanced self awareness

and cognitive capabilities they will also progressively reduce their range of acceptable

occupational alternatives, a process referred to as circumscription. Occupational options

are eliminated or retained according to their compatibility with the child's emerging self-

concept, with the enduring occupations representing the range, or zone of acceptable

alternatives. Following the pattern of cognitive growth previously outlined, children as

young as six will discard occupations that they perceive as gender inappropriate.

Between the ages of 9 and 13 occupations will be evaluated in terms of the child's

perceived social status and ability level; occupations that are associated with unsuitably

low prestige and/or excessive effort will be rejected. In adolescence young people

further circumscribe occupational alternatives by eliminating options that are

inconsistent with their personal values, capacities, and interests. Gottfredson suggested

that the career exploration process for adolescents occurs "largely within the set of

occupations that were deemed compatible at earlier ages according to one's more visible

social attributes (sex, social class, and intelligence) and one's sense of what is available

with reasonable effort" (1981, p. 549).

The sex-typing of occupations can be firmly entrenched by older adolescence and

extensive interventions would be warranted to reverse or impede this influence.

Gottfredson advanced, however, that the function of compromise can act to expand an

individual's zone of acceptable occupational alternatives. External factors, such as

educational financing, training opportunities, and employment patterns, can prompt an

individual to regard the existing scope of desirable career options as inaccessible. To

achieve a satisfactory job-self match, additional occupations will be considered while

some of the internalized developmental elements will be relinquished. Further,

Gottfredson (1981) maintained that the "typical pattern of compromise will be that,

vocational interests are sacrificed first, job level second, and sex type last" (p. 549).

Clearly, according to Gottfredson, the acquired sex stereotyping of occupations will be

difficult to resist or overcome. This premise is particularly important for the career

development of women.

Several studies have been conducted in an effort to validate or dispute

Gottfredson's theory. Lapan and Jingeleski (1992) in an examination of Gottfredson's

circumscription process, expanded upon the three existing criteria variables (e.g.,

occupational sex-type, prestige level, and level of effort) to include self-efficacy beliefs

and expectations of occupational attainment. Results of the study supported

Gottfredson's notion that both boys and girls have a common understanding of sex-type

and prestige across occupational fields and that young adolescents often make vocational

choices that they perceive as gender appropriate. Lapan and Jingeleski (1992) found that

"boys expected to attain, had greater beliefs in their ability to be successful in, and were

more interested in occupations that both boys and girls agreed are masculine jobs. The same is true for girls on the feminine side..." (p. 88).

The study by Lapan and Jingeleski (1992) also indicated that boys had greater expectation and interest for securing careers within fields such as science, trades, or law enforcement. Boys and girls did not differ significantly with respect to level of assertiveness. Emotional expressiveness was shown to be higher for the female students and girls expressed greater expectancy, self-efficacy, and interest for jobs within the social and conventional categories (e.g., social worker, teacher, bookkeeper, or accountant). The apparent inclination of girls and boys toward their respective traditional occupations supports the assertion that adolescents can "organize vocational aspirations within circumscribed attitudinal boundaries" (Lapan and Jingeleski, 1992, p. 89).

The non-independence of sex type, prestige, and interests, as acknowledged by Gottfredson (1981), is cited by the Hesketh, Elmslie, and Kaldor (1990) as a major obstacle associated with the empirical testing of the theory; the confounded nature of the variables makes it difficult to reject the theory. Hesketh, et al. (1990) studied the responses of 73 adults and 90 high school students to a fuzzy graphic rating scale in an effort to examine the validity of Gottfredson's theory of career compromise. The findings did not support Gottfredson's notion that sex type is the most important influence when making career-related decisions. Suggesting an alternative, Hesketh et al. maintained that interests are more significant in career choice because they already

encompass existing sex type and prestige preferences. The alternative presumes a cumulative effect of the three influences:

> Prestige level of job preferences incorporates some aspects of preferred sex type and hence is more important than sex type. Furthermore, a cumulative account results in a compound-interest effect because interests, the final factor in the circumscription theory, incorporate sex type and prestige preferences. Interests, therefore, will be the most important. (Hesketh, et al., 1990, pp. 50-51)

Leung and Harmon (1990) conducted a study to assess individual and sex differences in the zone of acceptable alternatives. Using a demographic questionnaire, the Bem Sex-Role Inventory, and a list of 155 occupations classified according to sex type and prestige, the researchers analysed the responses of 151 female and 95 male undergraduate students. The results did not support Gottfredson's contention that sex-type attitudes form early in life and are highly impervious to change and that acceptable levels of prestige remain relatively constant from the ages of 9 to 13. Indeed, the outcome indicated while circumscription was occurring there were also efforts made to augment the range of occupational options. Studies by Leung and Plake (1990) and Leung (1993) also found that the participants more readily compromised sex type before prestige.

Hesketh, Durant, and Pryor (1990) utilized a policy-capturing procedure in an effort to control for the confounded relationship between sex type, prestige, and interest.

Thirty-seven participants, representing varied educational and social backgrounds, were asked to rate the attractiveness of 27 hypothetical jobs that had been developed from the factorial combination of the three compromise variables. The study found no support for Gottfredson's (1981) compromise approach; prestige was considered more important. Hesketh, Durant, and Pryor did, however, endorse the circumscription aspect of Gottfredson's theory and they acknowledged that Gottfredson's theory placed renewed emphasis on the general notion of career compromise and the influence of sex type and prestige in career decision-making.

Astin's (1984) Need-Based Sociopsychological Model of Career Choice and Work Behaviour and its emphasis on the influence of personal and environmental characteristics is also important in understanding women's career development. Her theoretical premise maintains that change in occupational selections and subsequent work behaviours are a consequence of the interaction between four primary constructs, motivation, sex-role socialization, structure of opportunity, and work experiences. The following is summative description of each of these constructs as proposed by Astin:

1. Motivation in the form of three primary needs (for survival, pleasure, and contribution) that are the same for both sexes. Work, that is defined as activity directed to produce or accomplish something, can take the form of paid employment, volunteer work, or family work and has the capacity to satisfy these needs.

2. Sex-role socialization, whereby social norms and values are inculcated, through play, family, school, and early work experiences. In the process of satisfying the

three needs through these childhood activities, the individual develops certain experiences that directly influence career choice and work behaviour.

3. The structure of opportunity that includes economic conditions, the family structure, the job market, the occupational structure, and other environmental factors that are influenced by scientific discoveries, technological advances, historical events, and social/intellectual movements.

4. Work experiences, including perceptions of one's capabilities and strengths, the options available, and the kinds of work that can best satisfy one's needs. The individual's expectations are initially set by the socialization process and by early perceptions of the structure of opportunity. They can be modified, however, as the structure of opportunity changes. (pp.124-125)

Astin (1984) contended that individuals will be motivated to engage in paid or unpaid work activities as a means of satisfying three basic needs: the need to survive, the need to derive pleasure, and the need to contribute. The exact nature of these work activities will, in turn, be swayed by the individual's unique socialization background. Global forces, such as existing societal ethics, and immediate influences, such as parental modelling and schooling, can foster the adoption of gender differentiated attitudes and behaviours. Inappropriate gender bias can negatively alter the perception of one's needs, capabilities, and opportunities, restricting the range of possible career alternatives, particularly for women and girls.

According to Astin, one's perception of the structure of opportunity can be

affected by changes in demographics, technology, law, morality standards, and the economy. Indeed, recent trends in family, educational, and work structures have eliminated or reduced a number of career barriers for women thereby expanding the scope of potential occupational alternatives (Astin, 1992). One's distinct perception of the structure of opportunity and one's unique pattern of sex-role socialization will influence the nature of the work expectations. Such expectations are, however, subject to change with subsequent reevaluation of opportunity formations, or revisions in the perception of one's ability level and/or appropriate needs-work matches.

Empirical evidence to support Astin's (1984) theory is rare. Farmer (1985), in a study of a multidimensional model of career and motivation achievement did, however, find support for Astin's structure of opportunity concept. The overly general nature of concepts, such as "structure of opportunity," is believed to be responsible, in part, for the lack of research; the constructs are inadequately defined and constrain measurement (Fitzgerald and Betz, 1983 as cited in Walsh and Osipow, 1983). Astin's recognition and assessment of the influence of environmental and psychological influences have, however, been considered important to the understanding of career development for both men and women.

Farmer (1985), in her multidimensional Model of Career and Achievement Motivation for Men and Women, purported that a variety of factors can interact to reduce the general and occupational advancement of women and girls. Stereotypical beliefs about what is appropriate for one's gender, low academic self-confidence, low risk-taking

behaviour, and a fear of success can influence career motivation. In addition, a reliance

on inaccurate information about women in the labour force, and women in dual home-

career roles can generate a false perception of what is available and attainable. Finally, a

desire to be content with the achievements of significant male persons can lower a

woman's own level of occupational aspiration (e.g., assuming a depressed level of

acceptable occupational prestige). Farmer assesses the impact of "background, personal,

and environmental influences on aspiration, mastery, and career commitment" (Herr and

Cramer, 1992, p. 249).

Farmer (1985) investigated the utility of her model using multiple regression and

path analysis to interpret the responses supplied by the 1,863 high school students. The

results presented some intriguing information:

> We found significant influences for environment factors such as parent and
>
> teacher support and support for women working and for Personal factors such as
>
> academic self-esteem, competitive, and ability attributions. In addition, the effect
>
> of social status and sex was mediated through Environment and Personal
>
> variables. (p. 380)

In general, the study found that background factors most notably affected

aspirations while personal factors influenced career motivation more than mastery and

aspirations. The influence of environment factors was also more pronounced for women

and they placed greater emphasis on competing roles such as homemaking in their career

and mastery motivations. Teacher support was especially important for their aspiration

and mastery motivation while parental support was more meaningful for long-term career

motivation.

Farmer, Wardrop, Anderson, and Risinger (1995) conducted a longitudinal study

of persistence in math, science and technology careers. Included, amid an array of

research objectives, was an examination of Farmer's (1985) position that a woman's

career commitment is negatively affected by a homemaking commitment, and her

emphasis on society support as an indicator of career motivation. The results were

supportive for the issue of competing roles; however, neither parental nor teacher support

was found to be associated with persistence in science, math, or technology careers.

The process of women's career development was also considered in another

theoretical perspective put forth by Hackett and Betz (1981). They ascertained that

cognitive processes play a pivotal role in women's career aspirations and choice.

Utilizing Bandura's (1977) concept of self-efficacy, Hackett and Betz suggested that an

individual's perception of their ability to successfully accomplish a particular career-

related behaviour is influenced significantly by their unique socialization pattern. Low

career-related self efficacy in women is thought to result in an underutilization of talent

and ability, and it is presumed to be the product of stereotypical socialization practices.

Hackett and Betz (1981) accept Bandura's notion that self-efficacy is acquired or

modified by four sources of information: performance accomplishments, vicarious

learning, verbal persuasion, and emotional arousal. They argued that girls are not given

the same opportunity as boys to accumulate a broad range of task performance skills nor

are they encouraged to cultivate the potentially beneficial, yet stereotypical male, career attributes like assertiveness and competitiveness. Vicarious learning is also hampered for girls due to persistent literary and occupational sex-typing as well as the frequent lack of role models representing the entire range of career options. The absence or lack of career-related support provided by significant others and the generally higher level of anxiety exhibited on the part of females further contributes to low self-efficacy for women.

> If individuals lack expectations of personal efficacy in one or more career-related behavioural domains, behaviors critical to effective and satisfying choices, plans, and achievements are less likely to be initiated and, even if initiated, less likely to be sustained when obstacles or negative experiences are encountered. (Hackett and Betz, 1981, p.329)

Betz and Hackett (1981) conducted a study to determine the relevance of Bandura's self-efficacy concept to the process of decision-making and to the understanding of women's occupational behaviour and women's career development. The measures employed in the study were designed to gauge level of interest, degree of consideration, self-efficacy expectations, and degree of confidence. The subjects, 134 female and 101 male undergraduate students, were supplied with job titles representing ten traditionally male occupations and ten traditionally female occupations. They were then invited to rate their ability to complete the educational requirements and job duties for each of the twenty occupations. Analysis of the research findings demonstrated

significant gender differences in self-efficacy. Specifically, "males reported equivalent self-efficacy with regard to the two classes of occupations; females reported significantly higher levels of self-efficacy with regard to traditional occupations and significantly lower levels of self-efficacy with regard to nontraditional occupations" (Betz and Hackett, 1981, p. 399).

Research on the subject of self-efficacy is varied and extensive. Studies have examined the personality characteristics associated with the evolving self-concept (Niles and Sowa, 1992), self-efficacy in career exploration (Blustein, 1989), self-efficacy, socialization, and gender (Lent, Larkin, and Brown, 1989; Mathieu, Sowa, and Niles, 1993; Post, Stewart, and Smith, 1991), and self-efficacy in the decision-making process (Church, Teresa, Rosebrook, and Szendre, 1992; Luzzo, 1993; Taylor and Popma, 1990; Whiston, 1996).

Rotberg, Brown, and Ware (1987) expanded upon Betz and Hackett's (1981) research to include a variety of additional variables: race, gender, socioeconomic status, and sex-role orientation. Intentionally using a variant sample population (e.g., community college students of different races and gender) and different measures, Rotberg and her associates found support for Betz and Hackett's position that career self-efficacy and career interest was related to range of career choice. Gender and sex role orientation were found to predict career self-efficacy but not range of occupational choice.

Hackett and Betz's (1981) emphasis on the relationship between female

socialization, career self-efficacy, and range of occupational choice was examined by

Mathieu, Sowa, and Niles (1993). Attempting to study within-gender differences,

Mathieu and her colleagues utilized the Career Decision-Making Self-Efficacy Scale to

measure career self-efficacy for 101 female university students who had been categorized

according to the traditionality of their career preferences (e.g., traditional, gender-neutral,

non-traditional, or undecided). The study did not support Hackett and Betz's assertion

that higher levels of career self-efficacy are associated with women who indicate

preferences for non-traditional occupations. It was found that the level of career self-

efficacy for the undecided and traditional groups of women was similar yet significantly

lower than that of the women who expressed preferences for gender-neutral or non-

traditional occupations.

As previously outlined, self-efficacy originates and is altered through four sources

of information: performance accomplishments, vicarious learning, verbal persuasion, and

emotional arousal. Sullivan and Mahalik (2000) integrated these four sources into a

group counselling intervention for women in an effort to investigate changes in the level

of career decision-making self-efficacy, vocational exploration, and vocational

commitment. The study involved a control group, a no treatment group, and a treatment

group and it was noted that indeed there were increases in career decision-making self-

efficacy and occupational exploration and commitment for the women in the treatment

group. Furthermore, these increases continued to be evident six weeks later. Sullivan

and Mahalik endorsed Betz's (1992) analysis of the counselling uses of the career self-

efficacy theory that recommended such things as an overview of personal successes, the use of role models, the use of adaptive self-talk, and the need for ongoing counsellor encouragement.

Solberg, Good, and Nord (1994) in their review of career search self-efficacy highlight the significance of this approach for women. They suggested that:

Some groups may especially benefit from career search self-efficacy interventions. Some of these groups include women seeking nontraditional careers, members of racial/ethnic minorities, and individuals from disadvantaged backgrounds. Interventions designed to promote career search self-efficacy expectations are important due to these individuals being more at-risk for experiencing difficulties throughout the career search process. (p. 67)

Betz, Fitzgerald and Fassinger have developed another multidimensional approach, entitled a Theory of Career Choice in Women. Their causal model reflected interactions between individual, background, educational, and lifestyle factors that influence women's career development. Osipow and Fitzgerald (1996) suggested that "the model represents possibly the most sophisticated attempt yet to develop a framework for understanding women's vocational choices, particularly the factors that inhibit or facilitate what has traditionally been considered optimal choice" (p. 255). They also submitted that the model is unique because it applies only to women's career development and it addresses the underutilization of women's abilities. Fassinger (1990) summarized the hypothesis originally advanced by Betz and Fitzgerald (1987):

"background factors such as previous work experience, role model influence, perceived encouragement, and ability predicted attitudes toward work, self, and sex roles; these in turn predicted career intentions and realism of career choice" (p. 227).

Accepting Betz and Fitzgerald's (1987) profile regarding the multitude of factors that influence women's career development and their underlying premise that a gender-specific model is necessary in order to accurately understand the unique vocational behaviours, Fassinger (1990) conducted a study of 663 undergraduate female students to test the relationship among the variables. Fassinger applied a multivariate causal modelling technique with the aim of determining the effect of four independent variables (ability, agentic characteristics, feminist orientation, and family orientation) on three relevant dependent variables (career orientation, mathematics orientation, and career choice). The results of Fassinger's (1990) study revealed a number of interesting findings: (a) ability and agentic characteristics predicted career choice, (b) agentic characteristics and sex-role attitudes predicted career orientation, (c) career orientation and career choice predicted each other, and (d) high ability, liberal sex roles, and instrumental personality tendencies predicted strong career orientation, and a propensity for science-related, high prestige, and non-traditional careers (pp 225 - 243).

O'Brien and Fassinger (1993) tested two causal models of career choice and orientation with female high school students. The first model reflected Fassinger's (1990) paradigm with the difference of a sample that was more varied in age and demographics and the addition of three measurement variables, realism of career choice,

congruence of career choice, and level of career aspiration. The second model mirrored the first model with the addition of a variable identifying the adolescent's relationship with her mother. The results were consistent with the outcomes of Fassinger's (1990) earlier study that career choice and career orientation was influenced by ability, agentic characteristics, gender-role attitudes, and the nature of the maternal relationship.

Young women who possess liberal gender role attitudes, instrumental and efficacious with regard to math and careers, and exhibit moderate degrees of attachment and independence from their mothers tend to value their career pursuits. Furthermore, adolescent women who select nontraditional and prestigious careers were found to have high ability and strong agentic characteristics (O'Brien and Fassinger, 1993, p. 466).

Rainey and Borders (1997) expanded upon Fassinger's (1990) work in an effort to study the influential factors in the career orientation and career aspirations of adolescent girls. Based on the responses of the 276 grade seven and grade eight girls and their mothers, Rainey and Borders found that agentic characteristics and maternal variables subscribed notably to female adolescents' gender role attitudes. For the young girl her degree of assertiveness, level of independence, and willingness to take a stand, were particularly important. The study reinforced Fassinger's (1990) notion that agentic and family-related factors influence a female's career development.

The final theoretical viewpoint to be discussed was developed by Brooks (1988) and emphasized external occupational characteristics and internal personal properties as

critical to the career decision-making process. Utilizing a variation of Vroom's (1964) expectancy theory, Brooks maintained that the attainability and attractiveness of options influence the occupational exploration process. In Brooks' Expectancy-Valance Model of Motivation for Occupational Choice, the expectancy component is influenced by the individual's perception of the level of general and occupational self-efficacy, the level of social support, and the occupational opportunities and barriers. The unique and personal understanding of these factors will be weighed along with the perceived desirability of a specific occupation to determine the level of motivation that will be expended toward achieving the career option. Brooks suggested that the definitive career choice(s) will have both high expectancy and high valance levels for the individual.

Overall, this discussion has covered a range of theoretical perspectives and identified a variety of concepts that are especially important in understanding women's career development. The next section will address the nature of women's career aspirations and specifically their preferences for traditionally male, traditionally female, or gender-neutral occupations.

Career Aspirations of Women

Career aspirations can evolve over time and influence an individual's career choice and career satisfaction. Laws (1976 as cited in Astin, 1984) suggested that they are a function of what young people learn to value and what they expect they can achieve. The preceding theoretical overview appears to indicate that the development of

career aspirations can be rationalized by some combination of background, personal, and/or environmental factors. Farmer (1985), for instance, submitted that background factors, such as gender, race, age, SES, and ability, are the strongest predictors of occupational aspirations while sex-role socialization was cited by Gottfredson (1981), Astin (1984), and Hackett and Betz (1981), as instrumental in the evolution of an individual's career aspirations. Gottfredson also discussed how experiences early in childhood can effectively narrow the range of occupational choices and limit career potential. Indeed, a review of the literature provides an array of opinions regarding career aspirations, in general, and women's career aspirations, in particular.

Super (1957) and Gottfredson (1981) explored the process and progress of an individual's career development and suggest that there is a developmental sequence affiliated with occupational aspirations. This age-related process of forming career aspirations was supported by Helwig (1998) in his study of second-, fourth-, and sixth-grade students. Rojewski and Yang (1997) also explored this concept of evolving career development in their longitudinal study of the occupational aspirations of a sample of male and female adolescents. Based on an analysis of the exhibited patterns of occupational aspiration, the researchers determined that the student's aspirations did not change dramatically over a four-year period. Rojewski and Yang found that by eighth-grade occupational aspirations were relatively fixed and little change occurred from early to late adolescence.

As previously indicated in the theoretical overview, the career development

models of Fassinger (1990) and O'Brien and Fassinger (1993) accentuated the influence of academic ability, agentic characteristics, and gender role attitudes on women's career development. Rainey and Borders (1997) utilized an expanded version of O'Brien and Fassinger's model to investigate the factors and attitudes that influence the career aspirations of seventh- and eighth-grade girls. Findings, based on the responses of adolescent girls and their mothers, revealed that the adolescents' agentic characteristics and the nature of the mother-daughter relationship affected career aspirations.

Occupational aspirations and expectations were explored by Davey (1993) in a study employing data from a 1989 survey of Canadian senior high school students. Davey found that while students aspired to a variety of occupations, only 54% believed or expected to actually realize their career goal. Furthermore, the male students aspired toward occupations where the majority of workers were of the same sex while the female students desired to be engaged in both traditionally male and traditionally female careers. Interestingly, the male-dominated occupations selected by the females were primarily professional positions with minimal attention to occupations requiring less than a university degree. In a comparison of the desired and the expected occupations it was not apparent that there was a noticeable decline in occupational prestige. Based on the significant percentage of students who indicated that they did not anticipate obtaining their career goals (46%), Davey suggested that many of the participants envision a compromise in their career development plans; "occupations that would both require less education, and offer lower socioeconomic benefits" (p. 20). Survey results demonstrated

that the primary reason for this compromising of occupational choices was the cost of the

relevant schooling. Davey also ascertained that female students most frequently

indicated altruistic incentives for occupational choices while the majority of male

students emphasised interest in the work associated with the occupation

Davey's (1993) finding that boys aspired to traditionally male-dominated

occupations was also supported by Helwig (1998). In his longitudinal study of grade

school children Helwig found that the proportion of boys choosing male occupations

were 83%, 90%, and 93% for grade two, four, and six, respectively. Girls, on the other

hand, demonstrated an inverse pattern, aspirations to same-sex occupations decreased

steadily from second to sixth grade. Furthermore, aspirations to typically male

occupations increased from 19% in grade two to 48% in grade six while the level of

aspiration to gender-neutral occupations remained stable over the six-year research

period.

Helwig's (1998) study also investigated children's perception of the social value

of occupations, the influence of self-efficacy on realism of occupational aspirations, and

the relationship between parental expectations and occupational aspirations. Results of

the study showed that there was an increase in the social value of occupational

aspirations over time with 89% of the children aspiring to professional, managerial, or

technical positions in sixth grade. The hypothesis on self-efficacy was that children will

identify more realistic and less fantasy occupational aspirations from the second to the

sixth grade. This hypothesis proved incorrect; boys did not disengage from their fantasy

aspirations of becoming professional athletes and 16% of the girls still aspired to fantasy occupations. Finally, on parental influence, the data established that the children's aspirations were similar to their parent's expectations in terms of job level (e.g., both increasingly wanted more socially valued occupations); however, there were also indications of increased levels of individual autonomy as the child matured.

Sterrett (1999) indicated that past research has postulated a number of possible explanations for the variances in women's career behaviours. In general, the research has suggested that many women: (a) emphasize job satisfaction more than salary; (b) place great importance on family relationships; (c) are unwilling to compromise their other life roles in order to achieve greater career success; and (d) regard how they feel about their occupations as more important than how their occupation looks to others (pp. 249-250). One can suggest further that these reasons could also provide a basis for understanding the nature of some portion of women's career aspirations and choices.

Gender-related change in occupational aspirations was the focus of a sociological study by Shu and Marini (1998). Although the aim of the study was to determine the influence of the women's movement on occupational aspirations variance, the research does provide pertinent information for the study of women's career development. Utilizing data on cohorts of young people from the late 1960's to the late 1970's, Shu and Marini analysed widespread changes in attitude and occupational patterns. Findings revealed that during the given time-frame there was a significant gender-related change in occupational aspirations relating to participation in male-dominated occupations,

greater prestige, and increased earnings. Shu and Marini noted, however, that although

the sex-typing of occupational aspirations did decline it continued to be a significant

issue. The study also demonstrated an increased effect of parental socioeconomic status

on earning potential and sex-typing for women.

Career Orientation

Individuals possess an array of views regarding the appropriateness of certain

occupations for either sex and this, in turn, can affect an individual's career aspirations.

A significant proportion of the studies conducted in the field of women's career

development have contemplated the factors associated with this sex-typing of

occupations and the ultimate selection between traditional or female-dominated careers

and nontraditional or male-dominated careers (Astin, 1990; Astin and Kent, 1983;

Aylward, 1990; Booth, 1982; Darcy, 1987; Garfield-Scott and LeMahieu, 1984; Greene

and Stitt-Gohdes, 1997; Helwig, 1998; Long, 1995; McCracken and Weitzman, 1997;

Miller and Budd, 1999; Murrell, Frieze, and Frost; 1991; Rainey and Borders, 1997;

Read, 1994; Sandell and Burge, 1988; Whiston, 1993; Wiseman, 1983).

Lapan and Jingeleski (1992) employed an expanded version of Gottfredson's

circumscription-compromise theory to assess students' occupational perception. Results

confirmed that adolescents often make occupational choices they perceive as suitable for

their gender. The female participants expressed greater interest and expectancy for jobs

within the social and conventional categories. Eccles (1987) suggested that the

stereotyping of occupations can lead to the elimination of otherwise appropriate

occupational choices and that by choosing female-dominated occupations women often

reduce their earning potential. Farmer (1997), referencing Betz and Hackett's (1983)

"null environment," submitted that many women perceive their family, friends, and

society in general as indifferent to their career aspirations and pursuits, therefore, they

exert less effort and fail to reach their full potential. In a discussion of earlier research

on occupational preferences, Miller and Budd (1999) observed that:

> Studies of occupational preferences throughout the 1970's and 1980's generally
>
> concluded that both males and females on the whole aspire to what are perceived
>
> as gender-appropriate occupations. These gender-typed occupational preferences
>
> have been shown to be evident at various ages throughout childhood and
>
> adolescence. (p. 19)

Several studies have assessed the issue of non-traditional and traditional

aspirations and choices for groups of Newfoundland women (e.g., Darcy, 1987; Dyke,

1992; Wiseman, 1983). Darcy, for instance, utilized a sample of 12th-grade females to

evaluate changes in career aspirations and to determine factors that may be relevant to

gender-based career choices. Based on the results of her research, Darcy suggested that

many females seem to be predisposed to either a traditional or nontraditional career path.

Aspirations were found to change over time but the basic orientation did not. Role

models, self-perceptions, and academic and work history, were found to be defining

elements associated with career choice.

Almquist (1974) investigated the influence of sex stereotypes in occupational choice in her longitudinal study of college women. Annually, during the four-year study, the women were asked to indicate their occupational and marriage plans, work, academic, and social experiences, and their role perceptions. Almquist found that 40% of the women selected occupations that were categorized as masculine and that these women demonstrated stronger work values, had a longer and more varied work history, and showed greater interest in skill development and high income.

Although some of the aforementioned studies have shown that individuals regard more occupations as appropriate for either males or females, other researchers suggest that a discrepancy still exists in actual occupational behaviour. Evelo, Jessell, and Beymer (1991), for instance, conducted a study of middle and high school students and noted that liberality was increasing (e.g., students indicated that more jobs were deemed suitable for both males and females); however, the actual career choices of the participants did not reflect the enhanced occupational attitude. Davey and Stoppard (1993) also recognized that many women who had previously indicated a desire for less traditional careers will often ultimately enter more conventional employment fields. In their study to examine the discrepancy between desired and expected occupations they found that the opinions of significant others and the cost of education and training were meaningful influences in the career preferences of female high school students.

Nieva and Gutek (1981) and Vroom (1964) also noted the disparity in early non-traditional occupational aspirations and actual, subsequent career choice. Farmer (1997)

in a study of factors related to women's persistence in a science career found that the women who changed their aspirations did so for four basic reasons: (a) in high school they indicated an interest in a science-related career simply because it was popular; (b) later in life the women found occupations that they liked better and provided a better fit with their personality and interests; (c) later in life the women found an occupation more suited to their personality and interests but they had to overcome considerable obstacles in order to achieve their goals; and (d) early career aspirations were altered because of some critical external event such as, death of a family member, pregnancy, lack of funds, or significantly negative school experiences (pp. 62-80).

Read (1994) examined the relationship between displaced homemakers, single parents, and gender equity program participation and traditional and nontraditional training choice. Gender equity sessions were defined as those programs that directly encourage women to enter male-dominated occupational fields. Read also utilized Brooks' (1988) Expectancy-Valance Model of Motivation for Occupational Choice to probe the motivational influences of women entering traditional and nontraditional training programs at technical colleges. Survey results for the 532 participants indicated that individuals who had received gender equity counselling entered more nontraditional training programs than those individuals who had participated in some other type of career planning program or those who had no prior career exploration experience.

The expectancy portion of Brooks' (1988) Expectancy-Valance Model was categorized into three subscales for Read's (1994) research study. For the first

component, vocational self-efficacy (perception of one's ability to effectively accomplish work-related tasks), Read found that the students enrolled in nontraditional programs presented higher ratings. The nontraditional students held more positive views about returning to school, of employment in a male-dominated fields, and their decision-making capabilities. For the second component, perceived structure of opportunity (one's view of educational and occupational accessibility), no significant difference was found between the groups; however, the nontraditional students did indicate a higher level of knowledge regarding the nature of nontraditional occupations and related training. Finally, for the third component of the expectancy variable, perceived social support, the nontraditional students again expressed more positive perceptions of support and encouragement in their pursuit of occupations that currently had a high majority of male representatives. The valance factor of the Brooks' Expectancy-Valance Model refers to the appeal of individual career options, the gender appropriateness, the working conditions, the salary, and so on. An analysis of the participant's responses revealed that the students who were presently pursuing credentials in nontraditional fields were more attracted to male-dominated occupations. For instance, a majority of this group believed that doing a "man's job" would not diminish their femininity nor would the possibility of sexual harassment deter them from accepting a job.

In a study of female college students, Murrell, Freize and Frost (1991) found that higher career and educational aspirations were characteristic of the women who had chosen to pursue careers in male-dominated areas and that more black females than

white female participants were inclined to focus on nontraditional occupations. Survey results also demonstrated that the black women involved in the study planned to obtain more education than was necessary for their chosen career, they anticipated less family-career conflict, and they indicated economic benefits as the primary consideration in career selection.

In their qualitative/quantitative study of individuals who were actually pursuing "non-traditional" occupational programs, Sandell and Burge (1988) underscored the significance of exposure to and support from opposite sex role models. Lemkau (1990) found that the women in her study who were employed in nontraditional careers also stressed the importance of male support for their aspirations while 66% of the sample utilized by Lunneborg (1982) specified fathers as their achievement role models. Davey (1993), however, found that in his study of high school students the same-sex parent was identified as the most helpful; fathers were less supportive of their daughters than mothers of their sons. Furthermore, if parental encouragement was minimal or absent, the endorsement of friends, teachers or school counsellors was found to be beneficial.

Dahlberg (1984) outlined several internal and external barriers that students encounter when exploring nontraditional training or employment. Some of the internal barriers include lack of knowledge, inaccurate perceptions of nontraditional workers, and fear of failure, while external obstacles include lack of nontraditional role-models, traditional stereotyping by others, and lack of representation of nontraditional workers in resource and educational materials. In a related study, Greene and Stitt-Gohdes (1997)

found that a number of factors influence a woman's choices to work in the skilled trades. The ten female participants indicated that perceptions of natural ability, a strong sense of self, a desire for independence, and supportive role models were important in their decision to work in male-dominated occupations.

The relationship between school subject preference and occupational aspirations, choice and/or persistence has been explored in a number of studies (e.g., Betz and Hackett, 1983; Farmer, 1997; Farmer, Wardrop, Anderson, and Risinger, 1995; Hackett, 1985). Indeed, the tendency to underrate the long-term occupational value of math and science and failure to participate in such programs may prove limiting to a woman's career development (Bartholomew and Schnorr, 1994). Anxiety and lack of confidence in one's math ability (Taylor and Pope, 1986) as well as low math self-efficacy (Lent, Lopez, and Bieschke, 1991) have been cited as possible contributing factors to avoidance of math.

The development of occupational sex-role stereotypes, occupational preferences, and school subject preferences was the subject of a study conducted in Britain by Miller and Budd (1999). Children from three age groups, 8, 12, and 16-year olds, were invited to participate in a questionnaire-based survey. Results indicated that occupational stereotyping decreased with age, with females demonstrating a significantly greater increase in liberality than males. This expanded liberality did not, however, translate into an expanded range of occupational preferences for this sample population. Data indicated that the female participants more often rated traditionally female occupations

as desirable career options and the traditionally male occupations as less desirable.

Indeed, an allegiance to stereotypical gender-appropriate careers was evident for both females and males. Academic subject preferences were not found to include a gender bias; both males and females choose a wide range of subjects with a moderate number of females selecting "masculine" courses.

Some evidence has been found of math and science stereotypes (Barthlolomew and Schnorr, 1994; Hyde, Fennema, Ryan, Frost, and Hopp, 1990). The significance of academic subject selection was shown to be a determining factor in the second phase of a longitudinal study of variables associated with persistence in science-related careers. Farmer, Wardrop, Anderson, and Risinger (1995) found that after a ten year period, 36% of the women studied had persevered in their desire to obtain a science-related career. Analysis established that the number of elective science courses taken during secondary school was a significant indicator of persistence for the women.

In another study investigating the determinants of persistence in a science occupation, ability was shown to be the most influential variable. Schaefers, Epperson, and Nauta (1997) examined the responses of 278 undergraduate engineering students and found that ability was of paramount importance. The students needed prerequisite skills in order to get into the faculty and to succeed. In addition, persistence was found to be influenced by self-efficacy, interest congruence (e.g., degree of fit between personality characteristics and occupational demands), and barriers or support. Barriers and support include such things as, lack of support for nontraditional career choices, stereotyping, as

well as academic and occupational competitiveness.

Generally, a woman's preference for a male-dominated, female-dominated, or gender-neutral occupation may be influenced by a variety of factors. The next section will profile some of the factors that have been advanced as consequential in the career development of women. It should be noted that these variables or factors are not mutually exclusive but have a compounding effect on the individual. Furthermore, the impact of some variables may be direct, relatively obvious, and easy to measure while others may have very indirect influences with less obvious, often internalized effect, making it difficult to differentiate for investigation and measurement purposes.

Factors Influencing Women's Career Development

The previous section on theories of career development highlights some of the influences associated with the career progression of women. Farmer (1976, 1985) and Fassinger (1990), for instance, both presented multidimensional models that integrate background factors (e.g., gender, socioeconomic status), personal factors (e.g., values, self-concept), and environmental factors (e.g., parental support) in an effort to understand the process and issues of women's career development. Gottfredson (1981) addressed the effects of societal sex norms while Astin (1984) directed attention to the structure of opportunity. Betz and Fitzgerald's (1987) model considered a wide range of factors that may affect a woman's career. Indeed, Silcox and Cummings (1999) hold that the Betz and Fitzgerald model is more appropriate for understanding the involved nature

of women's career development. They summarize the model's four categories as follows: (a) individual variables, including high ability, liberated sex-role attitudes, instrumentality, androgynous personality, high self-esteem, and strong academic self-concept; (b) background variables, including working mothers, a supportive father, highly educated parents, female role models, work experience as an adolescent, and androgynous upbringing; (c) educational variables, including high education, continuation in mathematics, and women's schools; and (d) adult lifestyle variables, including late marriage and few children (p. 265).

Research studies examining the influence of inherent gender and societal restraints have demonstrated that an array of internal and external factors interact to complicate and restrict or facilitate a woman's career development (Betz and Fitzgerald, 1987; Darcy, 1987; Green and Stitt-Gohdes, 1997; Herr and Cramer, 1992; Sullivan and Mahalik, 2000). In a study directed toward populations within the province of Newfoundland and Labrador, Darcy (1987) outlined a number of internal/personal and external/situational influences that can affect a woman's career choice. The internal factors included role conflicts, self-concept, occupational knowledge and awareness, attitudes, low female aspirations, and lack of risk-taking behaviour while the external determinants comprised early sex-role training, lack of role models, counsellor bias, educational system deficits, lack of educational/training financing, education and socioeconomic status of parents, and the number of persons consulted.

Luzzo (1996, cited in Luzzo and Hutcheson, 1996) suggested that the perception

of career-related barriers might actually serve an adaptive purpose for some individuals

by acting as a motivating force for more careful career planning and exploration, whereas

for others the perception of barriers may, in fact, substantially interfere with optimal

career development. Some of these barriers or influences will now be discussed in

greater detail.

Internal/Intrinsic Factors

The internal or intrinsic factors that will be presented in this section include

attitudes and values, multiple roles and role conflict, aspects of self, and career

awareness and knowledge. Also pertinent is the nature of aspirations, however, the first

section in this chapter provides a discussion of this variable.

Attitudes and values. Attitudes are learned predispositions that can be unlearned

within the context in that they originated, that is within the context of the family, peer

groups, schools, community structures and the like (Herr and Cramer, 1996).

Socialization practices impose a significant influence on the development of attitudes, in

general, and career attitudes, in particular (Betz and Fitzgerald, 1987; Farmer, 1976,

1985; Fassinger, 1990; Gottfredson , 1981). Fitzgerald and Betz (1983, cited in Walsh

and Osipow, 1983) asserted that "cultural attitudes and beliefs concerning women's roles

and capabilities, through the mechanisms of sex-role socialization and occupational

stereotyping, operate to encourage the development of sex-typed psychological

characteristics and to perpetuate sex-typed adult roles" (p. 97).

Some studies have investigated the origins and determinants of gender-role attitudes. Ex and Janssens (1998) in their study of 165 adolescent girls found that mothers were instrumental in influencing their daughter's attitudes toward women. The nature of the child-rearing and the mother's own attitudes were established as meaningful influences. In another study, Rainey and Borders (1997) found that adolescent's gender-role attitudes were significantly affected by the adolescents' agentic characteristics (e.g., independence, assertiveness, willingness to take a stand) and maternal variables (e.g., mother's education, employment, agentic characteristics, and gender-role attitudes). The mother's education level and her general attitude toward women were shown to be especially predictive of the daughter's gender-role attitudes.

The importance of gender role beliefs in career decision-making was demonstrated in a qualitative study by Vermeulen and Minor (1998). Interviews were conducted with 40 women who were raised in a rural environment to ascertain influences, or the role of context, on their career decisions. A survey of the responses indicated that the "beliefs about the roles of mother, wife, and worker were central in the decision-making processes of these women" (p. 237). Perceptions regarding the role of mother was of paramount importance to 95% of the interviewees; they affected the range of occupational alternatives considered, the extent of labour force participation, and the degree of family-work conflict.

Gender-based attitudes toward occupations, or sex-typing, has been explored in

numerous studies (e.g., O'Neal Weeks and Pryor Porter, 1983; Shepard and Hess, 1975; Shinar, 1975). Socialization, in the form of widely accepted gender roles, norms, and traditions, has been identified as a primary element in the development of these occupational gender-biases (Miller and Budd, 1999). Boys have been shown to exhibit a greater tendency to adhere to their stereotyped views by choosing significantly more "masculine " occupations (Davey, 1993; Helwig, 1998) while girls have been shown to express more liberal or malleable views regarding the appropriateness of occupations (Evelo et al., 1991; Henderson, Hesketh, and Tuffin, 1988). The previous discussion concerning career orientation and traditional versus nontraditional choices addresses some of the consequences of occupational sex-typing.

Kerka (1995) proposed that all career counsellors consider the influence of gender role beliefs in career exploration and decision-making. Hansen (1997), in her Integrative Life Planning framework, contended that greater emphasis needs to be placed on the modification of gender role attitudes and the resolution of gender role issues. She acknowledged the influence of differential socialization processes for men and women and the impact of gender in career/life planning.

Personal values, like attitudes, are affected by cultural socialization, they influence interactions, interests, decision-making, and lifestyles, in general. Values relating to work begin to form early in childhood (Hales and Fenner, 1972 as cited in Herr and Cramer, 1992) and can manifest gender differences and variation throughout the life cycle. Such gender differences were established in a Canadian study by Davey

(1993), using a sample of male and female high school students. Pertinent to the values expressed, females most often conveyed altruistic reasons for choosing specific occupations while males most often specified an interest in the work as the primary motivation for their career aspiration. Vermeulen and Minor's (1998) study of adult females identified six key personal values relevant to occupational planning and choice for women: autonomy, excellence, challenge and lifelong learning, prestige and success, quality of life, and service. Herr and Cramer (1996) suggested "there is considerable evidence that what an individual values, both in work itself and in the rewards that work is perceived as offering, affects vocational decisions and is internalized fairly early in development" (p. 162).

The importance of values in career and life planning has been demonstrated. Values are considered an important aspect of Super's (1990) notion of self-concept. The Archway of Career Determination focussed attention on the role of values as components of an individual's personality and hence, influential elements in understanding self and self-concept (Osipow and Fitzgerald, 1996). Hansen (1997) also emphasized the relevance of values in her holistic approach to life/career planning. Furthermore, an acceptance and understanding of differences in collective value systems across racial or ethnic lines are becoming increasingly significant in today's global environment (Herring, 1998; Osipow and Fitzgerald, 1996).

Multiple roles and role conflict. The study of women's career development is inherently complex because many women are required to manage a variety of competing roles (e.g., wife, mother, homemaker, employee, etc.). Super (1957) was one of the first to acknowledge this unique aspect when he outlined his seven career patterns for women. Several other theorists and researchers have suggested alternative categorizations based largely on the influence of home/family responsibilities (e.g., Lassalle and Spokane, 1987; Zytowski, 1969). Collectively, the studies emphasize the distinctiveness of women's career development and the need to address the issue of multiple roles and role conflict. Farmer (1997) summarized the importance of role planning:

> In a society that offers little or no support for working mothers, and sends subtle but persuasively negative messages about mothers who plan to work, planning for multiple roles becomes an essential task for career and relational success. High achieving women receive dual messages telling them to work toward success, to use their skills and express their intelligence but to devote their time to their children when they have them. (p.124)

The women's movement, progressive societal attitudes, economic necessity, and more liberal female behaviours have resulted in increased labour participation and greater choice for women; however, primary responsibility for the home and family continues to rest with the female. For women who work outside the home, balancing work, family, and home responsibilities can be a challenging tasks and realistic multiple role planning is indispensable. The concept of multiple role realism was formulated to

reflect "the recognition that simultaneous work and family involvement is a complex and potentially stressful lifestyle, and it results in an awareness of the need for careful planning and consideration of the interface between work and family roles" (Weitzman, 1994, cited in McCracken and Weitzman, 1997, p. 149).

A study by McCracken and Weitzman (1997) investigated the relationship between realistic multiple role planning and personal agency, problem-solving appraisal, and traditionality of career choice. Overall, the sample of 131 female college students demonstrated an unrealistic orientation to multiple role planning. Perception of oneself as an effective problem-solver and agency were, however, found to relate to multiple role realism. For women with high agency, or strong career orientation, an inverse relationship was found between commitment to a multiple role lifestyle and nontraditionality of career choice. McCracken and Weitzman suggested that for high-agentic women this may reflect a level of indecision regarding the likelihood of career and family or that the women may simply feel that they can successfully cope with any of the problems associated with multiple roles.

Using an adult life roles approach, Hughes and Graham (1990, cited in Kerka, 1992) described individuals as having six principal life roles: relationship with self, work, friends, community, partner, and family. The onset of a new role or change within an existing role is thought to generate conflict and possible modification of other life roles. Work-family conflict occurs when incompatible pressures arise simultaneously from work and family roles (Greenhaus and Beutell, 1985, cited in Loerch, Russell and

Rush, 1989). Greenhaus and Beutell further distinguished three forms of work-family

conflict: (a) time-based conflict, where time spent in one role impacts on one's ability to

indulge in another role; (b) strain-based conflict, where strain-based symptoms

originating within one's role constrain participation in another role; and (c) behaviour-

based conflict, where behaviour styles utilized in one role are incompatible with the

behaviours expected in another role.

The issue of work-family conflict and its connection to family domain variables,

such as number of children or level of spouse support, was studied by Loerch, Russell,

and Rush (1989). Women and men, who either were parents or had a spouse/partner,

were asked to complete a questionnaire designed to assess gender variation in work-

family conflict. Overall, the results of the Loerch et al. study demonstrated limited

support for the influence of family domain variables; the most important factor was level

of conflict within the family, then family intrusions (e.g., family demands intruding into

the workplace), and finally, total role involvement (e.g., time spent in one role versus

another). Number of children, spouse work hours/week, and couple's employment status

were not found to be significantly related to work-family conflict for men or women.

The study did find comparable levels of strain- and behaviour-based conflict for both

sexes; however, women did report a greater incidence of time-based conflicts. Finally,

for women, conflict within the family environment had an influence on all three types of

work-family conflict and family intrusions affected strain-based conflict.

The three forms of work-family conflict were the subject of another study

conducted by Carlson (1999). Carlson analysed the responses of 225 men and women in an effort to determine the influence of dispositional factors (e.g., Type A personality and negative affectivity) as well as situational factors (e.g., role conflict and role ambiguity) on time-, strain-, and behaviour-based conflict. Results of the study indicated that dispositional factors provide additional explanations for work-family conflict variations, above and beyond that explained by situational variables. Other findings showed that the number of children living at home and negative affectivity were related to greater amounts of conflict across all of the three forms. Furthermore, work role conflict was related to strain-based conflict, while Type A personality and work and family role conflict was significantly related to behaviour-based conflict.

The theory of work adjustment (Lofquist and Davis, 1991, cited in Osipow and Fitzgerald, 1996) proposes that job satisfaction can be assessed with an analysis of the correspondence between the individual and the environment, the knowledge and abilities of the person versus job requirements and needs of the person versus job reinforcers. Fitzgerald and Rounds (1994, cited in Sinacore-Guinn, Akcali, and Fledderus, 1999) suggested that this theory can be made more applicable to women's career development if attempts are made to incorporate issues surrounding the work-family relationship (e.g., the interaction of multiple roles). Canadian authors Sinacore-Guinn, Akcali, and Fledderus (1999) attempted to do just that with the supposition that aspects of the family environment will have a predictive effect on job satisfaction. The responses of a sample of 173 employed women supported this supposition and indicated that the family

environment had an influence on four areas of job satisfaction: work on the present job, present pay, supervision, and job in general. Sinacore-Guinn et al. submitted that the nature of the family environment may actually facilitate job satisfaction, "acting as a buffer against job stress or by providing positive psychological spillover" (p.199). Strategies that promote an organized and structured family environment may be helpful for women considering or experiencing the multiple roles of worker, spouse/partner, and/or parent.

Cook (1993) discussed the gendered nature of the work environment and its impact on the career development of women and men. She submitted that because of traditional expectations and stereotypical beliefs and practices, the workplace for women can be filled with obstacles and barriers such as, discrimination and sexual harassment. Cook pointed to the deficiency of child care benefits and flextime arrangements as examples of employer's continued acceptance of the traditional view of the family (e.g., wife at home) instead of the more realistic view of career women, or dual working couples (e.g., the reality of multiple roles). "Many workplace rules and practices remain based on a male, single-earner workforce, and many families still act under role-sharing assumptions based on the presence of full-time homemakers, despite the fact that fewer than 7 percent of families fit that model" (Kerka, 1991, p.1). Women (and men) strive to cope with the "day-to-day life system" and the demands of multiple roles, however, women are often constrained by existing establishment bias; "she must exert energy in the face of the system's resistance to her efforts" (Davidson and Gilbert, 1993, p. 151).

Kerka (1991) maintained that individuals, employers, and society can benefit from

effective work-family management. Some of the benefits cited by Kerka include:

improved quality of life and mental health, greater individual contributions to the well-

being of society, increased productivity, a wider pool of competent employees which

could avert projected labour shortages, and a more holistic upbringing for children.

Betz and Corning (1993), in their discussion of the inseparability of career and

personal counselling, pointed to the "inevitable interconnectedness" of work and family.

Davidson and Gilbert (1993) suggested that career counsellors successfully attend to the

traditional duties of providing career information, assessment and guidance, however,

much more needs to be done in terms of addressing the links between occupational and

family systems. Deliberate attention to role planning is essential for achieving successful

work-family balance. Bartholomew and Schnorr (1994) held that what is needed

between partners is open discussion regarding issues such as child care, shared

housekeeping responsibilities, potential job relocation, outside support systems, and

coping strategies. Long (1995) advocated educating men with regard to the importance

of sharing home and family responsibilities. Kerka (1995) suggested that for the

increasing number of dual-career couples, counselling must include "evaluation of the

influences of gender-role beliefs, consideration of the interaction between the partners,

and recognition of social policies that still favour the separation of work and family" (p.

2).

Lack of knowledge regarding family-work issues and minimal multiple role

planning can adversely affect one's lifestyle and appropriate career interventions are recommended (McCracken and Weitzman, 1997). Farmer (1997) identified several interventions that may be useful in combining multiple roles and averting or mitigating role conflict: (a) understanding socialization (e.g., examining origins of gender role beliefs and values), (b) prioritizing role values, (c) educating in combining roles , and (d) enhancing work-family self-efficacy (pp. 267-268).

Acknowledging that individuals face the challenge of balancing work and family roles, Kerka (1991) compiled a list of important topics for life/career planning based on her analysis of past research and practice. Although originally intended for program facilitation, the list succeeds in drawing attention to some of the crucial issues surrounding multiple roles and role conflict and may be useful for individual reflection as well as for one-on-one or group counselling sessions. The issues are as follows: (a) interdependence of individual, family, and career systems; (b) developmental stages of individual, family, and career; (c) values, realistic expectations, and priorities; (d) career and lifestyle choices; (e) coping with multiple roles; (f) sex roles and sex stereotypes; (g) parenthood/family life education; (h) child care and elder care options; (i) managing time, a household, money, stress, and change; (j) using resources and developing support systems; (k) dual career and single parent/displaced homemaker issues; and (l) cultural differences in family-work attitudes (Kerka, 1991, pp. 2-3).

Aspects of self. The previous consideration of theories, empirical studies, and

aspirations has focussed attention on the importance of self. Self-awareness, self-esteem,

self-efficacy (Hackett and Betz, 1981), and overall self-concept (Gottfredson, 1981;

Super, 1980) have been shown to be meaningful concepts in understanding women's

career development. Farmer (1976, 1985) suggested that self concept, academic self-

esteem, sex role orientation, risk-taking behaviour and fear of success can act as barriers

to women.

A variety of situational, cultural, and other internal variables interact to limit or

cultivate a woman's concept of self. Blustein and Noumair (1996) proposed an

"embeddedness" perspective for career development reflecting this influence of context

on self and identity. They submitted that this perspective is a "way of underscoring an

interdependence between individuals and their psychological, social, historical, and

cultural contexts" (p.437). In career counselling, "an embedded view of the self and

identity provides a means of understanding the increasingly complex network of factors

that influence the development and expression of those concepts" (p. 440). Blustein and

Noumair contended that this viewpoint encourages counsellors to look beyond the

intrapersonal nature of the individual's self and identity toward a consideration of

contextual issues such as, lack of support and social relationships, religious upbringing,

cultural traditions and expectations, economic and occupational trends, and the political

medium.

Self-esteem and its role in career development have been investigated in a

number of studies (e.g., Fannin, 1979; Greenhaus and Simon, 1976; Knox, Funk, Elliott, and Bush, 1998; Silcox and Cummings, 1999). High self-esteem is viewed as an enabling variable for women's career development (Blustein and Noumair, 1996; Swanson and Lease, 1990), yet adolescent girls have been found in some studies to exhibit lower self-esteem then boys (Harper and Marshall, 1991). Knox et al. (1998) alleged that the notion of possible selves (e.g., self-conceptions) can be utilized to better understand this variation in levels of self-esteem and overall gender differences in global self-esteem. They asked 212 high school students to complete a questionnaire and a self-esteem measure. Based on the findings, Knox and her colleagues surmised that "self-esteem during mid-adolescence is more highly multidimensional for girls than for boys" and that the girls "report more contradictory or opposing self-attributes than do adolescent boys, and distress over such opposing attributes is heightened at mid-adolescence" (p.74). The girl's self-esteem was influenced by hoped-for possible selves related to such things as financial independence, education, occupational success, and relationships. Feared possible selves related to physical appearance were also found to be significant. The concept of possible selves is discussed in greater detail in the upcoming section on counselling intervention strategies.

The role of self-efficacy expectations in the formation of one's self concept has already been alluded to in the previous discussion regarding the nature of career aspirations and the theoretical foundations of women's career development. Research such as that conducted by Hackett and Betz (1981) and Betz and Hackett (1981)

underscored the influence of socialization, support systems, and anxiety on self-efficacy

and the part played by low self-efficacy in career choice and career progression. Indeed,

women's self-efficacy has been shown to be lower than men's (Hackett, Betz,

O'Halloran and Romac, 1990). Bandura (1977, 1982, cited in Gianakos, 1999) proposed

that low self-efficacy is related to "self-debilitating expectations" and "avoidance

behaviours" (p. 246). Niles and Sowa (1992) contend that self-efficacy can influence an

individual's approach to future career planning efforts.

Self-confidence and assertiveness are regarded as instrumental elements of self

and identity. In a study investigating identity development, Lucas (1997) found that

women tended to be more reliant on their parents both emotionally and functionally, and

generally, they did not feel confident regarding career decision-making. Clausen and

Gilens (1990) also concluded that self-confidence can be a material issue for women.

Based on their analysis of longitudinal data respective of women born between 1920 and

1929, the researchers determined that "high labour force participation was associated

with increases in self-confidence, status seeking, assertiveness, and intellectual

investment between adolescence and later adulthood" (p.595). Rainey and Borders

(1997) and Nevill and Schlecker (1988) likewise supported the notion that assertiveness

is influential in the career development of women. Nevill and Schlecker found that

assertiveness and strong self-efficacy expectations correlated with a willingness to

engage in nontraditional career-related activities. An opposing view was presented by

Lapan and Jingleson (1992) who found that assertiveness was related to an individual's

perceptions of their self-efficacy and their preference for science, yet it was found to be unrelated to gender.

In a study conducted to ascertain relevant factors that prompt women to opt for occupations in the skilled trades, Greene and Stitt-Gohnes (1997) emphasized the importance of one's self-concept. Along with perception of innate ability and supportive role models, the participants indicated that a strong sense of self and a desire for independence (e.g., a sense of autonomy) were determining variables in their career selections. Greene and Stitt-Gohnes acknowledge the influence of self-concept and self-efficacy in career decisions.

Reixach (1995) implicated several aspects of self in her discussion of possible reasons for women's tendency to underestimate their skills and abilities, a problem especially apropos for socioeconomically disadvantaged women. She maintained that socialization, gender role conditioning, and lack of family and community supports foster poor self-esteem and low self-confidence. Reixach suggested that disadvantaged women face specific challenges; "the experience of receiving social assistance may compound the negative effects of self-esteem and self-concept on skill awareness for disadvantaged women" (p. 4). Feelings of "isolation," "lack of control," "discrimination," and "lack of support" are terms used to describe the self perception of women who are economically disadvantaged.

Expanding the range of occupational options for women and intensifying the career development process requires consideration of several intrinsic issues

encompassing the self. Bartholomew and Schnorr (1994) asserted that career counselling programs need to cultivate young women's self-concept, self-esteem, and self-confidence while attending to issues surrounding "fear of success." They recommended interventions that promote "self-awareness, risk-taking, perseverance, and willingness to be a career forerunner" (pp. 249-250) and activities that help females to understand why they sometimes downplay their skills and achievements and ways to overcome this problem.

Career awareness and knowledge. One of the dominant characteristics of our global, knowledge-based society is change. The workplace is characterized by dislocation, downsizing, and job elimination as well as feelings of anxiety, and insecurity (Hughey and Hughey, 1999). Women, if they want to succeed in today's labour market, need current and accurate occupational information and career guidance.

McAuley (1998) contended that career counselling requires "a shift towards addressing current economic and political realities impacting the pursuit of work" (p. 3). Hoyt and Hughey(1997) also support this statement; they suggested that counsellors need to aware of the occupational and educational nature of today's knowledge-based economy. With respect to the cultivating of career awareness and knowledge in students, Hughey and Hughey (1999) recommended the following: information on occupational and educational options, counsellor assistance with selecting high school courses, parental involvement, and current information on economic and labour market trends.

Lack of career information was found to have a limiting influence on the range of occupational alternatives considered by a group of adolescent women in Newfoundland and Labrador (Taylor and Pope, 1986). In a more recent study, Vermeulen and Minor (1998) found that many of the 40 women who grew up in a rural environment also lacked access to the information they needed to make their career decisions. Some information was available in schools, at home, and from family and significant others; however, several women were unable to obtain accurate information regarding specific occupations or particulars regarding academic scholarships. Vermeulen and Minor asserted that "information or, more significantly, the lack of systematic information gathering and career exploration was a major factor affecting the participants' career decisions" (p. 243).

Having occupational information readily available does not mean that the resources will be used. Herr and Cramer (1996) suggested that in order to maximize use and effective utilization of the resources, an individual's level of motivation and assimilation processes must be assessed and the quality of information evaluated. Essentially, the individual should understand why the information is important and have a readiness to learn while the counsellor should attempt to determine the individual's preferences with regard to gathering organizing, and processing information. Current, valid, and applicable occupational information are, as previously indicated, imperative. Brown and Brooks (1991) submitted that career counsellors need to assist clients in the gathering and organizing of occupational information and they also need to promote

practical assessment of the occupational alternatives. They further suggested that both counsellor and client should be aware of the limitations associated with gathering occupational information: (a) printed sources of information can be dull and may not provide the kind of lifestyle information desired by the client; (b) counselling sometimes stops prematurely at the information-gathering stage; (c) some clients need extra help in setting up and conducting information sessions; (d) clients can easily misinterpret information; and (e) some sources of information used by clients (e.g., friends, parents, workers new to the field) provide unreliable and inaccurate information (Brown and Brooks, 1991, pp. 261-262).

Another problem associated with information and information-seeking in career counselling is an information overload. Post-Kammer and Perrone (1983), in their study of talented individuals, found that additional occupational information can expand the range of possible career alternatives to a point where individuals experience frustration of choice anxiety. A study by Barak, Carney and Archibald (1975, cited in Osipow and Fitzgerald, 1996) supported this notion; they contended that additional career information is not necessarily the solution for career indecision.

External/Extrinsic Factors

The situational or extrinsic factors that will be introduced in this section include socialization/gender bias, family influence, influence of significant others, and socioeconomic status. Role modelling is another significant factor in women's career

development, however, the final section of this chapter provides for a discussion of this variable.

Socialization/gender bias. Earlier discussion of career-related issues has focussed attention on the impact of socialization in the lives of women. Socialization has been shown to be a factor in career aspirations (Astin, 1984; Gottfredson, 1981; Herr and Cramer, 1996), career orientation (Miller and Budd, 1999), self-efficacy (Hackett and Betz, 1981; Mathieu, Sowa, and Niles, 1993), attitudes (Walsh and Osipow, 1983), self-concept (Reixach, 1995), gender role beliefs (Hansen, 1997), and multiple-role planning (Farmer, 1997).

Socialization practises can encourage women to adopt inaccurate and limiting assumptions that, if not remedied, can lower career aspirations and work expectations (Astin, 1984). Farmer (1980) suggested that a variety of background, personal , and environmental factors can interact to reduce the general and occupational advancement of women. Women will frequently underestimate their capabilities because of their reliance on stereotypical beliefs that support passivity and dependence. Hackett and Betz (1981) maintained that the restrictive nature of women's socialization (e.g., lack of support for nontraditional behaviours and limited task performance opportunities) can lead to low career-related self-efficacy and low expectations for career success.

Walsh and Osipow (1983) referred to societal sex-role stereotyping as the widespread use of cultural norms to label and direct male and female behaviour,

attitudes, beliefs, values, and the like. They maintained that direct instruction, vicarious learning, modelling, and reinforcement and punishment within the family, school, and/or community environment, "teaches" a child to adopt or internalize societal expectations or norms. They suggested that:

> In terms of adult roles, men are expected to work and be the family provider. Women are expected to be the nurturant wife and mother who stays at home. In terms of personality characteristics, men are expected to develop those associated with competency, instrumentality, and achievement, whereas women are to develop those comprising a "warmth-expressiveness" cluster, including nurturance, sensitivity, warmth, and emotional expressiveness. (p. 95)

> Davidson and Gilbert (1993) observed that "for men the development of career is anticipated as a performance demand central to their life roles; other life choices are expected to accommodate what is required for male success" (p.150). Women, on the other hand, although they may receive some measure of societal encouragement, are still expected to be primarily responsible for the home and the family.

> Eccles (1987) asserted that gender role socialization is influential in the development of sex differences in values and "expectations for success." Stereotypes can devalue a female's confidence in her abilities, effectively lower her expectations for success, and circumscribe occupational options. Women often underestimate their skills and abilities as a result of stereotypic attitudes and beliefs (Reixach, 1995; Swanson and Lease, 1990). Weiler (1996) suggested that girls often have limited knowledge of

occupations in mathematics, science, and engineering and are often not encouraged to

pursue math and science-related school programs. The stereotyping of mathematics and

science as traditionally male activities and its effect on career development for women

was also cited by Bartholomew and Schnorr (1994):

> Young women will not go into the more advanced math and science courses if
>
> they do not perceive them as being beneficial. Even if they begin to realize, as
>
> adults, that math- and science-related fields are appropriate career options for
>
> women, they will experience the consequences of a limited math and science
>
> background. (p. 41)

Occupational stereotypes are the "normative views of the appropriateness of

various occupations for males and females" (Walsh and Osipow, 1983, p. 96). Herr and

Cramer (1992) represented occupational socialization as a career-related aspect of

general socialization. They described the process of occupational socialization as a part

of career development that includes:

> Factors- psychological, sociological, cultural, economic- which, across time,
>
> result in self-career identity, decision-making ability, and career maturity. Such
>
> socialization processes, as we see it, have to do with those processes and factors
>
> that aid or impede one's acquisition of the values, knowledge, and skills leading
>
> to effective career behaviour. (p. 155)

Occupational stereotyping, or the classification of occupations according to sex

type, is thought to begin early in childhood (Gettys and Cann, 1981) and evolve over

time. Hawley and Even (1982) found that stereotypes were more profound for high

school students. Gottfredson (1981) asserted that between the ages of six and eight

children become more aware of gender role differences and begin to eliminate career

alternatives. She contends that bias resulting from occupational sex role socialization

results in a narrower set of career options for girls compared to boys. In a recent

longitudinal study, Helwig (1998) investigated the consistency of Gottfredson's

assumption that children will choose more same sex occupations as they get older. He

found that the boys in his sample did follow this pattern, however, girls increasingly

choose a greater number of male-dominated occupations. Helwig suggested that efforts

to promote nontraditional careers for females may be paying off, but that "boys are

becoming more "ossified" in traditionally male occupations as they age" (p. 261).

The influence of socialization and gender bias has been previously represented in

the discussion regarding the issues of career orientation and career aspirations. Evelo,

Jessel, and Beymer (1991), for instance, suggested that although attitudes may reflect a

decrease in occupational stereotyping, actual career-related behaviours may actually

represent more traditional orientation. Shu and Marini (1998) also identified a decline in

the degree of sex-typing by young people and an increase in aspirations towards male-

dominated occupations by women. They maintained, however, that occupational

stereotyping continues to influence the lives and career development of both men and

women.

Occupational segregation or gender bias within the organizational structure, can

have an adverse impact on women's career development, inhibiting or preventing

women's career advancement and limiting occupational achievement (Brown and

Brooks, 1996; Greene and Stitt-Gohnes, 1997; OECD, 1998). Women face issues of

legitimacy in the workplace (Davidson and Gilbert, 1993), sexual discrimination, and

harassment (Kerka, 1995). Indeed, women pursuing nontraditional majors indicated that

they "anticipated encountering unfair work practices and experiencing prejudice and

isolation in the workplace" (Silcox and Cummings, 1999, p. 273). Cook (1993) pointed

to the instances of discrimination and harassment in the workplace and suggested that

organizational gender bias is evident in the lack of business operated day-cares and

flextime options. Davidson and Gilbert (1993) described the dilemma of the woman

facing organizational bias: "in addition to energy required for the job she's doing, she

must also exert energy in the face of the system's resistance to her efforts" (p. 151).

Walsh and Osipow in 1983 stated that "society influences girls and young women

to limit their life roles and occupational options on the basis of gender alone, without

regard for or interest in their unique individual capabilities and potentials for

development" (p. 97). A decade later, Cook (1993) maintained that although the great

majority of women now work outside of the home, gender bias is still apparent. She

noted that both men and women still adhere to the traditional "division of duties";

women still feel compelled to interrupt or adapt their careers to accommodate family

needs, and a father's involvement with child rearing and home responsibilities is often

perceived of "as a "plus" rather than as a normal life responsibility" (p. 231). Cook,

(1993) held that "gender-based differentiation of our society is as robust as ever ... (an)

evolution rather than revolution" (p. 227). Farmer (1997), in her reflection on the

influence of socialization and gender bias, appears to agree with Cook's position:

> Twenty years ago ... I was riding a crest of optimism about the future and equity
>
> in the workplace for women. Twenty years later, my optimism has been toned
>
> down, not lost. There have been important gains for women during those
>
> decades, but we are still a long way from sex equity in the workplace and in our
>
> society as a whole. (p. 18)

Family influence. Parents are considered to be powerful influences in a young

woman's career development. Blustein (1997), in a discussion of his context-rich

perspective of career exploration, highlighted the importance of the family in promoting

progress in career development. Splete and Freeman-George (1985, cited in Naylor,

1986) outlined several family influence factors that are relevant to educational and career

pursuits: (a) geographic location, (b) genetic inheritance, (c) family background, (d)

socioeconomic status, (e) family composition, (f) parenting style, and (g) parent work-

related attitudes. (Please note that the significance of parents' socioeconomic status will

be explored in greater detail in an upcoming section and the role of parents in

socialization and its subsequent influence on career development has been previously

discussed.)

The nature of the parent-child relationship and its influence on career aspirations

has been investigated in a number of studies (e.g., Blustein, Walbridge, Friedlander, and Palladino, 1991; Hoffman, Hofacker, and Goldsmith, 1992). Male participants in a study conducted by Davey (1993) indicated that both their mother and father were supportive of their career aspirations while the female participants reported less support from their father. In a longitudinal study of young children, Helwig (1998) found that over time children aspired to more professional, technical, and managerial occupations in keeping with expressed parental expectations. Sewell and Hauser (1975 as cited in Farmer, 1997) demonstrated the significance of parental support on the career aspirations of high school students. Farmer's (1985) study found that aspirations were affected by parental encouragement; however, greater emphasis was found for the younger, grade nine participants compared to the grade twelve participants. Farmer speculated that this may be the result of an increasing need for independence from parents as a child matures.

The significance of family influence was also established in a sociological study by Shu and Marini (1998), to assess gender-related change in occupational aspirations for cohorts of young people from the late 1960's and the late 1970's. Parent's socioeconomic status (combination of level of occupational prestige and education) was compared to the occupational aspirations of the cohorts over time. Based on an analysis of the data, Shu and Marini concluded that: (a) over time the influence of parental SES on the earning potential and sex type of occupational aspirations increased, (b) the sex type of the mother's occupation had an effect on the nature of the daughter's aspirations during the late 1970's (e.g., sex typing declined), (c) for the white female respondents, the mother's

SES was more instrumental in terms of occupational prestige, and (d) the change in occupational aspirations was greater for women with highly educated parents.

Several studies have established the influence of mothers in a female's career development (e.g., Naylor, 1986; O'Brien, 1996; Young, 1994). O'Brien and Fassinger (1993) contended that a daughter's relationship with her mother is associated with career orientation and career choice; "young women who exhibit moderate degrees of attachment and independence form their mothers tend to value their career pursuits" (p. 466). The model utilized by O'Brien and Fassinger in their study was subsequently modified by Rainey and Borders (1997) to include additional maternal variables (e.g., gender role attitudes, educational status, and employment status) and a younger sample population that resided in a rural rather than an urban environment. Review of the responses of the 276 seventh- and eighth-grade students revealed that career aspirations were influenced by the nature of the mother-daughter relationship (e.g., psychological separation and attachment) and that the daughter's gender role attitude was greatly affected by the mother's characteristics, especially her education level and her own attitudes towards women. This connection between mothers' and daughter's gender role attitudes was also supported by Ex and Janssens (1998) while Hackett (1997) supported the use of career counselling interventions that promote the positive aspects of a mother-daughter relationship.

A study by Whiston (1996) investigated the influence of family on career indecision and career decision-making self-efficacy. The findings revealed that high

levels of organization and control in a woman's family were related to decreases in career indecision (e.g., less confusion, and less reliant on others). The intellectual-cultural orientation of the family environment was found to be related to career decision-making self-efficacy for both men and women.

Many studies have acknowledged the value of parental and family support for women pursuing or considering male-dominated careers. Lunneborg (1982) found that for females in high school and college parents represented the primary source of support. Betz and Fitzgerald (1987) cited several family-related characteristics in their survey of facilitating factors relevant to women's career development, namely, a working mother, supportive father, and educated parents. Hackett, Esposito, and O'Halloran (1989), in their study of college women, found that both parents can have an effect on career orientation (e.g., traditional versus nontraditional) and that a mother's support becomes especially important if the father expresses an unfavourable attitude towards the daughter's decision to pursue a nontraditional career path. In more recent studies the significance of parental support continues to be evident. Women in both traditional and nontraditional college programs reported supportive family environments in a Canadian study conducted by Silcox and Cummings (1999). In a study by Greene and Stitt-Gohnes (1997) women currently employed in or training in the skilled trades indicated that family members "served not only as role models but also provided influence that was inspirational for (all) workrole pursuits" (p. 274).

Parents can be active and effective participants in their child's career

development (Herbert, 1986). Way and Rossman (1996) maintained that parents can facilitate the transition from school to a career if they deliberately discuss career-related issues with their children, get involved in their children's schooling and demonstrate good work values. McDaniels and Hummel (1984, cited in Naylor , 1986) further suggested:

> Encouraging the development of such basic work attitudes as promptness, respect, and responsibility; stressing that the work children do in school is good, important, and related to the world of work; helping children understand that no one individual can be completely competent in all things; providing a climate conducive to study; serving as the connecting link between home and school; and encouraging participation in diverse experiences outside of school, including leisure activities and part-time jobs. (p. 3)

Bartholomew and Schnorr (1994) advocated career counselling interventions for young females that encourage parental involvement, dialogue, an understanding of the parent's career decision-making process, and an understanding of how family influences career choice. Sinacore, Healy, and Hassan (1999) endorsed this parental connection. They submitted that "parental involvement is one of the most potent influences affecting their children's career development" and it is "especially important during the teenage years, when movement towards individuation of adolescents often causes confusion with respect to the roles that parents can continue to play in their lives" (pp.331-332). Sinacore et al. offered some suggestions for "maximizing the positive aspects of parental

involvement" in career counselling:

<u>Children age 5-13</u>

1. Increase parents' awareness of how their attitudes, comments, and work values can influence the child's gender-role beliefs, occupational aspirations and understanding of work.

2. Encourage parents to help their child to explore and seek information regarding careers.

3. Reinforce, for parents, the value of higher education or alternate career training.

4. Assist parents in becoming more aware of their child's interests, abilities, and achievements.

<u>Adolescents age 13-17</u>

1. Encourage parents to help their daughters to overcome stereotypes regarding academic programs and career options.

2. Provide information to parents regarding the labour market and occupational opportunities, general career development, and vocational testing so that parents can help their teens to identify their personal interests, abilities, and potential.

3. Encourage parents to be expressive regarding their belief and pride in their son or daughter.

4. Motivate parents to exemplify good work values and habits while they

promote and praise the same in their son or daughter. (pp. 319-332)

Parents provide a framework for their children's values, behaviours, and

motivations and they are in a most influential position to convince them of the

significance of education and work in today's economy. Osipow and Fitzgerald (1996)

summarized the influence of parents and the family environment on career development:

> Familial factors are important to career decisions, both in the determination of the
>
> situational variables involved in career development (such as educational,
>
> economic, hygienic and medical resources, social support and reinforcement, and
>
> the provision of a context for work) and in the intra-individual variables (such as
>
> the physical and psychological characteristics that have a strong genetic
>
> component). (p. 322)

Significant others. Farmer (1985) and Walsh and Osipow (1983) highlighted the

importance of significant others in women's career development. Individuals outside of

the family unit can play a positive role in women's career development; they can serve as

role models, provide support and encouragement, and supply additional career-related

information.

Hackett, Esposito, and O'Halloran (1989), in a study of college women, found

that the influence of significant others was significantly related to career salience (e.g.,

importance of career and work in one's life), level of educational aspirations, and career

traditionality. For this group of women, female teachers were the most important influence for career salience and educational aspirations, male friends were perceived as having a negative effect on career salience, and male role models, in general, had a negative influence on women who desired nontraditional occupations. In Davey and Stoppard (1993) the influence of significant others was one of the factors found to "discriminate between students who expected to enter their desired occupations and those who expected to enter more traditional occupations than desired" (p. 235). The students whose occupational expectations were more traditional than their desired occupations implied less support from significant others.

A Canadian study of women in traditional and nontraditional science majors emphasized the importance of extrafamilial role models. Persons outside of the family unit were most influential for the group of women pursuing nontraditional science majors (41%) and they were important for 33% of the traditional academic majors, following the influence of mothers (Silcox and Cummings, 1999). Murrell, Frieze and Frost (1991) found that support from individuals outside of the family was especially important for women aspiring to careers in male-dominated occupations. Spouses/partners and friends played a positive role in the career development of the men and women in a study reviewed by Farmer (1997). The individuals participating in this study did not express positive views of their teachers as influential significant others; "several ... suggested that their teachers seemed unmotivated and just going through the motions"(p. 180).

Counsellors and teachers are often not called upon or are too busy to assist with the career decisions of young girls or women. In a study by Taylor and Pope (1986), less than 10% of the females surveyed indicated that they had discussed their career plans with the school counsellor. Lunneborg (1982) and Greene and Stitt-Gohnes (1997) found that counsellors were not a factor in the career decisions of nontraditional women. With respect to their study involving women in the skilled trades, Greene and Stitt-Gohnes, suggested that information concerning trades occupations may not have been considered by the counsellors nor made available to the students during high school. Rural women in a study by Vermeulen and Minor (1998) indicated that their teachers often did not challenge their restricted view of appropriate career options and some fathers were unsupportive of their daughter's career aspirations. Other studies have, however, demonstrated that teachers were meaningful influences in career development (e.g., Almquist, 1974; McLure and Piel, 1978). Davey (1993) found that 41% of the high school students interviewed credited their teachers as being influential, or a supportive influence, with respect to their career aspirations.

Counsellor bias regarding the merit of various educational alternatives can restrict an individual's career exploration process and/ devalue certain educational choices. Hughey and Hughey (1999) suggested that counsellors place considerable emphasis on preparing students for universities but are often unresponsive to the needs of the majority of individuals who are not university-bound. They maintained that counsellors need to be aware of the nature of and changes to the labour market and

advise students as to the full range of occupational and educational options. Hiebert and Bezanson (1995) agreed that more attention needs to be given to all of the opportunities that are available. "More value must be placed on technical occupations, apprenticeships, trades, and other skilled work. Such alternatives may then be seen as legitimate "first choice" options" (p. 1).

Failure to consider the full range of occupational options (e.g., skilled trades as well as professional careers) and provide the necessary information, may reflect a form of occupational and gender bias on the part of the counsellor. Nevill and Schlecker, (1988) maintained that this and other types of counsellor bias can influence career counselling services for women. Counsellors, like other individuals, are socialized to differentiate by gender (Cook, 1993); however, it is imperative that they become "aware of their biases and stereotypes and how these attitudes may influence their work" (Hansen and Harless, 1988, p. 2). Bartholomew and Schnorr (1994) supported this position and went on to say that counsellors have a responsibility to investigate and correct gender bias in career assessment measures. They also suggest that there is a need to acquire and integrate gender-fair language into one's counselling practice.

Ward (1995) directed counsellors to be knowledgeable about the influence of gender and gender bias in a female's career development. She suggested that counsellors (a) strive to develop an awareness of sex bias and sex role stereotyping in current theoretical frameworks, (b) avoid placing limits on career choice because of gender, (c) use gender-fair language, (d) assess their own personal biases and ensure gender-fair

practices, (e) be sensitive to the affects of socialization and stereotyping on their clients, and (f) be knowledgeable regarding issues such as discrimination, harassment, and multiple roles.

Socioeconomic status. Socioeconomic status (SES) is one of several important environmental factors that influence the career development of women. Variation in SES may affect the nature of career aspirations and promote or inhibit career plans. It can influence attitudes, values, expectations, opportunities, and achievements. "Socioeconomic status has been acknowledged as a powerful determinant of vocational behaviour" (Osipow and Fitzgerald, 1996, p. 235).

The cost of post-secondary schooling may present a daunting financial challenge for families, particularly those with a low SES background. It was distinguished as an important variable affecting occupational expectations for a group of adolescent females in a study conducted by Davey and Stoppard (1993). In another study, Davey (1993) surveyed 192 female and 173 male students and found that 25 percent of the respondents indicated that cost of education was their most serious obstacle, making it the number one reason for failure to achieve one's career aspiration. Luzzo and Hutcheson (1996), in a study of perceived occupational barriers, also concluded that financial obstacles were significant for many of the study's participants. More than 40% of the men and women indicated that it was an influential factor for future occupational plans.

A Canadian study by Hannah and Kahn (1989) investigated the relationship of

SES and gender to the prestige level and gender composition of occupations. The findings revealed that: (a) the prestige levels of the occupations selected by the students were comparable to their own SES background, (b) male-dominated occupations were chosen more often by girls with high SES backgrounds, and (c) "low SES students held lower self-efficacy expectations than high SES students regardless of the job prestige level" (p.176). A study by Shu and Marini (1998) supports the correlation between high SES girls and male-dominated occupational aspirations: "women from higher socioeconomic backgrounds were more likely to experience gender-role attitudinal change, to have the resources needed to achieve high levels of educational and occupational attainment, and to be exposed to people who were achieving high status in male occupations" (p. 61).

This relationship between high SES and career development was examined in a Finnish longitudinal study. Pulkkinen, Ohranen, and Tolvanen (1999) found that high SES backgrounds were directly related to high career orientation in females and males. Low SES was not linked to career orientation but the influence of a "less than privileged" background was expressed at age eight in the form of anxiety and passivity characteristics.

Clearly, there is a wide range of influences associated with women's career development. Strategies that address these influences are necessary for optimal career exploration and progress. The next section will highlight some of these strategies.

Career Counselling Intervention Strategies for Women

This section opens with some general commentary regarding career counselling

for women and proceeds to a detailed discussion of selected career counselling

intervention strategies that are relevant to this research study and the career counselling

program, "Shaping Your Future: Towards the Occupational Integration of Women." The

specific topics include imagery, possible selves, role models, and decision-making.

Career counselling intervention strategies for women need to address the myriad

of influences associated with women's career development. Kerka (1998) suggested that

a more inclusive, life-span perspective is required, attending to issues such as gender as

they exist within our cultural context. Career counselling strategies have focussed on

increasing self-esteem and self-efficacy, providing assertiveness training, increasing

career awareness, providing role models, or developing decision-making skills. To be

effective, however, any career counselling strategy must seek to amend the barriers and

restraints that are often associated with women's career development. In particular, the

pervasive influence of gender stereotyping should be examined in an effort to curb the

unnecessary elimination of occupational alternatives.

Gender can have a significant influence on a woman's career choice. Read

(1994) supported the objective of gender equity programs, to increase attainment of

"nontraditional" occupations. She advocated a multidimensional approach to

counselling that utilizes Brooks' (1988) Expectancy-Valance Model of Motivation for

Occupational Choice. Specifically, she encouraged the use of cognitive strategies that

promote realistic self-appraisals, the provision of accurate labour market information and role models, and opportunities for peer and family support. Bartholomew and Schnorr (1994) in a discussion of ways to promote the concept of gender equity and an expanded course of career exploration for women suggested that counsellors:

> (a) enhance counsellor awareness of gender role stereotyping, (b) break down women's gender role and occupational stereotypes, (c) help women overcome math and science stereotypes, (d) improve young women's self-concepts, (e) improve young women's self-esteem and self-confidence, (f) address their fear of success, (g) help female students formulate realistic family and life planning goals, (h) examine their parental and peer influences, and (i) develop support systems. (p. 246)

Particular areas of concern have been accentuated by some researchers. Greene and Stitt-Gohdes (1997), for instance, emphasized the importance of self-concept development especially for women aspiring to male-dominated occupations while Whiston (1993) underscored the importance of a woman's self-efficacy for tasks. Whiston's study found that women demonstrated higher self-efficacy for tasks that involve working with people rather than things and she recommended that counsellors be aware of self-efficacy expectations and provide opportunities for enhancement where necessary. Constructivist approaches to career counselling promote self-knowledge and personal empowerment as a means of developing proactive postures towards career development (Hoskins, 1995; Peavy, 1995). Hoskins emphasized the importance of self-

awareness:

> Enhancing self-knowledge enables a person to assess life positions; in doing so,
> an individual can determine the extent to which these positions may either
> constrain or support growth in various aspects of employment. Counsellors act as
> a mirror or a lens, enabling the client to gain more knowledge of self and the
> world. (p. 2)

Imagery and Guided Fantasy

In career counselling an individual's experiences often consist of the receipt of
occupational and training information, test scores, or inventory results. Imagery (or
fantasy), however, has the potential for making the counselling experience more
significant and relevant for the client. Heppner, O'Brien, Hinkleman, and Humphrey
(1994) underscored the value of creative vocational interventions, such as guided
imagery, as means of enhancing the career counselling process for both the counsellor
and the client. The utilization of imagery techniques can enhance an individual's
capacity for such things as self-knowledge, problem solving, creative thinking, and
concept evaluation. Indeed, in domains such as learning, imagery is actively promoted
because it is believed that by providing words or sounds that stimulate the creation of
mental pictures students can more easily connect new information or ideas with
previously discerned material (Myrick and Myrick, 1993).

In essence there are two types of imagery or fantasy utilized in career counselling.

Witmer and Young (1987) distinguished between directed imagery that requires the presence of some verbal instruction and spontaneous imagery that transpires without direction or guidance. Morgan and Skovholt (1977) asserted that with the information derived from spontaneous fantasies both counsellor and client can survey changes in occupational aspirations from childhood to the present, discern any recurring visualization of occupational success, and trace employment areas for which there has been little or no interest. Likewise, through the use of deliberate or guided fantasy, the counselling participants can also obtain additional material pertaining to career considerations.

Gerler (1980) indicated that imagery is often overlooked as a useful career counselling technique " because mental imagery is an elusive and poorly understood aspect of human functioning" (p. 307). Certainly, in many psychology texts daydreaming and fantasy experiences are viewed as being indicative of a personal or emotional dysfunction. In terms of career counselling, however, Morgan and Skovholt (1977) suggested that fantasy can be regarded "on a continuum of sorts, with one end representing unhealthy activity and the other representing healthy activity" (p. 391). Information obtained through deliberate or spontaneous fantasy experiences can be utilized by career counsellors to help their clients explore occupational options and/or choose specific employment or training paths.

Skovholt and Hoenninger (1974) asserted that fantasy experiences can be beneficial to a variety of populations, including elementary, secondary, and college level

students. Certainly, clients of all ages can often achieve a better understanding of their desires, hopes and expectations by visualizing what their lives will be like in the future. Imagery can provide insight into one's perception regarding a diversity of specific life style issues including sex role conflicts in career development and occupational preferences. Sinacore, Healy, and Hassan (1999) proposed work-related fantasy techniques as a means of fostering skills necessary for successful career transitions.

In a discussion of imagery in counselling, Witmer and Young (1987) summarized four functions associated with the technique. Firstly, they state that imagery can increase awareness of oneself and others. "Dreams, daydreams, spontaneous imagery and guided imagery can give a person access to desires, values, emotions, goals, conflicts, and spiritual yearnings" (p. 7). Imagery can also foster empathy if individuals try to adopt the feelings of others.

As a second function, Witmer and Young cited that imagery can improve an individual's sense of control. For instance, relaxation and guided imagery activities are often employed to reduce the detrimental impact of stress related conditions or physical illnesses, enhancing an individual's capacity for endurance and increasing the degree of hopefulness. In the learning domain, imagery also works to strengthen personal control by reinforcing a readiness to learn, problem solving ability, creative thinking, and memory capability.

The third purpose of imagery in counselling is that of facilitator of change. Inappropriate habits can be altered or terminated and fears or apprehensions diminished

through imagery. In practice, relaxation techniques and assertiveness training involving some degree of visualization are advanced as a means of fostering a desired behaviour.

Finally, Witmer and Young asserted that fantasy techniques can enhance creative thinking and problem solving. By visualizing the situation, individuals can assess different aspects of the problem and strive to derive a number of unique, alternative solutions.

For career counselling, in particular, there are many applications for the imagery process. Brown and Brooks (1991), for example, indicated that there were eight uses for guided fantasy in career counselling: to develop self-awareness, to overcome here-and-now time orientation, to develop awareness of masculine and feminine sides of personality, for values clarification, for goal setting, in problem solving, to generate career alternatives, and to examine career aspirations.

Furthermore, in a study assessing the impact of guided imagery interventions on the generation of career alternatives, Sarnoff and Remer (1982) found that the undergraduate students who participated in a fantasy activity produced a significantly larger number of occupational choices than did the students who participated in a discussion only activity. They concluded that " guided imagery techniques (which encourage autonomy, control, and active participation) may be effective in counselling because they expand clients' imaginations in such a way as to lead to greater diversity of thought, which in turn may lead to more satisfying solutions to life problems" (p.306). The relationship between the imagery strategy and decision-making style was also

explored in the study.

While some counsellors may choose to develop their own unique imagery plans there are a variety of established formats available for utilization. Crabbs (1979) in a discussion of effective fantasy techniques relevant to career counselling briefly outlined the work of Morgan and Skovholt, Klarreich, and others. For instance, Morgan and Skovholt (1977) developed distinctive guided fantasy scripts to facilitate the consideration of such career issues as nontraditional occupations and mid-career change. Stimulus pictures, pictures of females in different settings, were employed by Klarreich (1973, cited in Crabbs, 1977) to assist women in their reflection and evaluation of present and future career goals and aspirations. Lastly, the Gestalt empty-chair technique has been utilized to help individuals resolve conflicting career identities by isolating specific occupational anxieties or ambitions.

Guided fantasy, probably the most widely used imagery technique, progresses through a sequential series of steps. Yet, while the general pattern is relatively similar among practitioners, there are some slight variations in the applied procedure. For instance, Skovholt and Hoenninger (1974) and Gerler (1980) in their discussion of the application of imagery techniques indicated that the procedure should begin with specific relaxation exercises, proceed with the selected fantasy script, and conclude with artistic or oral expression of participants' thoughts or feelings regarding the experience.

In a very analogous interpretation, Morgan and Skovholt (1977) submitted that the three-phase guided fantasy process begins with procedures designed to promote a

relaxed and interested state. The fantasy technique is explained, participants are asked to assume a comfortable position, and relaxation exercises may be employed to ease muscle tension. In the second phase of the counselling procedure, the participants are invited to visualize themselves in certain situations or settings as the counsellor guides them through a scripted scenario. Scripts can cover a variety of issues including obtaining new employment, changing careers, and retirement. Finally, in the third phase the participants are encouraged to relate and discuss their feelings and thoughts regarding the experience.

Carey (1986) provided information on the mechanics and effectiveness of a particular type of procedure, relaxation and imagery training (RIT). As with guided imagery, the initial stage of this approach involves measures designed to help participants achieve a relaxed and receptive state. Participants are then directed to visualise themselves doing what they would like to do in a productive and flawless manner. Carey (1986) suggested that RIT can enhance positive self-perception, concentration, attention span, and career exploration.

Brown and Brooks (1991) provided a more detailed account of the guided fantasy process, asserting that there are five stages in guided fantasy process. The first stage, induction, involves a counsellor-guided introduction to guided fantasy with an accent on the spontaneous nature of imagining, the potential for personal control, and client fit. The second stage, relaxation, ensures the privacy, comfort, and safety of participants and provides for appropriate relaxation techniques or deep breathing exercises designed to

induce a relaxed state. The third stage, fantasy, includes the selection and presentation of relevant guided fantasy scripts that contain calming introductory scenarios, vivid descriptions, and appropriate pacing and sequence. The fourth stage, reorientation involves bringing clients gradually back to the present and normal mental alertness possibly through the use of verbal guiding and physical touch. The final stage, processing, invites clients to share their thoughts and feelings regarding the fantasy experience. Direct links are then generated in terms of future career plans or desires.

Guided fantasy scripts should be appropriate for the client(s) involved. Counsellors need to provide enough verbal direction to guide participants towards a general destination while simultaneously fostering the integration of an individual's own images and ideas. Indeed, the content of the fantasy story is important to the overall effectiveness of imagery as a career counselling technique. Skovholt and Hoenninger (1974) stated that:

> In our judgement, life style elements (e.g., place of residence, leisure activities, family members, personal needs - all of which are important for a career choice) are elicited more often and more clearly in the guided fantasy trip than with many direct career counselling techniques. (p. 696)

The content of guided fantasy scripts can address a variety of lifestyle or career concerns, including occupational aspirations, gender bias, or career transitions (Morgan and Skovholt, 1977). Crabbs (1979) suggested several considerations regarding the actual implementation of any fantasy oriented career counselling technique: (a) care must

be taken to ensure that the language and instructions are appropriate for the age and maturity of the participants; (b) the individual or group should be adequately informed as to the rationale, the duration, participant roles, and anticipated outcomes of the activity; and (c) the fantasy experience should conclude with a discussion of the thoughts and images that were realized. Crabbs also provided a list of suitable questions that counsellors may ask to promote client reflection. The questions invite the participants to ponder their reactions to the activity, their feelings, thoughts, and experiences during the activity, and how the fantasy exercise influences their career hopes and plans.

The application of the guided fantasy technique may vary from facilitator to facilitator. Myrick and Myrick (1993), however, suggested that when implementing this counselling intervention within the school system it is advantageous to prepare an appropriate script story with words that encourage mental creativity, create the mood and foster relaxation, proceed at an even pace using a soothing tone, conclude the process at a pleasing point in the imaginary journey, and discuss the experience. Participants may be invited to discuss how they felt about the activity and the nature of the images that were generated in response to the scripted scenario.

As with any counselling intervention there are advantages and disadvantages associated with imagery. Kelly (1972) concluded that the fantasy technique was helpful to participants because it encouraged open communication and emotional release, it reduced constraints, and it permitted access to a greater volume of focussed insights. Crabbs (1979) reiterated this endorsement of imagery by asserting that the strategy

allows for contact with personal feelings and emotions, it promotes openness and sharing among clients, and it is an enjoyable and safe technique.

Morgan and Skovholt (1977) elaborated on the benefits of imagery in career counselling. Specifically, they maintained that techniques such as guided fantasy are valuable because the procedures are safe and pleasant for both the counsellor and the clients. The fantasy process, furthermore, encourages the sharing of feelings; it sanctions the importance of one's inner experiences, and it supplies helpful career-oriented information.

Problem areas with imagery techniques can be allocated to those affecting the client and those influencing the counsellor. Morgan and Skovholt (1977) and Crabbs (1979) indicated that for the participants obstacles may arise if they are not receptive or open to the fantasy experience, or if they try to place too much meaning on the content of their fantasies. For the counsellor, difficulties may arise with the relaxation procedures, their pacing of the fantasy script, their voice quality, client emotional response, and their sense of competence with the technique itself.

Carey (1986) and Witmer and Young (1987) stressed that counsellors need to be able to effectively manage any intense emotional expressions that the fantasy experience may create. Carey went on to suggest that the extent of fantasy procedures used for individual children should be weighed in relation to their existing level of fantasy activity; their existing level of concentration may impede the imagery process. In addition, counsellors should possess an adequate level of knowledge and training in

relaxation and imagery techniques.

Brown and Brooks (1991) while supporting the use of guided imagery, indicated that there are several limitations related to the technique. They suggested that some fantasy activities demand lengthy preparation periods and counsellors need adequate training in this domain, if they are to handle the range of responses that can result from guided imagery experiences. They also submitted that some individuals may be hesitant to become involved in imagery experiences (e.g., fear of losing control) and that guided fantasy may not be appropriate for individuals who are experiencing significant emotional problems (e.g., separation, divorce, or recent death).

Guided imagery or fantasy provides a creative and interesting format for advancing career counselling objectives. As previously mentioned, imagery acts as a stimulus for gains in self-knowledge, problem-solving, value clarification, and career planning. Another useful medium for women's career exploration is the notion of possible selves. This will be explored in the next section.

Possible Selves

Possible selves, like imagery, utilize the imagination as a tool for career exploration and motivation. Individuals frequently envision themselves in the future. They imagine what their life could be like: types of relationships, possessions, jobs, and so on. From these cognitive musings individuals will develop certain expectations for the future, outcomes they hope to achieve and outcomes they are afraid of acquiring.

Markus and Nurius (1986) regarded these expectations for the future as possible selves or cognitive evidence of one's hopes, fears, goals, or threats. Oyserman and Markus (1990b) indicated that possible selves are "elements of the self-concept that represent what individuals could become, would like to become, or are afraid of becoming" (p. 112).

Possible selves can be negative or positive, temporary or relatively permanent, yet all are linked with past experiences. Markus and Nurius (1986) submitted that one's sociocultural and historical background, the media, social interactions, and comparisons with significant others are entwined in the development and maintenance of possible selves. Adolescents, for instance, are influenced greatly by their parents, their peers, and film and television personalities. Continuing exposure to these role models and the subsequent assimilation of personally relevant information and feedback can foster the creation of specific possible selves. The adolescents acknowledge that they can become what others are now.

Future representations of the self, such as "loved" or "alone," "employed" or "unemployed," "physically fit" or "out of shape," evolve from one's lifelong personal interactions and observations. Over time the store of possible selves varies, however, possible selves are important in influencing behaviour. Depending upon the particular personal or social circumstances, specific possible selves are activated within an individual's working self-concept. For example, notification of a low grade in a midterm math exam may, in some individuals, incite such negative possible selves as "the helpless

student" or "the slow learner." Ruvolo and Markus (1992) indicated that the working

self-concept comprises the accessible and functional self-concept, and that the negative

and positive nature of these self-representations will impact on individual behaviour.

Possible selves serve as incentives for future behaviour and as evaluative tools for

assessing current behaviour (Markus and Nurius, 1986). In a study focussed on possible

selves across the lifespan, Cross and Markus (1991) elaborated on these two functions.

As for the motivational aspect, possible selves were recognized as allowing cognitive

simulation of an expected event or role, providing catalysts for continued effort,

supplying a basis or foundation for individual development, and permitting selection and

activation of relevant information. As an evaluative agent, possible selves were viewed

as providing impetus for change, serving as a guide for comparison purposes, and

permitting individuals the opportunity to alter their interpretations of specific outcomes

or circumstances. The motivational component of possible selves was explained further

by Ingelhart, Markus, and Brown (1989). As outlined by the researchers, possible selves

influence motivation in two ways: structuring and energizing. Structuring supplies a

realistic image of the desired end-state, thereby focussing the individual's attention on the

task. Cognitively, plans or strategies are weighed and the most appropriate action is

carried out as a means of achieving or avoiding the hoped-for or feared result. The

second motivational aspect, energizing, refers to the emotions associated with the

possible self. The positive or negative affect that arises when an individual considers a

distinct future self-representation energizes or inspires that individual into proceeding

with pertinent goal-oriented behaviours.

Behaviour is also influenced by the degree of balance among possible selves. Oyserman and Markus (1990a, 1990b) pointed out that balance, and hence maximum motivational effectiveness, is most evident when "expected possible selves are offset by countervailing feared selves in the same domain" (p. 112). The likelihood of reaching a particular goal is, therefore, enhanced if an individual has both self-representations of success and nonsuccess. Furthermore, individuals having a distinctive feared self also require a corresponding expected possible self that demonstrates how to progress in avoiding the undesirable outcome. Adolescents, for example, will possess a heightened motivational level in the area of secondary school completion if they have expected possible selves, such as "high school graduate" or "university student" and feared possible selves, such as "dropout" or "failure."

An individual's behaviour can be directed or motivated by possible selves. The future self is visualized and the most appropriate plan is formulated to achieve the goal or objective. Markus and Ruvolo (1989) in a discussion of self-representation in goal accomplishment suggested that global selves facilitate the construction of more goal-specific possible selves, ultimately reinforcing the performance and decision-making process. They concluded that the more directed activity patterns generate a variety of cognitive, affective, and somatic (or tangible) consequences. Some of the cognitive consequences can include more efficient and effective information gathering, decision-making, organization, and completion techniques, heightened effort and perseverance,

and a more focussed approach to the task at hand. Affective consequences of goal-specific possible selves embody some of the actual positive or negative affect associated with accomplishing the task. Positive feelings can improve decision-making and performance as well as boost creativity, while negative feelings can foster distress and self-doubt. The somatic consequences can involve changes to an individual's blood pressure, muscle activity, and other bodily systems. These changes, in turn, are thought to influence such things as healing and athletic performance.

The significance of possible selves in motivating behaviour has been addressed in numerous research studies. The work of Oyserman and Markus (1990a, 1990b) focussed specifically on the relationship between possible selves and delinquent behaviour. Recognizing that youth need to create personally significant possible selves while also accommodating societies' expectations, it was proposed that the least delinquent adolescents would demonstrate the greatest extent of balance between expected and feared selves. An analysis of the responses, or descriptions of possible selves, offered by four youth groups with varying degrees of delinquent behaviour supported the hypothesis set forth by Oyserman and Markus. The least delinquent group had significantly more pairings of feared possible selves and positive, expected selves. The two most delinquent groups also communicated numerous feared selves related to avoiding troublesome behaviour, however, they appeared to have insufficient expected possible selves available to adequately illustrate how they could realistically plan to avoid the delinquent activity. In addition to demonstrating the significance of balance in possible selves, Oyserman and

Markus asserted that "it is important to assess not just global feelings of worth, efficacy, or competence, but also to appraise the specific images, conceptions, and feelings that adolescents have of their potential and their future" (p. 123).

Curry, Trew, Turner, and Hunter (1994) applied a modified version of the possible selves model to a group of 13- and 14-year old children in an effort to assess the comparative significance of life domains; careerist versus noncareerist orientations. In consideration of the sample makeup, middle-class, well-educated, and studying advanced courses, Curry et al. replaced the "hoped-for" and "feared" selves with "most probable" and "most promising" selves and the researchers acknowledged that for girls the "hope for a successful career may be complicated by probable and "ought" selves concerning future roles as primary caregivers for young children" (p. 138). The results showed significant gender variances with 86% of the boys being categorized as careerist compared to only 54% of the girls. The female careerists also differed from the girls who were classified as noncareerists, they took more science courses, had a higher level of confidence regarding academic abilities and nontraditional careers, and identified more with their fathers.

The concept of possible selves was utilized by Knox, Funk, Elliott, and Bush (1998) in a study investigating gender differences in components of male and female self-esteem. High school students were asked to complete two research measures, the Possible Selves Questionnaire and the Self-Perception Profile for Adolescents Global Self-Worth Scale. Results indicated distinct gender differences and a multidimensional

aspect to the adolescent female's self-esteem. Male self-esteem was found to be associated with only one domain of possible selves, relationships/interpersonal functioning, while female self-esteem was found to be correlated with positive affect, financial and material functioning, educational performance, occupational performance, relationships, and appearance. Knox et al. (1998) suggested that during this period of mid-adolescence girls are psychologically more mature than boys and with time the male self-concept may also become more differentiated.

In an examination of several studies on possible selves, imagery, and performance, Ruvolo and Markus (1992) concluded that future self-representations are linked to motivation and performance. Subjects who were encouraged to conceptualize themselves as successful in the future showed increased task performance as well as an increased number of positive possible selves within their working self-concepts. Conversely, individuals who were urged to imagine future failure displayed poorer performance and a greater accessibility to negative possible selves. The development of a definite, clear image of oneself in the future was regarded as a medium for the creation and maintenance of motivational elements. Ruvolo and Markus (1992) suggested that:

> It is specific, personalized images and conceptions of the desired end-states, and
> how to approach these end-states, that may mediate the relation between positive
> expectancies, high levels of aspirations, optimism, control, self-efficacy,
> perceived competence, and performance. Similarly, it is specific, personalized
> images and conceptions of undesired end-states that may explain the relation

between negative expectancies, low self-efficacy, low self-esteem, low perceived

competence, helplessness, and poor performance. (p. 121)

Cross and Markus (1991) explored possible selves across the lifespan in an

attempt to reveal how possible selves are transformed over time. Individuals in four age

groups were asked to describe their hoped-for and feared selves. Results illustrated that

the younger participants, although expressing a greater number of possible selves and

more confidence in their ability to achieve or avoid these self-representations, were less

likely to behave in a manner aimed at actually reaching their goals or objectives. Older

respondents, on the other hand, indicated fewer possible selves than the younger age

groups but were more inclined to proceed with behaviours directly focussed at attaining

or avoiding their possible selves. Cross and Markus speculated that reformulation of

possible selves may account for at least some of the variation across age groups. As

individuals age they may modify their hoped-for selves in such a way that the difference

between the current self and the positive possible self is diminished, individuals begin to

lower their expectations in consideration of the passing years. Positive views of the

aging individual are also sustained by creating more extreme feared possible selves or by

acquiring alternative ways of presenting the same possible selves.

In summary, the concept of possible selves can be a valuable tool for counsellors

and clients. It provides a way of thinking about one's occupational future by envisioning

the "future self" in a variety of possible career alternatives. The use of possible selves in

career counselling cultivates self-knowledge. It provides a means of understanding the

composition of one's current self concept and it supplies a basis for determining

necessary modifications. It also serves as a guide for assessing career behaviours and it

fosters realistic goal setting.

Role models can also encourage pragmatic goal setting and they can be especially

useful for career exploration. The next section will provide further information.

Role models

Bandura's (1977) Social Learning Theory includes the concept of modelling, or

observational learning, and emphasizes that a wide variety of children's behaviours, such

as sex-typed responses, are learned by watching and listening to others around them; by

remembering and developing general rules about certain behaviours. Bandura indicated

that responsiveness to modelling is largely determined by three factors: (a) the

characteristics of the models (e.g., high status, power, competence, or qualities that are

similar to those of the observer); (b) attributes of the observer (level of self-confidence,

need for direction, and degree of dependency on others); and (c) response consequences

(obvious or inferred signs of success or lack of success because of the model's own

behaviour, such as money, specialized skills, admiration, or occupational prestige).

Modelling is a form of reciprocal determinism, a vicarious interaction of the

observer with the model resulting in modelling stimuli that are processed cognitively and

result in the acquisition of selected behaviours (Galbo, 1989). Bandura's (1977) theory

asserts that the main reason individuals learn from seeing or hearing a model is that the

information acquired helps in deciding how the observed behaviour might help or hinder in the fulfilment of needs on some future occasion. If the individual seeks to obtain a certain result, such as high socioeconomic status, they will attend to the more germane role models, encode and retain the information, and finally imitate the behaviour or alter existing cognitive representations (Thomas, 1992). Role models by giving a picture of the kinds of people they are, their behaviour and the consequences of those behaviours, help others to vicariously explore the personal relevance of certain things (e.g., acting aggressively, choosing nontraditional occupations, etc.).

Individuals encounter many traditional sex-typed behaviours, interests and roles throughout their youth. Sex-stereotyped patterns of household activity, achievement and occupational activities continue to exist and television, textbooks, and storybooks persistently promote sex-typed behaviours (Berk, 1991). While Social Learning Theory supports the notion that modelling can encourage this conformity to sex stereotypes, there is an indication that it can promote non-stereotypic behaviour as well. Indeed, the capacity of modelling to alter sex-typed activities and perspectives has been assessed by many researchers, including those engaged in the study of career development and career aspirations.

Laws (1976 as cited in Astin, 1984) suggested that a developmental model of women's work aspirations represented career choices as a function of past experiences and background factors, as well as current informational inputs. If these current informational inputs were altered, Laws asserted that work aspirations could also be

modified. Role models are a primary source of current information on nontraditional jobs and can be utilized to demonstrate the attractiveness of many previously discounted occupations. Gottfredson (1981) submits that experiences, such as role modelling, can help individuals discover and confirm their interests and enhance their decision making process, thereby influencing the circumscription and compromise process. Gottfredson proposed that children and adolescents often rely on inaccurate perceptions of themselves and the world of work; therefore, they often have difficulty figuring out what they like and what they can do. Hackett and Betz (1981) when discussing their career self-efficacy theory also supported the utility of role-modelling for women. They suggested that role-modelling interventions provide the opportunity to receive encouragement from same-sex models and to observe success in certain occupational areas (eg., nontraditional jobs).

Greene and Stitt-Gohdes (1997) underscored the positive influence of role models for women working in the skilled trades in their qualitative study of young females. The participants conveyed that both male and female role models were instrumental in their career development "in providing them with acceptable patterns of behaviour not restricted by gender and also by providing support for their individualistic choices" (p 273).

Support for role-modelling was demonstrated by Walker (1981) in her study examining the effect of role models on attitudes related to career aspirations. Seventy-five female college freshmen were assigned female faculty advisors and enrolled in a

career exploration course that included exposure to female role models from a variety of careers. Results showed significant changes in the women's self-esteem and sex role attitudes. The less stereotypical attitude towards the role of women was considered to be indicative of an increased probability of choosing nontraditional careers. Fisher and Poitier (1987) also achieved positive results from a role-modelling intervention. A program designed to foster nontraditional careers for displaced homemakers and high school women included field trips to an educational institution offering nontraditional and technological careers, and role model presentations. The opportunity to listen to the experiences of nontraditional women and ask questions proved beneficial and effectively broadened the career interests of many participants.

In a study by McKenna and Ferrero (1991) that assessed the attitudes of ninth grade students towards nontraditional occupations, it was discovered that nontraditional education was still not widely accepted. Based on an analysis of the responses to the research survey, several recommendations were developed, among them the advantages of using role models. Students indicated that parents, counsellors and workers in the occupation influenced their career choices; therefore, the suggestion was that nontraditional workers and parents in the community should be invited to serve as role models to provide necessary information and encouragement.

A study on the effects of a role-modelling intervention was also conducted by Hackett, Esposito and O'Halloran (1989). More than one hundred female seniors from a college completed a series of questionnaires and assessment scales regarding

occupational interests and attitudes. Results revealed that perceived role model influence, in isolation, was significantly related to nontraditionality of occupational choice and aspirations.

Some studies assessing the impact of role-modelling interventions produce no significant effects; however, the researchers do record partial support for the strategy. Vaughan and Fisher (1981) in a study of the effect of traditional and cross-sex modelling showed some immediate but no long term change in the sex-role attitudes of three to six year olds. The researchers did, however, indicate that the children were learning sex roles from the models they had observed and that the degree of change, although not statistically significant, was towards more androgynous views. As indicated by Vaughan and Fisher, the duration of the nontraditional exposure may be problematic; four 10-minute sessions just will not balance the continuous traditional exposure of many children. Longer or continuing role-modelling interventions may be more effective.

Weeks and Porter (1983) exposed 24 kindergarten children to nontraditional role models and curriculum over a 10-week period. Measurement on the Vocational Role Preference Scale revealed that neither the control group nor the experimental group made a significant pretest to posttest change towards nontraditional roles. The researcher asserted that the minimal alteration in attitudes may be due, in part, to the age of the subjects and their "inherent" need to categorize or classify people and things. The suggestion was that role modelling may more effectual for older children who possess a more flexible cognitive structure.

Nonsignificant treatment effects were also found in a study that examined the influence of a nontraditional role-modelling intervention on the occupational preferences, career exploration, and career salience of adolescents. Brooks, Holahan, and Galligan (1985) implemented a five-week role-modelling program for 30 female middle and high school students. Authentic role models, representing a variety of occupations, were provided in conjunction with group discussions and a tape show of local women employed in nontraditional fields. Although the intervention did not prove to have a significant impact, it was proposed that the role-modelling program would be more effective for students of different age groups. The researchers suggested further investigation of the treatment for eight, twelve, or eighteen year olds.

Many researchers in their reviews or investigations of related topics recommended the use of role-modelling interventions. For instance, Almquist (1974) and Lunneborg (1982), in separate studies examining the influences of nontraditional women, asserted that role models are necessary for a supportive personal environment. Their notion that role models provide encouragement, information, and validation is also maintained by several other individuals (e.g., Coyle-Williams and Maddy-Bernstein, 1990; Dahlberg, 1984; Hollenback, 1985; Smith, 1984). Role-modelling interventions are viewed as a means of support for females considering nontraditional careers.

Farmer (1976), Miller (1986), and Brooks (1988) regarded role modelling interventions as ways of encouraging women to contemplate a wider range of occupations. Direct presentation of women in nontraditional careers is believed to

counteract some of the effects of sex-based occupational foreclosure as well as increase women's career motivation. Consequently, role modelling is perceived as a strategy for career awareness and exploration.

A review of the literature demonstrates that nonsignificant findings may be due, in part, to the rather brief duration of the role-modelling interventions, the nature of the intervention components, the age of the participants, and/or the types of measures used to evaluate changes in nontraditional aspirations. While the potential of role-modelling interventions is reaffirmed throughout many of the readings, it does appear that the effectiveness of the strategy may be dependent upon certain variables, namely the intervention and measurement processes.

People learn by watching, listening and asking questions. They sometimes need a certain amount of counselling when considering options and making choices. Role models can provide this information and direction; therefore, it seems logical to assume that they can also be effective in the process of expanding or modifying the career interests of adolescent females.

In summary, role-modelling represents one option for fostering the dissemination of information on the full range of occupations and for supplying necessary reinforcement. The objective of many career development strategies is to help students learn about the nature of nontraditional work and to provide encouragement and support for nontraditional choices. For women, in particular, exposure to generally male-dominated occupations may help them to broaden their options, as well as give them an

opportunity to consider jobs that often offer greater pay and increased satisfaction than do many of the more traditional, female-dominated occupations. Role models are beneficial in that they provide much needed support and inspiration as well as serving as effective sources of information.

Role models can be a source of invaluable occupational knowledge and inspiration, and they can foster the career decision-making process. This process will be discussed in the next section.

Decision-making

As indicated in the preceding section on factors relevant to women's career development, most women will have to contend with a myriad of issues when assessing the suitability of career/life options. For many women the presence of competing family and career aspirations will make the process of reaching a decision complex and difficult (Larson, Butler, Wilson, Medora, and Allgood, 1994). Specific circumstances, as well as beliefs, attitudes, and values will merge to influence the nature of the process and the final decision. Effective decision-making evokes the need for knowledge of the situation, what is desired, and what is possible. Walsh and Osipow (1988) described the decision-maker as "proceeding, with varying degrees of self-awareness and rationality, from an initial state in which information is gathered and organized, to an eventual state in which information is evaluated as the basis for choice"(p. 26).

In the program assessed in the present study, "Shaping Your Future: Towards the

Occupational Integration of Women" (Cahill, 1994), participants are presented with a decision-making model that outlines a process that may assist them in making career and other life decisions. Self-awareness, occupational information, and gender-related issues are presented to the program participants as integral components of the career decision-making process. The model includes seven steps: (a) define exactly what it is you have to make a decision about, (b) gather all the information you need to make an informed decision, (c) identify all alternatives, (d) list all the advantages and disadvantages of each option, (e) choose the option that seems best for you, (f) decide how to put your decision into action, and (g) evaluate how well your plan is working and make changes if necessary.

Magnusson (1995) described five processes involved in career planning: initiation, exploration, decision-making, preparation, and implementation. With respect to the decision-making component he suggested that many individuals feel constrained by formal decision-making models and prefer that decisions evolve more naturally. During the decision-making phase, Magnusson proposed that individuals attend to their intuitive responses, accept that a certain level of uncertainty is to be expected, and prepare for a cognitive appraisal of career-related alternatives.

When making career decisions, an individual is faced with the task of comparing alternatives and the possibility of career compromise. An approach developed by Gati (1993) forms the basis for a model of career compromise developed by Gati, Houminer, and Fassa (1997). The model presumes that the framing of career compromise, or the

way a person perceives the problem will ultimately influence the process and outcome of the career decision. Gati et al. (1997) suggested that there are three possible framings of compromise that can affect the decision-making process: (a) compromise in terms of occupational alternatives, or a willingness to forego an occupational alternative in favour of another alternative despite the former's desirable characteristics, and then a willingness to accept that alternative even though it deviates from the ideal; (b) compromise in terms of the relative importance of aspects that involve decreasing the initial importance attributed to a specific aspect, so that it will have less influence in evaluating and distinguishing between the occupational alternatives; and (c) compromise in terms of within-aspect preferences that involves the individual's willingness to consider additional levels of an aspect as acceptable, even though they are less desirable than the optimal level (pp. 392-393).

Gati, Houminer, and Fassa (1997) submitted that framing in terms of within-aspects options necessitates a contemplative process, an individual may feel a greater sense of control if variation within each aspect is scrutinized. A six-stage counselling intervention designed to foster the framing of compromises in terms of within aspect preferences was proposed: (a) explain the need to compromise, recast conflicts as decision problems; (b) identify the client's dominant framing; (c) present the other two possible framings, explore multiple viewpoints; (d) guide the client to focus on the framing involving within-aspect preferences, ensuring systematic and analytical examination; (e) examine global compromise, look at alternatives as a whole; and (f)

learn from the process, its applicability to other career or life decisions (pp. 395-397).

Some studies on the subject of gender differences in career decision-making have revealed no significant difference in the level of career indecision for men or women and no overall gender differences in psychological problems in the career decision-making process (Larson, Butler, Wilson, Medora, and Allgood, 1994). Larson et al. did, however, find that based on the responses of their sample of 1006 college students, women indicated having greater problems with life-goal awareness (e.g., level of knowledge, understanding, and insight regarding individual wants and needs) while men demonstrated greater difficulty with secondary gain (e.g., degree of advantage received by not committing to a career decision). Measurement of decision anxiety did not show significant gender differences, however, both men and women exhibited some apparent difficulty with anxiety.

Gender differences in career decision-making was also the focus of a study by Gati, Osipow, and Givon, (1995). Using a sample of more than two thousand young adults from Israel, Gati et al. endeavoured to assess the similarity and dissimilarity in content and structure of preferences for men and women. Results of the study reflected an analysis of aspects, within-aspect preferences, and structure of aspects. Most aspects, or factors, used to evaluate occupational alternatives were perceived to have a comparable signification for both men and women. Women, however, did place higher emphasis on "relationships with people" and men regarded "income" as more important. An appraisal of within-aspect preferences, or desirability of various levels in each aspect,

revealed meaningful gender differences that reflected traditionally male or female orientation. Gati et al. (1995) contended that "men's preferences are compatible with the traditional male business and technology orientation, whereas women's preferences are compatible with the traditional female social and humanistic orientation" (p. 213). With regard to the structure of aspects, or the pattern of relationships, some general similarity was evident. There was also, however, some evidence of gender-specific perception and interpretation of aspects; suggesting that men and women were relating the same aspect to different contexts. The researchers cited the example of "flexibility in working hours"; women related this aspect to "working conditions" while men related it to "status at work" (p. 213). Based on the overall results of the investigation, Gati et al. (1995) suggested that counsellors address the issues of decision anxiety and secondary gain motivation in their counselling of both men and women. They also noted that problems in career decision-making can be related to factors other than those examined in their research, namely gender-role attitudes, self-esteem, and support.

Bandura's (1977) concept of self-efficacy has been suggested as a determinant in the career decision-making process in a number of studies (e.g., Church et al., 1992; Luzzo, 1983; Taylor and Betz, 1983; Taylor and Popma, 1990; Whiston, 1996). The term career self-efficacy is used to refer to a belief in one's ability to perform career-related behaviours successfully (Betz and Fitzgerald, 1987). In a recent study of undergraduate students, Gianakos (1999) established that differences in career decision-making self-efficacy could be related to Super's four patterns of career choice: stable, conventional,

multiple trial, and unstable (Super et al., 1957). Participants were classified as belonging

to one of the four groups based on their autobiographical information and career

behaviour to date. An analysis showed that unlike the groups exhibiting conventional

and unstable patterns, the stable and multiple trial pattern groups "reported significantly

greater confidence in their abilities to successfully undertake the career-related tasks of

goal selection, gathering occupational information, problem solving, realistic planning,

and self-appraisal" (p.253). Career self-efficacy was also investigated in a recent

Canadian study comparing women in traditional and nontraditional science majors.

Silcox and Cummings (1999) found that, contrary to prior research establishing

differences in career self-efficacy (e.g., Fassinger, 1990; Scheye and Gilroy, 1994), there

was no significant variation between the two groups of women. They suggest like Shu

and Marini (1998) that this finding may be an indication of favourable social change

brought about because of the women's movement.

Solberg, Good, Fischer, Brown, and Nord (1995) defined career search self-

efficacy as an "individual's degree of confidence that they can successfully perform a

variety of career exploration activities" (p. 448). Solberg et al. utilized this concept in

their study examining the influence of career search self-efficacy and human agency on

career decision-making and career exploration. They concluded, based on a hierarchical

regression analysis of the responses of 427 college students, that career search self-

efficacy expectations were more consequential in the career making process than

personality traits such as assertiveness, interpersonal facility (e.g., shyness), or

instrumentality. Recommendations for career counselling included the implementation

of interventions designed to augment an individual's current level of career search self-

efficacy. Specific reference was made to interventions that mirror Bandura's (1986)

strategies for fostering self-efficacy expectations, providing opportunities for mastery

experiences, vicarious experiences, persuasion experiences, and physiological feedback.

Career decision-making approaches or models aim to facilitate the decision-

making process and remedy indecision. Gati's (1986) sequential elimination approach to

career decision-making seeks to achieve this by placing emphasis on the value of various

aspects relating to a decision. Osipow and Fitzgerald (1996) provided a concise

description of Gati's approach, indicating that it involved:

> Identification of the relevant aspects of the decision ranked by their importance,
>
> then of the acceptable range for the most important aspect not yet considered.
>
> Next, occupations whose characteristics are outside of the acceptable range for
>
> the considered aspect are eliminated. A list of acceptable occupations is then
>
> generated, which serves as the basis for further exploration of occupational
>
> alternatives. (p. 174)

Gati, Fassa, and Houminer (1995) utilized Gati's (1986) sequential elimination

approach as a basis for a general, theoretically-based framework for career decision-

making issues. Gati et al. (1995) suggested that counsellors can help clients "improve

the quality and outcomes of the career decision-making process" if they follow this

pattern: (a) define the goal and identify alternatives; (b) identify most personally relevant

aspects (e.g., abilities, income, independence, etc.); (c) rank aspects by importance; (d)

identify optimal and acceptable levels of each aspect; (e) eliminate occupations

incompatible with preferences with an aim of having seven or fewer preferential choices;

(f) test sensitivity to changes in preferences; (g) collect additional information on the

promising alternatives; (h) rank alternatives by overall desirability assessing advantages

and disadvantages of each alternative; and (i) outline steps to actualize the most desirable

alternative (pp. 213-216).

Unlike some models of career decision-making Gati's (1986) sequential

elimination model (SEM) does not begin with a limited number of alternatives, but rather

commences the decision-making process with wide range of occupational options and an

analysis of aspect preferences. Slaney (1988) noted that "the SEM approach may be

useful for reducing a large number of options to a number of alternatives that can be

subjected to more intense decision-making analysis" (pp. 69-70).

Career counselling also needs to address today's reality of multiple occupational

moves, the need for effective coping skills and more frequent career decision-making

(Cahill and Martland, 1994). McAuley (1998) pointed to the significance of current

economic and political realities (e.g., government cutbacks, recession, unemployment,

downsizing, etc.) in an individual's career planning. She maintained that career

decision-making should involve not only self-knowledge and occupational exploration

but attention to personal and environmental factors such as job availability and career

transitions. Research by Gati, Krausz, and Osipow (1996) attempted to provide a means

of facilitating career changes and a blueprint for understanding the myriad of factors that can complicate the decision-making process.

Gati et al. (1996) suggested that an individual's career decision-making process can be expedited if one is able to locate and understand the nature of the difficulties that occur: "Career indecision is not a single type of problem with different symptoms but rather a group of problems that typically lead to some final outcome (i.e., the inability to make a career decision)" (p. 521). Subsequently the researchers proposed a taxonomy of 44 difficulties in career decision-making based on existing theoretical and empirical research, and addressing both cognitive- and affective-based difficulties. To test the model a research-specific questionnaire reflecting the taxonomy was administered to two culturally diverse groups, 259 young Israeli men and women and 304 male and female American university students. Analysis of relationship patterns revealed similarity between the two samples and consistency with the theoretical foundations; however, some relatively minor changes to the taxonomy were required. The resulting taxonomy configuration included three major categories of difficulties: (a) lack of readiness, referring to problems that occur before the career decision-making process; (b) lack of information and (c) inconsistent information. Ten subcategories were organized under the three main categories: lack of readiness included lack of motivation, indecisiveness, and dysfunctional myths; lack of information included the career decision-making process, self, occupations, and ways of obtaining information; and inconsistent information included unreliable information, internal conflicts, and external conflicts.

Further discrimination resulted in a number of additional, more precise subcategories for a total of forty-four taxonomy difficulties.

The quality of one's career decisions is especially meaningful in today's dynamic labour market characterized by change. An individual who possesses self-knowledge, is conscious of what he or she wants in a career, is comfortable with the process of decision-making, and is motivated to seek occupational information, may be better able to adjust to negative things such as downsizing or positive things such as innovative occupational opportunities.

Chapter Summary

The career counselling program, "Shaping Your Future: Towards the Occupational Integration of Women," draws from a number of different theoretical foundations and considers the influence of a variety of intrinsic and extrinsic factors. This literature review suggested that several theorists/researchers view women's career development as unique in that women exhibit a variety of career patterns that differ somewhat from that of men. Women continue to hold primary responsibility for children and the home, and they are frequently faced with a variety of psychological and contextual issues (e.g., low self-efficacy, gender bias, and role conflict) that can inhibit, alter, or obstruct career aspirations, career progression, and career success. Intervention strategies appropriate for addressing many of these women's career development issues

were also discussed.

The following chapter will discuss the methodology utilized by the researcher and outline the major topics of interest for this study, namely occupational knowledge, self-knowledge, decision-making ability, level of assertiveness, role model emphasis, utilization of imagery/possible selves, and attitudes.

CHAPTER 3

Methodology

Design of the Study

This is a quasi-experimental study that utilized a pretest-posttest, nonequivalent control group design (Gay, 1992). This type of design is frequently utilized in the evaluation of educational/counselling programs when random assignment is not practical or possible, as in this case. Subjects for this research study were not randomly assigned to groups because of the unavailability of two analogous and ongoing employment enhancement programs and because of the limited enrolment in the current New Beginnings program. The treatment group was selected from individuals currently involved in the government-sponsored, employment enhancement program, New Beginnings, while the control group was chosen from a list of former New Beginnings participants. Treatment was not randomly assigned.

Subjects

Sixteen individuals were selected from the total current enrolment in the New Beginnings program to participate in the career counselling program "Shaping Your Future: Towards the Occupational Integration of Women" (Cahill, 1994). The treatment group members were chosen by the New Beginnings program director on the basis of being female with no prior involvement in a career counselling program, having an adequate reading level, and having an expressed interest in the study. Of the 16 individuals who were originally selected for the treatment, 13 remained at the conclusion of the study. Two women voluntarily decided to withdraw from the counselling program after the second session, while another woman completed the entire program but moved

out of the province before the posttest was administered.

Another equal number of current New Beginnings students who met all of the selection criteria would constitute the ideal control group composition. However, as limited enrolment precluded this type of arrangement, it was decided to select the control group members from a list of past graduates of the New Beginnings program. It was determined that these people would most closely match the treatment group in terms of the selection criteria and background characteristics. A series of telephone interviews by the New Beginnings program director resulted in the organization of a group of nine (9) interested and eligible individuals. Like the individuals in the treatment group, all of these women: had completed the employment enhancement training offered by the staff at New Beginnings, had little or no experience with career counselling programs, had adequate educational standing, and communicated an interest in the academic study. A moderate degree of socioeconomic similarity was also assumed considering that members of both groups are or have been in receipt of Social Assistance benefits. Furthermore, individuals in both groups were living in an urban environment. Statistically, a series of one-way ANOVAs indicated that both the treatment and control groups were similar at the time of the pretest.

Setting

The research for this study was conducted at the New Beginnings training facility, located in the central region of a city of approximately 160,000 people. Treatment sessions were conducted in a large room with ample, comfortable seating and an adequate level of privacy. Participants were encouraged to sit in circular arrangement to facilitate communication and foster group cohesiveness.

Treatment

The treatment in this study involved participation in a ten-session career counselling program, "Shaping Your Future: Towards the Occupational Integration of Women" (Cahill, 1994). The entire program was conducted during the period July 13 to August 10, 1995, with an additional meeting two weeks after program completion for purposes of the posttest administration. On average, each of the ten sessions lasted one hour and forty-five minutes with a fifteen minute break.

The general focus of the career counselling intervention was to enhance the self-awareness, occupational knowledge, and career-related skills of the participants. It was proposed that with accurate information and an adequate understanding of internal and external career influences, the women in the treatment group could develop appropriate career plans and make informed occupational decisions. A multimedia approach was utilized and included videos, print materials, discussions, and guest speakers/role models.

Appendix C provides a schedule of the pretest, treatment, and posttest as delivered and a brief summary of the ten-session program. With the permission of the author of the original program, some modifications were made to amend or augment some session themes to accommodate participants' concerns. All treatment sessions and measures were administered by the researcher.

Instrument

A questionnaire approach was selected as the most appropriate method for obtaining the necessary research information. An instrument was developed specifically for the study and was designed to reflect the distinctive nature of the career counselling program, "Shaping Your Future: Towards the Occupational of Women" (Cahill, 1994) and the uniqueness of the research subjects. The questionnaire (see Appendix A)

garnered sociodemographic information as well as details on all major career development issues/factors covered by Cahill's program, including educational and occupational aspirations, perceived educational and occupational barriers, level of occupational/labour market knowledge, influence of significant others/role models, perceived level of capability, assertiveness, decision-making/problem solving ability, and finally, perceived level of self-knowledge. Some of the questions used in this research instrument were drawn from a questionnaire originally developed by Cahill (1994) to evaluate the effectiveness of her career counselling program with students living in rural areas of Newfoundland and Labrador. The remaining questions were derived from a literature review encompassing all of the aforementioned topics and efforts were made to address a wide variety of relevant issues. The questionnaire did ask for participants' names, however, codes were later assigned by an impartial research data analyst to ensure confidentiality.

Pretesting of the questionnaire using a small sample of the intended population or a similar population was not feasible due to the limited number of available research subjects (e.g., women participating in a government-sponsored employment enhancement program). The instrument was, however, examined by two expert reviewers for deficiencies relating to the directions for completion and the questionnaire items.

Instrument Analysis

The final version of the questionnaire comprised four distinct segments: Parts A and D collected general and sociodemographic information as well as general commentary on the program; Part B comprised a subtest designed to assess attitudinal changes and required a qualitative review; and Part C encompassed six subtests requiring

quantitative analysis. Items in each of the six subtests were constructed and scored using a 5-point Likert scale; therefore, it was necessary to employ Cronbach's coefficient alpha as a measure of rational equivalency reliability. As the subtests represent tests being developed for a new area of research, reliability coefficients of .60 or better were considered acceptable (Gay, 1992). To achieve this standard of reliability several items within the subtests had to be omitted for purposes of statistical analysis. The following table illustrates the final composition of each subtest and its reliability coefficient:

Table 1

<u>Subtest Reliability Coefficients</u>

Subtest	Items Dropped	Items Retained	Reliability Coefficient
Occupational Knowledge (Q. 48-56 inclusive)	50, 51, 54, and 56	48, 49, 52, 53, and 55	Pretest - .56[a] Posttest - .67
Self-Knowledge (Q. 75-83 inclusive)	80 and 82	75, 76, 77, 78, 79 81, and 83	Pretest - .64 Posttest - .69
Decision Making (Q. 68-74 inclusive)	70, 71, and 72	68, 69, 73, and 74	Pretest - .72 Posttest - .51[a]
Assertiveness (Q. 57-67 inclusive)	n/a	57, 58, 59, 60, 61, 62, 63, 64, 65, 66, and 67	Pretest - .84 Posttest - .85
Role Models (Q. 41-47 inclusive)	41, 42, 43, 44, and 45	46 and 47	Pretest - .67 Posttest - .60
Imagery/ Possible Selves (Q. 31-40)	36, 37, and 38	31, 32, 33, 34, 35 39, and 40	Pretest - .65 Posttest - .77

[a] These values did not meet the reliability standard of .60, however, they were accepted by the researcher because the values approached the required standard, because the corresponding pre/posttest demonstrated acceptable reliability, and because the measure was being utilized for preliminary and exploratory research.

Procedures

Letters and consent forms (see Appendix B) were forwarded to the prospective members of the treatment and control groups. The letter provided a brief outline of the research study, a synopsis of the career counselling program, and it emphasized the confidentiality of the entire process.

A pretest-posttest format was used for the study, with the questionnaire being administered at the beginning of the project and again two weeks after program completion. Modifications were made to delete references to the intervention program in the questionnaire that was delivered to the subjects in the control group. Administration of the questionnaires was conducted by the researcher and participants from both groups were provided with ample space and time. Questionnaires were administered to both groups at the same time.

Design and Analysis

The data for this study produced both quantitative and qualitative information. The quantitative information to address research questions 1 to 6 is described below, with respect to the analysis of variance for repeated measures. Analysis of the qualitative information for research question 7 is also provided.

Quantitative Analysis

Analysis of variance for repeated measures was utilized to evaluate the effects of the independent variable, the career counselling intervention, on six dependent variables. The dependent variables included:

1. Occupational Knowledge - The relevant subtest measured the participant's level of occupational knowledge and use of job search techniques. High scores indicate a higher level of such knowledge and utilization of job search techniques.

2. Self-Awareness, Self-Esteem, and Self-Efficacy - The subtest measured the degree of each participant's sense of "self"; her self-knowledge, self-esteem, and self-efficacy. High scores indicate a more positive sense of self.

3. Decision-Making and Problem-Solving Ability - The subtest measured the participant's level of decision-making and problem-solving ability. High scores indicate higher levels of these capabilities.

4. Assertiveness - The subtest measured the extent of the participant's assertiveness. High scores indicate a greater degree of assertive behaviours.

5. Role Models - The subtest measured the importance of role models for participants. High scores indicate greater endorsement for role models in career planning.

6. Imagery/Possible Selves - The subtest measured the importance of imagery and possible selves for participants. High scores indicate greater endorsement for the use of imagery and possible selves in career planning.

Repeated measures analysis of variance is appropriate for research questions aimed at determining growth between the pretest and posttest (Schaefer, 1992). This statistical analysis addressed change over time and, in terms of this research study, it assessed gains that occurred for both the treatment and control groups. The analysis compared the mean difference between the pretest and posttest for one group in relation to the mean difference for the other group.

The six subtests requiring quantitative analysis utilized a Likert 5-point scale.

The following point values were assigned to the responses to facilitate scoring of five of the six subtests: "Strongly Agree" - 5; "Agree" - 4; "Undecided" - 3; "Disagree" - 2; and "Strongly Disagree" -1. The subtest for assertiveness consisted of negatively worded questions, therefore, the point values were reversed: "Strongly Agree" - 1; "Agree" - 2; "Undecided" - 3; "Disagree" - 4; and "Strongly Disagree" -5. The effect of the treatment, or the career counselling intervention, was assessed by examining the significance of the interaction of the treatment variable with the repeated factor in the design. For instance, the effect of treatment on occupational knowledge, self, decision-making, assertiveness, role models, and imagery/possible selves would be demonstrated by an increase in these dependent variables for the treatment group from pretest to posttest with no exhibited increase for the control group. Significance at the $p < .10$ level was considered acceptable as this was a preliminary evaluation of the measure (Harris, 1995).

Qualitative Analysis

Research question 7, regarding changes in participant's attitudes, was assessed by the subtest included in Part B of the questionnaire. Individual qualitative analysis was required as the subtest items, questions 20 to 30 inclusive, were not composite. To facilitate analysis of the responses to these questionnaire items, the researcher accepted a cumulative percentage for the "Strongly Agree" and "Agree" responses and a cumulative percentage for the "Strongly Disagree" and "Disagree" responses. Ultimately, the responses of participants were sorted into only three categories: "Agree," "Undecided," or "Disagree."

CHAPTER 4

Analysis and Results

Introduction

This chapter provides the quantitative and qualitative data and research findings relevant to this quasi-experimental study. For each section in this chapter the research question will be presented followed by a discussion of the results. Tables will be provided to illustrate the findings, where appropriate. The quantitative analysis of research questions 1, 2, 3, 4, 5, and 6 will be presented first, followed by the qualitative analysis of research question 7.

Quantitative Analysis

Research Question 1: Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's level of occupational knowledge?

The first research question focussed on changes in the dependent variable, occupational knowledge, as a result of the career counselling intervention program, Shaping Your Future: Towards the Occupational Integration of Women. It was expected that the experimental, or treatment group, would show an increase in their level of occupational knowledge and related job search behaviours as measured by the research questionnaire.

Table 2 shows the mean response for each group. The treatment group exhibited an increase over time, from 16.55 to 20.45, while the control group mean remained the same at 17.22. The increase in the treatment group means indicated a trend in the right direction and an increase in occupational knowledge for the group's participants. This statement must, however, be interpreted cautiously given the lack of statistical significance illustrated in Table 3. This table shows there was no significant interaction between group and occupational knowledge at the $p < .10$ level, however, the interaction did approach significance $F(1,18)=2.980$, $p=.101$.

Table 2

<u>**Mean Values for Occupational Knowledge on the Pretest and Posttest by Group**</u>

Group	N	Pretest		Posttest	
		Mean	Std. Deviation	Mean	Std. Deviation
Treatment	11*	16.55	3.62	20.45	3.67
Control	9	17.22	2.86	17.22	2.05

* two cases missing

Note: A <u>high</u> mean on occupational knowledge indicates a greater level of occupational knowledge, ranging from a score of 5 to 25.

Table 3

Two Factor ANOVA for Repeated Measures Source Data on Occupational

Knowledge by Group

Source	Sum of Squares	Df	Mean Square	F	p
Within Subjects					
Occknow	37.820	1	37.820	2.980	.101
Occknow by Group	37.820	1	37.820	2.980	.101
Error	228.455	18	12.692		

Research Question 2: Are there significant differences between the pretest and posttest

mean scores for the treatment and control groups with regard to the participant's level of

self-awareness, self-esteem, and/or self-efficacy?

Research question two addressed changes in the dependent variable, self-

awareness, self-esteem, and self-efficacy, as a result of the treatment. It was anticipated

that the participants in the treatment group would show an increase in their level of these

qualities of self as measured by the research questionnaire.

Table 4 shows the mean response for each group. The treatment group showed a slight increase over time, from 29.31 to 29.61, while the control group displayed a slight decline, from 28.89 to 28.78. The increase in the treatment group means indicated a minor increase in the level of self-awareness, self-esteem, and self-efficacy. Table 5 shows there was no significant interaction between group and self-awareness, self-esteem, and self efficacy at the $p < .10$ level $F(1,20)=.098$, $p=.757$.

Table 4

Mean Values for Self on the Pretest and Posttest by Group

		Pretest		Posttest	
Group	N	Mean	Std. Deviation	Mean	Std. Deviation
Treatment	13	29.31	3.28	29.61	2.79
Control	9	28.89	2.26	28.78	3.38

Note: A high mean on self indicates a greater level of self-awareness, self-esteem, and self-efficacy, ranging from a score of 7 to 35.

Table 5

Two Factor ANOVA for Repeated Measures Source Data on Self by Group

Source	Sum of Squares	Df	Mean Square	F	p
Within Subjects					
Self	.103	1	.103	.022	.884
Self by Group	.466	1	.466	.098	.757
Error	94.829	20	4.741		

Research Question 3: Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's level of decision-making and problem-solving ability.

This research question was directed towards changes in the dependent variable, decision-making and problem-solving ability, as a result of the career counselling intervention. It was expected that the treatment group would demonstrate an increase in their level of these abilities as measured by the research questionnaire.

Table 6 shows the mean response for each group. The treatment group showed an increase over time, from 14.69 to 16.46, while the control group mean decreased from

15.89 to 15.00. The increase in the treatment group means indicated an increase in decision-making and problem-solving ability for the group's participants. Furthermore, Table 7 shows that there was a significant interaction between group and decision-making and problem-solving ability at the p < .10 level $F(1,20)=3.195$, p=.089.

Table 6

Mean Values for Decision-making and Problem-solving Ability on the Pretest and Posttest by Group

Group	N	Pretest		Posttest	
		Mean	Std. Deviation	Mean	Std. Deviation
Treatment	13	14.69	3.54	16.46	2.22
Control	9	15.89	2.52	15	2.24

Note: A high mean on level of decision-making and problem-solving abilities indicates a greater degree of decision-making and problem-solving ability, ranging from a score of 4 to 20.

Table 7

Two Factor ANOVA for Repeated Measures Source Data on Decision-Making and

Problem-Solving by Group

Source	Sum of Squares	Df	Mean Square	F	p
Within Subjects					
Prob	2.061	1	2.061	.350	.560
Prob by Group	18.788	1	18.788	3.195	.089
Error	117.598	20	5.880		

Research Question 4: Are there significant differences between the pretest and posttest

mean scores for the treatment and control groups with regard to the participant's level of

assertiveness?

This research question focussed on changes in the dependent variable,

assertiveness, as a result of the research intervention. It was expected that participants in

the treatment group would manifest some increase in their level of assertive behaviours

as measured by the research questionnaire. A reminder that for this particular scale the

questions were negatively worded, therefore, the point values for the Likert scale were

reversed. An increase in assertiveness would be demonstrated by an increase in the mean

score.

Table 8 shows the mean response for each group. The treatment group showed

an increase over time, from 37 to 40.23, while the control group decreased from 42.56 to

41.11. The increase in the treatment group means indicated a trend in the right direction

and an increase in the level of assertiveness for the group's participants. This statement

must be interpreted with caution, however, as Table 9 shows that there was no significant

interaction between group and assertiveness at the $p < .10$ level $F(1,20)=2.226$, $p=.151$.

Table 8

Mean Values for Assertiveness on the Pretest and Posttest

Group	N	Pretest		Posttest	
		Mean	Std. Deviation	Mean	Std. Deviation
Treatment	13	37	9.52	40.23	9.46
Control	9	42.56	2.56	41.11	3.72

Note: A high mean on assertiveness indicates a greater degree of assertive behaviours,

ranging from a score of 11 to 55.

Table 9

<u>Two Factor ANOVA for Repeated Measures Source Data on Assertiveness by</u>

<u>Group</u>

Source	Sum of Squares	*Df*	Mean Square	*F*	*p*
<u>Within Subjects</u>					
Assert	8.485	1	8.485	.325	.575
Assert by Group	58.121	1	58.121	2.226	.151
Error	522.265	20	26.113		

<u>Research Question 5:</u> Are there significant differences between the pretest and posttest mean scores for the treatment and control groups with regard to the participant's emphasis on role models?

This question focussed on changes in the dependent variable, role models, as a result of the research intervention. It was expected that the treatment group would show an increase in their emphasis on role models as measured by the research questionnaire.

Table 10 shows the mean response for each group. The treatment group showed an increase over time, from 7.00 to 8.17, while the control group exhibited a decrease

from 7.56 to 6.78. The increase in the treatment group means indicated an increase in the importance of role models and a trend in the right direction. Table 11 shows there was no significant interaction between group and role models at the p <.10 level, however, the interaction did approach significance $F(1,19)=2.950$, $p=.102$.

Table 10

Mean Values for Role Models on the Pretest and Posttest by Group

Group	N	Pretest		Posttest	
		Mean	Std. Deviation	Mean	Std. Deviation
Treatment	12*	7	2.13	8.17	1.75
Control	9	7.56	1.42	6.78	1.56

*one case missing

Note: A high mean on this scale indicates a greater emphasis on role models, ranging from a score of 2 to 10.

Table 11

Two Factor ANOVA for Repeated Measures Source Data on Role Models by Group

Source	Sum of Squares	*Df*	Mean Square	*F*	*p*
Within Subjects					
Role Models	0.389	1	0.389	0.118	.735
Role Models by Group	9.722	1	9.722	2.950	.102
Error	62.111	19	3.295		

Research Question 6: Are there significant differences between the pretest and posttest

mean scores for the treatment and control groups with regard to the participant's

emphasis on imagery/possible selves.

This research question addressed changes in the dependent variable,

imagery/possible selves, as a result of the intervention strategy. It was anticipated that

the treatment group would show an increase in their emphasis on imagery/possible selves

as measured by the research questionnaire.

Table 12 shows the mean response for each group. The treatment group showed

a slight decrease over time, from 30.77 to 30.46, while the control group increased

slightly from 28.56 to 28.89. The decrease in the treatment group mean indicated a small

decrease in the importance of imagery/possible selves for the participant's in that group.

Table 13 shows there was no significant interaction between group and imagery/possible

selves at the p <.10 level F(1,20)=.224, p=.641.

Table 12

Mean Values for Imagery/Possible Selves on the Pretest and Posttest by Group

Group	N	Pretest		Posttest	
		Mean	Std. Deviation	Mean	Std. Deviation
Treatment	13	30.77	2.8	30.46	3.23
Control	9	28.56	2.74	28.89	2.93

Note: A high mean on this scale indicates a greater emphasis on imagery/possible selves,

ranging from a score of 7 to 35.

Table 13

<u>Two Factor ANOVA for Repeated Measures Source Data on Imagery/Possible</u>

<u>Selves by Group</u>

Source	Sum of Squares	*Df*	Mean Square	*F*	*p*
<u>Within Subjects</u>					
Image	1.748	1	1.748	.000	.985
Image by Group	1.093	1	1.093	.224	.641
Error	97.385	20	4.869		

<u>Summary of Quantitative Analysis</u>

The repeated measures analysis of variance is designed to ascertain growth or gain between pretest and posttest, or change over time. Overall, the quantitative analysis indicated that there was a significantly greater difference between the pretest and posttest mean scores of the treatment group compared to the difference for the control group on only one of the dependent variables, decision-making and problem-solving. In other words, significant effect was found on the decision-making and problem-solving scale, $F(1,20)=3.195$, $p=.089$. None of the other five dependent variables were significant at

the p<.10 level; however, two of the variables, occupational knowledge and role models, did approach significance at p=.101 and .102, respectively.

Data analysis on several scales indicated trends in the expected direction. The treatment group demonstrated positive increases in the areas of occupational knowledge, role models, and assertiveness while the control group exhibited decreases or no change at all in these areas. Neither positive trends nor significance was evident for the dependent variables relating to qualities of self and imagery/possible selves.

Qualitative Analysis

Research Question 7: Are there differences between the pretest and posttest responses of the treatment and control groups with regard to the participant's attitudes?

This research question was represented by eleven questionnaire items, questions 20 to 30, inclusive (see Appendix A). Analysis of selected questionnaire items pointed to a variety of attitudinal changes that were particularly relevant to this study.

Questions 20 and 25 addressed attitudes involving the issue of education. Question 20 asked participants if they agreed with the statement suggesting that furthering one's education resulted in better occupational opportunities. Based on the pretest and posttest results, the treatment group demonstrated a 7% increase in their level of agreement with this statement (from 85% to 92%) while the control group displayed an 11% decrease (from 100% to 89%). Question 25 asked participants, if interested,

would they engage in a male-dominated school program. The treatment group indicated a decrease of 8% in their level of agreement with this statement while the control group showed an increase of 11%. Although a decrease for the treatment group was evident, at the time of the posttest, a large percentage of the participants in both the treatment and control groups indicated that they would participate in such programs, 92% and 89%, respectively.

Several questions were directed towards determining the participants' attitudes regarding women in the workforce. Participants in both groups expressed increases in their level of agreement with the statement concerning women's ability to work in any occupational area (Question 22). Based on the results of the pretest and posttest, the treatment group recorded an increase of 8% (from 92% to 100%) and the control group recorded an increase of 11% (from 78% to 89%). Intriguingly, both groups also felt that women have to work harder to prove themselves on the job (Question 26). From the time of the pretest to the posttest the treatment group demonstrated an increase in their level of agreement with this statement, from 77% to 85%, while the control group increased from 67% to 78%.

Questions 24 and 27 of the questionnaire subtest queried the participants' attitudes towards men and women in the workplace. When asked if they would find it interesting to work at a job where most of the other employees were men (Question 27), participants in the control group exhibited no change over time, the percentage of positive response to the statement remained at 56%. The treatment group, on the other

hand showed a 15% increase in their level of agreement with the statement, from 62% to 77%. Participants were also asked if they thought that men had more career opportunities compared to women (Question 24). On the pretest, 54% of the treatment group and 67% of the control group indicated that they did not agree with this statement. At the time of the posttest 69% of the treatment group felt that men did not have more career opportunities than women, an increase of 15%. In contrast, the control group demonstrated a decrease of 23%. Less than half of the participants, at the time of the posttest, recorded disagreement with the statement.

Summary of Qualitative Analysis

The qualitative evaluation of selected data from Part B of the questionnaire suggests some changes in attitudes. The participants indicated an increased level of agreement for the statements regarding: (a) the link between education and occupational opportunity, (b) women's ability to work anywhere, (c) women's need to work harder to prove themselves, and (d) the notion that men have more occupational opportunity than women. The women in the treatment group also indicated an increased interest in engaging in a male-dominated occupation; however, they recorded a decrease in their level of interest for a male-dominated course of study.

Chapter 5

Discussion and Recommendations

This research study was designed to investigate the influence of a ten-session

career counselling program, Shaping Your Future: Towards the Occupational Integration

of Women, on the career development of a group of women who were participating in a

government-sponsored employment enhancement program. The treatment was found to

have only one significant effect, although some trends were apparent. This chapter will

begin with a discussion of the major findings of the study, integrated with the review of

literature. Limitations associated with the research will follow, and the chapter will

conclude with recommendations for future research and practice.

Major Findings

Occupational Knowledge

An important component of the career counselling program, Shaping Your

Future: Towards the Occupational Integration of Women, and the first issue investigated

in this research project, was occupational knowledge. Research (e.g., Hoyt and Hughey,

1997; McAuley, 1998) indicates that in today's dynamic global, knowledge-based

economy, information about current and future labour market needs is essential.

Availability and access to complete, accurate and up-to-date occupational information is

the means by which women can identify new, emerging, or changing occupations and their related skill and educational requirements. It can assist women as they explore the full range of occupational alternatives and strive for optimal career development (Eccles, 1987).

Occupational information is essential to career decision-making and overall career development. It provides data on occupations, labour market trends and academic/training prerequisites, while reinforcing the value of education. Limited occupational and educational resources and restricted access have been shown to have an adverse effect on women's career exploration (Taylor and Pope, 1986; Vermeulen and Minor, 1998), particularly in the areas of mathematics, science, and engineering (Weiler, 1996). Career counselling interventions, such as the one conducted in this study, should strive to motivate women in their career search (Herr and Cramer, 1996) by supplying the necessary resources and support and by cultivating the individual's personal commitment to their own career development.

An aim of this research study was to provide participants with occupational information, provide knowledge and practice regarding a number of job search techniques (e.g., cover letters, resumes, and networking), and introduce participants to the materials and services provided by their local Career Resource Centre. Based on an analysis of the relevant subtest, the findings indicated that the treatment group did not exhibit a significant increase in their level of occupational knowledge as a result of the intervention, however, some improvement was noted. It can be speculated that the

program did not provide sufficient coverage of occupational knowledge and job search issues for this research sample. Given that 77% of the participants in the treatment group had not completed high school nor received any supplementary career counselling, it is unlikely that they would be knowledgeable regarding the full range of occupational alternatives or about labour market trends. Furthermore, they could not be expected to be well versed in the steps associated with the job search process. Additional information, time and support may have been beneficial.

Self-awareness, Self-esteem, and Self-efficacy

The second major investigative issue in this research study was qualities of self. Internal psychological variables such as self-awareness, self-esteem, self-efficacy and overall self-concept, are critical determinants of career decision-making and career development, and it is important to address their influence for women. Research (e.g., Blustein and Noumair, 1996; Herr and Cramer, 1996; Mathieu, Sowa, and Niles, 1993; Schafers, Epperson, and Nauta, 1997; Swanson and Lease, 1990) has shown that the nature of these aspects of self can influence occupational choice and limit, or advance a woman's career potential.

A variety of theoretical perspectives (e.g., Farmer, 1976, 1985; Hackett and Betz, 1981; Super, 1980) point to the importance of self in career planning and development. Gottfredson (1981) suggested that occupational choice is directly related to one's self-concept, one's awareness of who she is and what she is capable of. Studies have shown

that low self-efficacy, in particular, is associated with women's underutilization of talent and ability and restricted career choice (Blustein, 1989; Hackett and Betz, 1981; Luzzo, 1993; Whiston, 1996).

The integration of self-efficacy into career counselling has been recommended (Betz, 1992; Sullivan and Mahalik, 2000) especially for women seeking nontraditional careers (Solberg, Good and Nord, 1994). Many authors have also supported consideration of self-awareness (e.g., Bartholemew and Schnorr, 1994; Hoskins, 1995) and self-esteem issues (e.g., Green and Stitt-Gohdes, 1997; Silcox and Cummings, 1999). Reixach (1995) submitted that women who are economically disadvantaged often have poor self-esteem and low self-confidence while Rice (1993) suggested that many feel powerless and trapped within the complexity and "double bind" of the system. Interventions that promote identity exploration, esteem building, assertiveness training, and positive self-efficacy experiences may be especially useful for this population.

The career counselling intervention employed in this research study attempted to enhance the self-awareness, self-esteem, and self-efficacy of the participants. Based on an analysis of the relevant subtest, however, there was no significant increase for the women in the treatment group. The results are not surprising given the relatively short duration of the program and the fact that change in these areas is neither instantaneous nor easy to achieve. Purkey (1988) held that although there is great potential for positive development, one's self-concept is learned through socialization and difficult to change. It is the view of this researcher that some of the participants in this study may have been

influenced negatively by their economic circumstances, their early learning experiences, and by social attitudes, therefore, a more extensive intervention is necessary. A comprehensive component that will provide for the assessment and enhancement of self-efficacy, self-esteem, and self-awareness is needed to help offset the influence of the null environment (Solberg, Good, and Nord, 1994) and to dissuade women from "foreclosing prematurely on certain occupational options" (Sullivan and Mahalik, 2000, p. 60).

Decision-making and Problem Solving

The third major issue of interest in this research study was decision-making and problem-solving ability. Competency in this area is considered to be especially important in today's economy marked by constant change and things like unprecedented occupational opportunities, downsizing, job elimination, and job retraining. The likelihood of numerous occupational transitions (Cahill and Martland, 1994; Charland, 1997) and the need for competent problem-solvers within the workplace (Hughey and Hughey, 1999) exemplifies the significance of these skills.

Decision-making and problem solving are processes that continue throughout the life span. A woman must be able to evaluate the suitability of various occupational options. Occupational information must be assessed in relation to her self-knowledge and what she desires from an occupation (Walsh and Osipow, 1988). Research (e.g., Davidson and Gilbert, 1993; Larson, Butler, Wilson, Medora, and Allgood, 1994) has shown that the interconnectedness of work and family roles for women and the influence

of gender bias and occupational stereotyping (Astin, 1984; Brown and Brooks, 1996; Eccles, 1987; Herr and Cramer, 1996) may circumscribe the range of occupational alternatives considered during the career decision-making process and ultimately depress a woman's aspirations.

Larson et al. (1994) found no gender differences in career decision-making; however, a study by Gati, Osipow, and Givon (1995) indicated that men and women expressed traditionally male and female preferences. While presenting contradictory findings, both studies do support the impact of self-concept and gender role attitudes in career decision-making and recognize the need for appropriate interventions. A number of models and approaches have been introduced (e.g., Gati, Fassa, and Houminer, 1995; Gati, Houminer, and Fassa, 1997; Gati, Krausz, and Osipow, 1996) to help systematize and clarify the decision-making process.

The counselling program used in this study incorporated the issues of gender, role conflict, self-knowledge, and occupational knowledge into a simplified model of career decision-making. Findings, based on an analysis of the relevant subtest, indicated that the treatment group did indeed demonstrate a significant increase in their level of decision-making and problem-solving ability. In other words, the career counselling intervention was associated with improvement in this area. It can be suggested that the participants had a better understanding of the decision-making and problem-solving process and were beginning to weigh alternatives and think more seriously about possible occupational choices. Aspects of the program (e.g., the decision-making model, the

occupational information, and the supportive environment) may have inspired the participants and provided some occupational direction.

Assertiveness

Level of assertiveness represents the fourth major outcome of interest for this study. The research intervention, Shaping Your Future: Towards the Occupational Integration of Women, recognizes assertiveness training as a medium for providing women with a means to secure their rights and express their needs and wants, while respecting the rights of others. Such training can help women to identify patterns of behaviour that block effective communication, to recognize the benefits of assertive thoughts and behaviours, and to understand the effect on self-confidence and overall self-concept. Assertiveness can be a valuable interpersonal communication skill in occupational settings and a way of successfully managing other life challenges.

Socialization practices have tended to cultivate passivity in women, encouraging nurturing rather than assertive activities. Indeed, assertiveness has historically been considered a beneficial yet typically male attribute (Cook, 1993; Hackett and Betz, 1981). Research has shown that assertiveness is related to higher labour force participation (Clausen and Gilens, 1990), willingness to engage in nontraditional career-related activities (Nevill and Schlecker, 1988), interest in science-related careers (Lapan and Jingleson, 1992), and the career aspirations of young females (Rainey and Borders, 1997).

This research intervention provided the participants with knowledge regarding assertiveness and opportunities for practice. Findings, based on an analysis of the relevant subtest, suggested that there was no significant increase in the participant's level of assertiveness, although some improvement was indicated. As with several other components of this career counselling intervention, the duration of the program may have been inadequate. It can be speculated that economically disadvantaged women may sometimes feel forced to adopt aggressive communication patterns as a means of coping with their environmental circumstances and dealing with the complex and often frustrating public assistance agencies. These types of behaviours were apparent during some of the assertiveness exercises and lead the researcher to believe that additional support and training in this area would be highly beneficial. Training in assertive behaviours should be extensive and complete, such that it generalizes beyond the training context to life in general.

Role Models

The influence of role models in the career development of the participants was another area of interest in this study. Role models represent a source of understanding, knowledge, encouragement, support, and validation for individuals who want to consider, or actually pursue nontraditional occupations. Many women have limited exposure to role models from a wide range of occupational alternatives. It is, therefore, important to provide appropriate role modelling interventions that focus attention on the growth

occupations associated with our knowledge-based economy, occupations that are generally male-dominated.

Individuals seeking to attain a specific result (e.g., a nontraditional career or an enhanced economic situation) will attend to the words and actions of germane role models and endeavour to imitate their behaviours and acquire their attitudes and values (Thomas, 1992). The merit of role models for enhancing decision-making (Gottfredson, 1981), self-esteem (Walker, 1981), and self-efficacy (Hackett and Betz, 1981) has been demonstrated. Numerous studies have also recognized the influence of role modeling in fostering consideration of nontraditional occupations (e.g., Coyle-Williams and Maddy-Berstein, 1990; Fisher and Poitier, 1987; Green and Stitt-Gohdes, 1997; Hackett, Esposito, and O'Halloran, 1989; McKenna and Ferrero, 1991).

Throughout this research intervention, role models were presented in person or through media format in an effort to provide exposure to a variety of women working in nontraditional fields. It was hoped that these individuals would provide occupational information, career motivation, and encouragement to the participants. Based on an analysis of the relevant subtest, the findings indicated that the treatment group did not exhibit a significant increase in their level of emphasis on role models, however, some improvement was noted. In this study, as in others (e.g., Vaughan and Fisher, 1981), the duration of the nontraditional role-modelling intervention may have been problematic. It can be presumed that the women involved in this study, because of their circumstances, would not ordinarily be exposed to a wide range of nontraditional role models, therefore,

more intensive or continuing intervention would be warranted.

Imagery/Possible Selves

Imagery and the notion of possible selves represent a creative, cognitive approach to career counselling and represent additional investigative issues in this study. Research (e.g., Brown and Brooks, 1991; Witmer and Young, 1987) has established that imagery can promote occupational exploration, stimulate decision-making, and enhance self-knowledge and values clarification. It fosters the generation of greater and more varied occupational choices and "leads to greater diversity of thought" (Sarnoff and Remer, 1982, p. 306). It is, therefore, highly appropriate for this type of research intervention that is aimed at expanding the occupational exploration of women.

Possible selves are "elements of the self-concept that represent what individuals could become, would like to become, or are afraid of becoming" (Oyserman and Markus, 1990b, p. 112). They are reflections of one's past, they instigate and evaluate current behaviours, and they act as incentives for future behaviours (Cross and Markus, 1991; Markus and Nurius, 1986; Ruvolo and Markus, 1992). Becoming aware of the nature and composition of possible selves can help women understand the influence of socialization and personal history and it can emphasize the importance of having positive future self-representations. Individuals who have developed such successful and positive possible selves have been shown to exhibit increased task performance (Ruvolo and Markus, 1992). Possible selves can serve as motivators for women in their career

development.

An aim of this research study was to introduce the concepts of imagery and possible selves and to identify their utility in women's career development. It was anticipated that the techniques would be employed successfully by the participants to expand their range of career exploration and to further specific, goal-directed behaviours. Findings, based on an analysis of the relevant subtest, indicated, however, that there was no significant increase in the importance of imagery and possible selves for the participants in the treatment group. Crabbs (1979) and Morgan and Skovholt (1977) contend that obstacles may arise if individuals are not open to the fantasy experience. It can be suggested that the concepts of imagery and possible selves would be a "hard-sell" for the women who are faced with a daily myriad of economic and other life challenges. Reality may provide little time for fancy.

Furthermore, Oyserman and Markus (1990a) held that individuals who have distinctive feared selves (e.g., "dropout" or "unemployed") need corresponding expected possible selves that demonstrate how to avoid the undesirable outcome. It is possible, given the lack of access to career or employment counselling and the fact that many of the participants have had long-term experience with public assistance, that some individuals in the group may have difficulty developing these corresponding expected selves. They may not know exactly how to avoid the feared self, or how to progress towards achieving a positive future self-representations like "high school graduate" or "employee." The benefits of the techniques may have to be reinforced and generalized to

the participant's real-life issues. Counselling strategies have to be meaningful and realistic for the population.

Attitudes

Qualitative analysis, based on a review of the relevant subtest, revealed interesting findings relating to changes in participants' attitudes. The ensuing discussion will highlight a number of selected attitudinal items. It should be noted before proceeding that the significant increase in decision-making and problem-solving ability and the distinct improvements in role model emphasis, occupational knowledge, and assertiveness may have contributed to some of the attitudinal changes.

The first selected questionnaire item, question 20, addressed the connection between further education and enhanced occupational opportunity. This connection is clearly supported by the research. Statistics Canada (1999) asserted that the gender wage gap is more significant for individuals who do not have some form of post-secondary education; therefore, it is highly appropriate that women are encouraged to pursue further education. Indeed, education has been shown to be an essential element in today's knowledge-based economy (Hoyt, 1997). It can improve a woman's chances for employment and foster opportunities for additional monetary reward, power, and prestige (Butlin and Oderkirk, 1996). Human Resources and Development Canada (1996) also noted the significance of the education premium, or the increase in salary because of additional years of schooling.

The treatment group's awareness of the importance of education and its link to occupational opportunity was evident even from the onset of the career counselling intervention. Over the course of the career counselling intervention the level of agreement with this questionnaire item increased, indicating greater endorsement of the attitudinal statement. The control group exhibited a decrease in their level of agreement with the statement; therefore, it can be suggested that the research intervention confirmed or elevated the importance of education in women's career development for the participants in the treatment group.

Item 25 on the questionnaire was also education-related and asked participants if they would engage in a traditionally male school program. The national trend, according to a Status of Women Canada (1997) report, is towards a greater imbalance in education; more women are entering male-dominated fields of study, however, even greater numbers are enrolling in female-dominated areas. Dahlberg (1984) suggested that women's low participation in traditionally male academic programs may be due to the influences of gender discrimination, or fear of failure. Anxiety and low self-confidence (Taylor and Pope, 1986), low self-efficacy (Hackett and Betz, 1981; Gianakos, 1999), as well as math and science stereotypes (Bartholomew and Schnorr, 1994; Hyde, Fennema, Ryan, Frost, and Hopp, 1990; Weiler, 1996) have also been found to be consequential factors.

An indication of the continuing tendency to opt for traditionally female academic programs may be evident in this research study where, over the course of the

intervention, the treatment group recorded a small decrease in their level of interest for participation in a male-dominated course of study. It is important to note, however, that at the end of the intervention a very high percentage of the participants in the treatment group (92%) still indicated a willingness to engage in such a program.

Explanations for the decline in interest for a traditionally male school program may relate to psychological or environmental influences. Even though furthering their education would be the logical next step for the women in this study some participants, because of their socioeconomic background, may be underestimating their capabilities (Reixach, 1995). They may also be experiencing lingering negative effects of early school experiences. A poor attitude towards learning, difficulty with academic requirements, or the lack of a supportive, conducive learning environment, may have been responsible for the fact that the majority of the women in the treatment group did not complete high school.

Item 27 gauged the participant's degree of interest in working in a male-dominated occupation. Preference for male-dominated, gender-neutral, or female-dominated occupations has been examined and found to be influenced by a wide variety of factors including self-concept and self-efficacy (Betz and Hackett, 1981; Green and Stitt-Gohdes, 1997) and background factors such as work history, employment opportunity, and economic situation (Fassinger, 1990).

There are indications that more women are aspiring to traditionally male occupations; however, some research has shown that this trend is more evident for

women with higher socioeconomic status (Hannah and Kahn, 1989; Shu and Marini, 1998). Interestingly, the participants in this study, who have fewer socioeconomic benefits, indicated an increase in their level of interest in working in a male-dominated occupation. It can be speculated that the research intervention did succeed in advancing the advantages of such occupational opportunity. This finding is in keeping with a study by Read (1994) that also found that programs promoting occupational gender equity increased interest in male-dominated fields.

Item 24 compared men's occupational opportunities to that of women. Studies suggest that indeed there are gender-based distinctions in the structure of occupational opportunity. Furthermore, occupational segregation has been shown to be a powerful determinant and a restrictive influence for women's career development (Bartholomew and Schnorr, 1994; Brown and Brooks, 1996; Miller and Budd, 1999). Socialization patterns, gender discrimination, and occupational stereotyping can create occupational barriers for women and preserve benefits for men. A report by the Organization for Economic Co-operation and Development (1998) indicated that men dominate in the occupations with the greatest prestige, power, and monetary rewards and although there are signs of decline in the area of occupational segregation (Shu and Marini, 1998), it remains a significant issue.

The participants in this research study demonstrated an increase in their belief that men do not have more occupational opportunities than women. If one also considers the increase in the participant's interest for employment in a male-dominated occupation

(Question 27), it can be intimated that the present finding reflects an awareness of the current occupational situation yet a desire and confidence to overcome or dismiss any existing obstacles. It may also be, however, that the participants are underestimating the influence of discrimination in the workplace by assuming that it is a thing of the past. Tomaskovic-Devey (1990, cited in Sterett, 1999), has suggested that women may ignore gender inequities because they compare themselves to other women.

Item 22 suggests that women can work in any occupational area if they want to. The participants in this study indicated an increase in their endorsement of this statement over the course of the research intervention. This increase may be reflective of the notion that females generally have more liberal and flexible attitudes regarding career aspirations and they adhere to fewer stereotypes compared to males (Evelo, Jessell and Beymer, 1991; Henderson, Hesketh, and Tuffin, 1988). If the present finding is related to the participant's increase in interest for male-dominated occupations (see question 28), then it can also be suggested that the increase may be an indication of the treatment group's level of self-confidence or self-efficacy. Nevill and Schleckler (1988) found that women who were interested in pursuing male-dominated occupations have higher self-efficacy and feel more confident in their ability. Conversely, the present finding may be an expression of the group's underestimation of the presence of occupational segregation.

The final item selected for discussion was item 26 which suggested that women had to work harder to prove that they can do the job. The participants demonstrated an

increase in their concurrence with this statement likely indicating some awareness of the

issues associated with occupational and organizational discrimination. Kerka (1995) and

Cook (1993) asserted that women can encounter sexual discrimination and harassment

because of persistent organizational gender biases. Cook held that while women are

expected to maintain primary responsibility for the family, few organizations make the

effort to accommodate this unique aspect of many female workers by providing such

things as company daycares or flex-time options. Davidson and Gilbert (1993) also

suggested that because of the prevalence of gender biases women face legitimacy issues

on the job. This may be especially true of traditionally male occupations, however,

Silcox and Cummings (1999) submitted that women often anticipate such treatment and

act accordingly.

Summary of Findings

The data analysis indicated a significantly greater difference in problem-solving

and decision-making ability for the treatment group and changes in the intended direction

for several of the dependent variables, namely occupational knowledge, assertiveness,

and role models. Furthermore, while the treatment group's level of occupational

knowledge and their endorsement of role models failed to differ significantly from that

of the control group, the differences did approach significance. Findings for the

dependent variable self-awareness, self-esteem, and self-efficacy and the dependent

variable imagery/possible selves showed no significant effect or positive influence.

The career counselling program did appear to influence the attitudes of the participants of the treatment group. The selected findings showed that for the treatment group, at the time of the posttest, a larger percentage of agreement was found in response to the attitudinal statements regarding: (a) the connection between further education and enhanced occupational opportunities, (b) the ability of women to work in any field they choose, (c) the notion that women need to work harder to prove themselves on the job, (d) the notion that men did not have more occupational opportunity than women, and (e) interest in working in a male-dominated occupation. The treatment group exhibited a decrease in their level of agreement with the attitudinal statement concerning interest in participating in a male-dominated school program.

Limitations

1. Quasi-experimental, nonequivalent control group design, such as this study, with its lack of random assignment, provides adequate control of several sources of invalidity, however, a number of threats are evident. Uncontrolled internal validity issues include regression of scores and three possible selection interactions (Gay, 1992). Regression of scores refers to the tendency of subjects who score highest on a pretest to score lower on the posttest, and of subjects who score lowest on the pretest to score higher on the posttest. Selection interaction occurs when using already formed groups.

The groups may have been different from the onset or benefitted more, or less, from the treatment because of maturation (e.g., physiological or biological processes occurring within the subjects over time), history (e.g., environmental events occurring between the first and second observations in addition to the independent variable), or testing factors (e.g., sensitization to the posttest as a result of having completed the pretest). Attributing causal status to the independent variable, the career counselling intervention, may be difficult because of these internal validity questions. External validity is concerned with generalizability and for this type of study the uncontrolled threat is pretest-treatment interaction. The pretest may have increased or decreased the participant's responsiveness or sensitivity to the treatment. (It should be noted that a series of one way ANOVA's was utilized to empirically assess the differences in the two groups at the beginning of the study. Analysis indicated that the groups were similar on the pretest, therefore, initial differences and normal development can be ruled out as a basis for one group outperforming the other.)

    2. The uniqueness of the research sample, women receiving social benefits and participating in a government-sponsored employment enhancement program, precludes broad generalization of the results for other populations. It can be speculated, however, that the results could be generalized to other women with low socioeconomic status.

    3. The small sample size makes it difficult to demonstrate significant changes and it can influence the generalizabilty of the results. Additional studies using similar groups would prove beneficial

4. The research-specific questionnaire is not a well-tested, standardized measure. Further reliability and validity studies will be needed to ensure the appropriateness of the instrument for analysing the effects of the career counselling intervention.

5. The external validity of this study may have been influenced by experimenter effects resulting from the fact that the researcher also acted as facilitator of the career counselling intervention.

Recommendations for Research

Based on the results of this study and the review of literature, several recommendations are made for further research:

1. There is a need for additional research in the area of career counselling for women with low socioeconomic status. A comparison study of rural versus urban low SES women, for instance, may help to identify differences and similarities as well as pinpoint meaningful issues.

2. Replication of this study with a larger yet similar sample population will permit a reevaluation of the program's influence and provide an opportunity for reassessment of the research-specific measure. In addition, a larger sample size may be more representative of the general target population and make the results more generalizable.

3. Replication of this study utilizing an expanded time frame for the career

counselling intervention, "Shaping Your Future: Towards the Occupational Integration of Women" will permit a further evaluation of the effectiveness of the program.

4. Any replication of this study should involve a three or six-month followup evaluation. This will provide further information concerning the extended influence of the career counselling intervention and foster necessary revisions to the program.

Recommendations for Practice

Based on the results of this study and the review of literature, several recommendations are made for practice:

1. Women need to be aware of the current labour market trends and the various occupational and educational options in order to make informed occupational decisions. Additional time, information, and support should be provided in the area of occupational knowledge and job search strategies. There should be increased access to information resources such as the Career Resource Centre, the Internet, and the public libraries as well as further training in resume writing and interviewing techniques. It may also be prudent to make the participants aware of policy/legislation relating to funding for further education since educational costs are often an insurmountable obstacle.

2. Career counselling is intricately linked to personal counselling and this link prescribes that efforts are made to address the influence of the self in women's career development. There must be provision for additional self-evaluation, assertiveness

training, self-esteem enhancement, and confidence-building activities. Attempts need to be made to help women rid themselves of internalized feelings of inadequacy, especially as they relate to learning. Where necessary, arrangements should be made to provide anger management training, financial counselling, or coping strategies. Societal attitudes as well as feelings associated with lack of control and power, stress over money concerns, and feelings of isolation may negatively influence the self-concept and prove especially difficult to overcome for women from low SES backgrounds.

3. Women who have restricted access to finances, transportation, or daycare may have little opportunity to meet a wide range of women who are working in male-dominated occupations. It is, therefore, advantageous to provide a significant number of role models. Based on this study, live models have the greatest impact because of the opportunity for group or individual discussion.

4. The concepts of imagery and possible selves should be made relevant to the career counselling participants. Efforts should be made to ground the concepts by using appropriate real-life situations and the benefits of the strategies should be generalized beyond the training context to reality issues.

5. Specific attention to educational/learning issues may be necessary for low SES women, especially for those who did not achieve a complete high school education. Limited educational attainment and the possibility of negative learning experiences indicate a need for discussion of issues such as fear of failure, low self-confidence, and math and science phobias.

6. Accurate information regarding the influence of occupational segregation, socialization and gender discrimination must be included in the program. Women need to be aware of the prevailing situation and of ways to overcome presenting obstacles.

7. The notion of multiple roles should be integrated into the program. Skills for balancing work and family are important part of an effective, current career counselling program. Participants would benefit from group discussions and information on role planning strategies.

8. To accommodate additional emphasis and/or practice for key career issues (e.g. self-awareness, assertiveness, and occupational knowledge), efforts should be made to increase the time frame for the implementation of the career counselling intervention, "Shaping Your Future: Towards the Occupational Integration of Women." Follow-up to ascertain sustained gains would also be useful.

In general, there should be more attention to career counselling for adults, especially for the unemployed, the economically disadvantaged, those in career transitions, and those re-entering the workforce after an extended absence. This may entail the development of new career counselling programs or the revision of existing programs. It may involve government funding, but in the end the goal should be provision of professional services or appropriate resource material for individuals who do not readily have access to such information and services.

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APPENDIX A

"Questionnaire: Shaping Your Future: Towards the Occupational Integration of Women"

PART A

1. Name: _____

2. Age: _____

3. What is your present marital status?

       widowed .... __
       married .... __
       divorced .... __
       separated .... __
       single .... __

4. What grade did you complete in school? _____

5. What is your parents' educational level?

	Mother	Father
Some schooling		
High school diploma		
Some college or university		
Completed university		
Completed nursing school		
Completed trades/technical school		
Don't know		

6. What do you think is the most important thing you can achieve by continuing your

education? _____

7.   If you would like to continue your education after this program, check the one institution that interests you the most? Indicate your preferred course of study, if known.

Institution		Program
Undecided		
Memorial University		
Cabot College		
Marine Institute		
Community College		
Hospital Nursing School		
Private College		
Other (specify)		

8.   Indicate how much you know about each of these educational institutions and the programs they offer. (Answer even if you do not plan to continue your education.)

Institution	A lot	Some	Little	Nothing
Memorial University				
Cabot College				
Marine Institute				
Community Colleges				
Hospital Nursing Schools				
Private Colleges				
Training Institutes outside Newfoundland				

9.   If you are not continuing your education after this program, which of the following is the most important reason? (Check only one.)

My grades are not high enough	
I can get a job without continuing my education	
I cannot get the money I need to continue my education	
I don't know what I want to study	
I have no interest in continuing my education	
I want to stay home with my children.	
Other (specify)	

10.   What type of work would you like to do in the future? Try to be specific and name an occupation. _____

11.   What type of work do you expect to do in the future? Try to be specific and name an occupation. _____

12.   What do think is the average starting income for a person in the career you hope to pursue?

Less than $10,000 per year	
$10,000 to $20,000 per year	
$20,000 to $30,000 per year	
$30,000 to $50,000 per year	
more than $50,000 per year	

13. What gave you the idea to try this occupation?

(Check all that apply.)

T.V.	
Radio	
Books	
DISCOVER program	
Parents	
School instructors	
Husband/partner	
Social worker	
I know someone who does this type of work	
Other (please specify)	

14. Have you discussed your occupational plans with anyone?

(Check all that apply.)

Husband/partner		Counsellor	
Friends		Social worker	
Relative		Parents	
Instructor		Someone who does the work	
Haven't talked to anyone		Other (specify)	

15.   Do you know someone who is working in the occupational field that interests you?

No __

Yes __

If yes, indicate your relationship to this person (e.g. father, aunt, friend's, mother,

etc.): _____

16.   Do you think that women could experience problems if they chose to work in jobs where the workers are mostly male?

No __

Yes __

If yes, indicate what types of problems could they encounter:

_____

17.   Do you know of any supports that exist for women who wish to pursue careers in areas where the workers are primarily male?

No __

Yes __

If yes, what are some of these supports? _____

18.   Would you leave Newfoundland in order to find a job or continue your education?

No __

Yes __

19.   What are your top 5 goals in life (e.g. make lots of money, finish school, get married, etc)?

1. _____

2. _____

3. _____

4. _____

5. _____

PART B

For each of the following statements indicate your level of agreement or disagreement by circling one of the following responses:

>Strongly Agree - This statement is correct all of the time.

>Agree - This statement is correct much of the time.

>Undecided - I don't know how I feel about this statement.

>Disagree - This statement is incorrect much of the time.

>Strongly Disagree - This statement is incorrect all of the time.

Attitudes:

20. Continuing my education after this program means that I will have a better chance of obtaining a good job.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

21. I could work at a job that I felt was boring and unchallenging if the money was good.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

22. I think that women can work in any occupational area, if they want to.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

23.   I would not like to work in a job where most of the other employees were men.

Strongly Agree   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

24.   I think that men have more career opportunities than women.

Strongly Agree   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

25.   I would take a course in school if I was interested in it, even if the class had never had a girl in it before.

Strongly Agree   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

26.   I think that women have to work harder to prove that they can do the job.

Strongly Agree   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

27.   I would find it interesting to work in a job where most of the other employees are men.

Strongly Agree   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

28.   I need to find a job that I enjoy doing ... money is not a priority for me.

Strongly Agree   **Agree**   **Undecided**   **Disagree**   **Strongly Disagree**

29.   Having people respect me is more important than having a good salary.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

30.   Having a good job where I know I won't get fired or laid off is more

       important to me than being paid a good salary.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

PART C

For each of the following statements indicate your level of agreement or disagreement by circling one of the following responses:

Strongly Agree - This statement is correct all of the time.

Agree - This statement is correct much of the time.

Undecided - I don't know how I feel about this statement.

Disagree - This statement is incorrect much of the time.

Strongly Disagree - This statement is incorrect all of the time.

Guided Imagery/ Possible Selves:

31.   Imagining myself getting a good grade on an exam causes me to study harder.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

32.   Imagining myself being unemployed for a long period of time would cause me to try harder to be successful.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

33.   I usually imagine myself as a success.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

34. I have high expectations for my future.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

35. I often daydream about my future.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

36. When I'm stressed about something, I imagine myself in a relaxing situation and it calms me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

37. I try to solve problems by visualizing the situation in my mind.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

38. I often imagine what it would be like to be another type of person.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

39. I try to imagine what it would be like to be work in the occupation(s) that interest me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

40.   Daydreams often give me new ideas.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Role Models:

41.   It is important that the people who are close to me (e.g., husband/partner, parent, friend, etc.) support my choice of career.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

42.   I have talked to people who are currently working in occupational areas that interest me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

43.   People that I have seen on T.V. or people that I have read about, have influenced my thoughts on possible career choices.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

44. People who are currently working in the occupational areas can tell me a great deal about the working conditions, salary, and employment barriers.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

45. My husband/partner could persuade me to choose a career other than the one I really want.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

46. I talk to my instructors about my career plans.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

47. I have talked to my social worker or counsellor about my career plans.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Occupational Knowledge/ Job Search Techniques:

48. I have tried to get a part-time job or volunteer work to obtain valuable job-related skills.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

49.   I have researched the educational requirements for my occupational choice(s).

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

50.   Knowing people who work in a variety of occupational areas could help me to prepare or actually obtain a job.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

51.   I have a good understanding of how to write a resume.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

52.   I have a good understanding of what to expect during a job interview.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

53.   I use the DISCOVER program to find information regarding occupations that interest me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

54.   I am aware of the occupational areas where there will a strong demand for workers over the next 5-10 years.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

55.   I have asked my husband/partner, parents, instructors, or friends about planning my career.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

56.   I review the newspaper ads to get an idea of the types of jobs that are available.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Assertiveness:

57.   I would rather let people have their own way than create a fuss.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

58.   I usually go along with what my other friends want even if I do not like the idea.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

59.   I try always to be the leader and force others to do what I want.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

60. I usually will not express my true feelings if they are different from everyone else's,... I would be embarrassed.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

61. I get very angry when I don't get my own way.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

62. I often have difficulty expressing what I feel or what I want.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

63. I feel angry with myself because I frequently let people walk all over me or use me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

64. I always seem to be apologizing for what I do or say.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

65. I don't usually take part in group discussions.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

66.   My friends usually do not pay attention to what I have to say.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

67.   I don't care if I hurt the other person's feelings just as long as I get to say
        what I think.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Decision Making:

68.   I have reviewed information about courses or programs that interest me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

69.   I have spent time trying to determine how I will finance any further
        education or training that I might need to achieve my career choice.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

70.   I am fairly certain about the career I wish to pursue.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

71.   I know the general area I want to work in, but I have not decided upon a
       specific occupation.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

72.   I am presently involved in paid or volunteer work that will give me valuable job
       related skills.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

73.   When I am making a decision I consider all of the possible advantages and
       disadvantages.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

74.   I do not feel embarrassed when I ask for help with a problem.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Self Awareness / Self Esteem / Self Efficacy:

75.   I know what type of job best suits me.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

76.   I have a good idea of what my talents are.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

77.   I feel confident that I could handle the requirements of my chosen
       occupation.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

78.   When I do well I know it's usually because of my hard work.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

79.   I am willing to work hard to obtain my desired career.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

80.   I try to learn from my mistakes.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

81.   I reward myself when I do well at something.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

82.   I feel that I deserve to be happy and successful.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

83.   I generally think of myself as being equal to everyone else.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

PART D

Please use this space to describe your overall impression of the career counselling program, "Shaping your Future: Towards the Occupational Integration of Women". (Feel free to give detailed comments.)

_____

_____

_____

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APPENDIX B

Correspondence

Dear Mr. Ron Janes:

I am a graduate student at Memorial University pursuing a Master's degree in Educational Psychology. My research is in the area of career counselling for women and I am asking your support with a career counselling program which can be offered at New Beginnings. My study has been approved by the Ethics Review Committee at Memorial.

The program is entitled "Shaping your future: Towards the occupational integration of woman" and it includes ten sessions proceeding over a five-week period. Individual sessions require a minimum of 60 minutes or a maximum of 90 minutes; the program is flexible to the demands of the participant's schedule. The activity/discussion-based career planning program is designed to deal with a number of personal and career issues including self-esteem, self-awareness, assertiveness, and decision-making. Participants will be given the opportunity to examine all career options, including occupations in the professions, technology, and skilled trades. A number of women who work in such fields as engineering, law enforcement, and construction will be available to provide information and encouragement.

In addition to the group of women who will actually be participating in the career counselling program, my research will involve a second group of women who will serve as a comparison group. Individuals in both groups will be asked to provide some personal background information and answer questions concerning their occupational hopes and expectations. Two questionnaires will be presented to all women, one at the beginning of the program and another seven weeks later. It is expected that each questionnaire will take approximately 30 minutes to complete and the participants are free to omit answering any questions that they prefer not to answer. The information provided by the comparison group

will then be studied in relation to the information provided by the program participants.

All information gathered in this study is strictly confidential and at no time will individuals be identified. Participation is voluntary and any individual may withdraw at any time without incurring prejudice in any form. Participation will not be linked in any way with successful completion of the New Beginnings program. My aim is to determine the effectiveness of this career counselling program on women involved in a government-sponsored training program while also contributing to our knowledge of women's career development and career interests; I will not be evaluating individual performance. The results of my study will be available to you upon request.

I sincerely hope that you will support this study. If you have any questions or would like additional information please contact me (745-3650) or my research supervisor, Mildred Cahill, Associate Professor with the Faculty of Education (737-6980). If at any time you wish to speak with a resource person not associated with the study, please contact Dr. Stephen Norris, Acting Associate Dean, Research and Development. Copies of the consent letters applicable to prospective members of the program and comparison groups are attached for your perusal.

Thank you for your consideration of this request.

Yours sincerely,

Deborah Brake-Brushett

Dear Participant:

I am a graduate student at Memorial University pursuing a Master's degree in Educational Psychology. My research is in the area of career counselling for women and I am asking your support with a career counselling program being offered at New Beginnings. My study has been approved by the Ethics Review Committee at Memorial.

The program is entitled "Shaping your future: Towards the occupational integration of woman" and there will be ten sessions proceeding over a five-week period. Each session is expected to last a maximum of 90 minutes. The activity/discussion-based career planning program is designed to deal with a number of personal and career issues including self-esteem, self-awareness, assertiveness, and decision-making. You will be given the opportunity to examine all career options, including occupations in the professions, technology, and skilled trades. A number of women who work in such fields as engineering, law enforcement, and construction will be available to provide information and encouragement.

Program participants will be asked to provide some personal background information and answer questions concerning their occupational hopes and expectations. Two questionnaires will be presented to you, one at the beginning of the program and another seven weeks later. It is expected that each questionnaire will take approximately 30 minutes to complete and you are free to omit answering any questions that you prefer not to answer.

All information gathered in this study is strictly confidential and at no time will individuals be identified. Participation is voluntary and you may withdraw at any time without incurring prejudice in any form. Your participation is not a requirement for successful completion of the New Beginnings program. My aim is to determine the effectiveness of this career counselling program on women involved in a government-

sponsored training program while also contributing to our knowledge of women's career development and career interests; I will not be evaluating individual performance. The results of my study will be available to you upon request.

I sincerely hope that you will support this study. If you have any questions or would like additional information please contact me (745-3650) or my research supervisor, Mildred Cahill, Associate Professor with the Faculty of Education (737-6980). If at any time you wish to speak with a resource person not associated with the study, please contact Dr. Stephen Norris, Acting Associate Dean, Research and Development.

Attached is a consent form. Please sign this form and return it to your New Beginnings director, Mr. Ron Janes, if you agree to take part in the program.

Thank you for your consideration of this request.

Yours sincerely,

Deborah Brake-Brushett

I _____ hereby agree to take part in a study to determine the effectiveness of the career counselling program, "Shaping your future: Towards the occupational integration of women", on a group of women currently involved in a government-sponsored employment enhancement/training program. I understand that my participation is entirely voluntary and that I may withdraw at any time without incurring prejudice in any form. All information is strictly confidential and no individual will be identified.

Date: _____

Dear Participant:

I am a graduate student at Memorial University pursuing a Master's degree in Educational Psychology. My research is in the area of career counselling for women and I am for asking for your support. My study has been approved by the Ethics Review Committee at Memorial.

As part of my research study I will be offering a career education program entitled "Shaping your future: Towards the occupational integration of woman" to a group of women who are currently involved in the New Beginnings training program. The ten session activity/discussion-based career planning program is designed to deal with a number of personal and career issues including self-esteem, self-awareness, assertiveness, and decision-making. For your part, as a member of the comparison group, you will be required to provide some personal background information and answer questions regarding your occupational hopes and expectations.

Two questionnaires will be presented to you, one at the beginning of the study and another seven weeks later. It is expected that each questionnaire will take approximately 30 minutes to complete and you are free to omit answering any questions that you prefer not to answer. The information that you provide, as a member of the comparison group, will then be studied in relation to the information provided by the individuals participating in the actual career counselling program.

All information gathered in this study is strictly confidential and at no time will individuals be identified. My aim is to determine the effectiveness of this career counselling program on women involved in the government-sponsored training program while also contributing to our knowledge of women's career development and career interests; I will not be evaluating individual performance. Participation is voluntary and you may withdraw

at any time without incurring prejudice in any form. The results of my study will be available to you upon request.

I sincerely hope that you will support this study. If you have any questions or would like additional information please contact me (745-3650) or my research supervisor, Mildred Cahill, Associate Professor with the Faculty of Education (737-6980). If at any time you wish to speak with a resource person not associated with the study, please contact Dr. Stephen Norris, Acting Associate Dean, Research and Development.

Attached is a consent form. Please sign this form and return it to the New Beginnings director, Mr. Ron Janes, if you agree to take part in the program.

Thank you for your consideration of this request.

<div align="right">Yours sincerely,</div>

<div align="right">Deborah Brake-Brushett</div>

I _____ hereby agree to take part in a study to determine the effectiveness of the career counselling program, "Shaping your future: Towards the occupational integration of women", on a group of women currently involved in a government-sponsored employment enhancement/training program. I understand that my participation is entirely voluntary and that I may withdraw at any time without incurring prejudice in any form. All information is strictly confidential and no individual will be identified.

Date: _____

Dear _____:

Thank you for considering the program, "Shaping Your Future: Towards the Occupational Integration of Women".

We are hoping to have a number of women, including yourself, act as positive role models for our program participants. As role models, you would be encouraged to share some of your experiences with working in your respective professional, technical, or trades field. Of course, sharing your female perspective of life roles in general (e.g. wife/partner, mother, student, etc.) would also be very helpful to the participants.

"Shaping your Future: Towards the Occupational Integration of Women" focuses on the career exploration and planning of women. Although originally developed to provide supplementary career counselling for adolescent females living in rural and/or remote areas, the program components are valuable and relevant for all women. The duration of the program ranges from 10 - 15 hours, with individual sessions requiring a minimum of 60 minutes or a maximum of 90 minutes; the program is flexible to the demands of the participant's schedule.

"Shaping Your Future: Towards the Occupational Integration of Women" aims to :

- foster positive self-esteem and self-efficacy;

- develop competencies in decision-making, problem solving, and critical thinking;

- enhance interpersonal skills, organizational and negotiating/networking skills;

- provide as role models for the students, women who are self-employed or engaged in professional, technical, or trades occupations;

- develop competencies in self-exploration and life-planning;

- provide access to accurate and current occupational and labour market information; and

- teach participants how to gather their own occupational and labour market information.

We feel that you can play a very important role in our attempts at encouraging women to consider the full range of career options.

I have attached a summary package of information that further outlines the program. Please feel free to contact me if you have any comments or concerns.

Yours truly,

TOWARDS THE OCCUPATIONAL
INTEGRATION OF WOMEN

This information package has been designed for parents, students, teachers, counsellors, role models, and administrators who are interested in a career program that deals with the unique career-related issues of young women.

Background Information:

The Centre for Distance Career Counselling Services was established in 1990 at Memorial University of Newfoundland to provide career counselling to youth in rural and remote areas. Under the directorship of Professor Mildred Cahill, six projects were developed at the Centre. These projects were originally designed to be delivered via distance education, although the program content is also appropriate for face-to -face counselling.

Program Information:

The career counselling program to be delivered to the students is entitled **"Shaping Your Future: Towards the Occupational Integration of Women"**. It was field tested on 49 young women (twenty-four from grade 9 and twenty-five from level 2) from six schools in rural Newfoundland and Labrador. This program, while addressing the particular needs of young women living in rural and/or remote areas, is appropriate for females of all ages.

All too often, women "close occupational doors" by not considering all career options. This program is a general career exploration program designed to encourage women to consider the full range of career alternatives. While the program does provide the participants with access to post-secondary information and up-to-date labour market information, it also focuses on the importance of self-awareness and positive self-esteem in

career planning. A career is viewed as more than just a job; it is a life role encompassing aspects of work and non-work experiences. Emphasis is given to the relationship between one's self knowledge and one's career preferences.

Role Models:

Many women have inadequate exposure to role models who represent the broad range of occupational alternatives. This program will endeavour to introduce the participants to women from a variety of professional, technical, and trades fields. These women can have a significant impact by supplying relevant information about their respective occupations, by demonstrating that women can be competent in their chosen career, and by encouraging the participants to consider all occupational options.

Role models are encouraged to share their personal and occupational experiences with the participants. These women will add "real life" scenarios to the many issues encountered in the career development of women.

Program Materials:

Various materials have been developed to aid in the successful implementation and delivery of this career education program. Three distinct program Guides are available to assist the counsellor, the participants, and the role models, respectively. These Guides contain career counselling themes and exercises that will facilitate discussion of relevant career development issues. The women will also be provided with post-secondary and labour market information.

To augment the material contained in the program Guides, three original videos have been produced by the Centre. These videos focus on a number of career counselling issues and will form a basis for further discussion during the program.

The program consists of:

1.   one counsellor/facilitator Guide

2.   one student Guide

3.   three videos concerning career planning for young women

4.   information packages

School Contact Person:

In order to ensure the smooth running of the program, a teacher/counsellor within the school should act as a contact person. Principals should discuss the program with the selected contact person and refer him or her to the project counsellor. The project counsellor will then arrange to meet with the contact person to identify their respective roles and responsibilities.

Program Goals:

By the end of this program, participants will:

1.   recognize the connection between personal strengths, interests, values, attitudes, and career planning and exploration.

2.   understand the importance of developing/maintaining a positive self concept.

3.   understand the decision-making process and be able to use strategies for effective decision-making.

4.   understand the changes taking place for women in the workforce and the opportunities that are available for women today.

5.   understand the concept of "career" and how it differs from "job" or "occupation".

6.   understand the unique concerns for women in their career planning,

7.   have the necessary skills and knowledge required for gathering information related to occupations, education, locations/settings, and labour markets, and be able to relate this information to their own career planning and development.

8.   develop skills and competence in their career planning and development.

Overview of the Program:

Session #1:

   - general introduction to the program

   - invitation for participants to commence reflecting on their future

Session #2:

   - definition of career and career planning

   - focus on self-esteem

   - exploration of attitudes

   - introduction of role models

Session #3:

   - discussion of women in the workforce and the roles women play

   - exploration of feelings related to finishing high school and leaving

home

- identification of good coping strategies and ways to boost self-esteem

- invitation of role models to share their experiences

Session #4:

- assertive behaviour

- self-awareness and assertiveness

- self-esteem and assertiveness

- practise of assertive behaviour

Session #5:

- job search techniques

- letters of inquiry

- resumes

- job interviews

Session #6:

- the decision-making process

- a decision-making model

- making decisions

Session #7:

- introduction to CHOICES/DISCOVER profile booklet

- completing the CHOICES/DISCOVER profile

Session #8:

    - "Jane's Decision"

    - locating occupational information

    - a closer look at career action planning

Session #9:

    - discussion of CHOICES/DISCOVER and individual profile

Session #10:

    - summary of the program

    - discussing individual career plans

    - program evaluation

Administrative Points:

1. This program can be offered in a minimum of 10 hours. The inclusion of a number of role models and/or the large number of student activities, can extend the program to a maximum of 20 hours in length. Another possibility would be to incorporate this program into an existing career education course.

2. This program may be delivered on site by a counsellor/facilitator or via distance technology.

3. This program has been field tested on young women from Grade 9 to Level II. However, it would be appropriate for all women exploring career options.

APPENDIX C

"Shaping Your Future: Towards the Occupational Integration of Women"
Overview of Research Intervention Strategy

Session 1

Pretest
Introduction to the program
Establishing of ground rules
Guided fantasy

Session 2

Career and career planning
Self-esteem
Attitudes
Role conflict
Video ("From Here to There")

Session 3

Self-esteem
Self-awareness
Feelings

Session 4

Stress
Coping strategies
Assertiveness
Guest speaker (Coping strategies)

Session 5

Assertiveness
Job Search
Video ("The View From Here")
Guest speaker (Job search)

Session 6

Career planning/ job search
Letter of inquiry
Resumes
Job interviews

Session 7

Guest speaker (Self esteem, motivation, and volunteering)

Session 8

Job interviews
Decision-making model
Time management

Session 9

Field trip (Career Information Resource Centre)

Session 10

Video ("For Richer-For Poorer")
Guided fantasy
Program summary

Posttest administration

Session One

Objective: This session introduced the learning goals of the career counselling program

and provided for the organization of appropriate group rules.

In this, the initial session of the program, the pretest was administered to the

participants and efforts were made to explain the aims of the career counselling program.

A group activity was implemented to facilitate introductions and help put the participants at ease. The women were then told that during the program they would be involved in discussions and activities that could enhance their understanding of themselves, the career planning process, and the nature of job and educational opportunities. A brief overview of the major program themes was provided and mutually agreeable ground rules were established. The session concluded with a guided fantasy activity focusing on one's future life/career and the assignment of a home activity concerned with self-awareness.

Session Two

Objective: This session defined the concept of "career", and examined the importance of attitudes and self-esteem in career planning. The women were also introduced, through video, to women working in a wide variety of jobs.

To reiterate the importance of confidentiality and appropriate group conduct this session began with a brief overview analysis of the ground rules. A review of the home assignment and the subsequent discussions facilitated the sharing of feelings and information. The notion of career as a life story, a composite of work and non-work experiences, was discussed within the group setting. The significance of one's self-esteem and personal attitudes in career planning were highlighted throughout a series of activities. One activity, in particular, utilized the practice of positive self-talk to modify poor self-esteem and negative attitudes.

A program video entitled "From Here to There" was shown to the participants during the second part of the session. In the video six women communicate their experiences with role conflict and they stress the importance of having a supportive environment and personal role models.

Session Three

Objective: This session was designed to further the self-assessment process and to investigate for strategies that boost self-esteem.

The home activity that was assigned during the last session asked each woman to make two lists: "words that describe me" and "things that I'm good at". Discussion of this exercise encouraged the presentation of personal thoughts and feelings. Additional emphasis was placed on expression of one's feelings and the connection of feelings with one's thoughts and self-esteem with a supplementary "feelings" activity.

The homework assignment for the next session was concerned with the identification of individual priorities.

Session Four

Objective: This session looked at the importance of having good self-esteem, the impact of stress, coping strategies, and assertiveness. Participants were also introduced to a role model who was educated and trained in a "non-traditional" field.

The home activity was reviewed to demonstrate similarities and differences in

personal priorities. Participants then joined with the guest speaker in discussing the various sources of stress and ways of managing the resulting anxiety. Assertive behaviour was presented as an alternative means of averting stressful situations. A home activity was assigned to evaluate one's personal assertiveness level.

The guest for session four was a women who had training in the areas of Food Science and Electronics. She shared, with the program participants, her educational, work, and life experiences.

Session Five

Objective: This session provided additional information and practice in the area of assertive behaviour and coping strategies. A guest speaker introduced the topic of job search.

The home activity was reviewed to weigh the degree of assertiveness among the participants. A film entitled "The View from Here" was then shown to illustrate the influence of assertiveness and coping strategies, such as positive self-talk and time management. Women working or training in the province provide their comments on these issues throughout the film.

The guest speaker who attended session four returned to contribute to the group's discussion on job search. The experiences of this speaker were especially relevant for the women from New Beginnings because the guest speaker was a single parent in receipt of Social Assistance benefits: she was struggling with many of the same issues

that confront some of the New Beginnings participants.

Session Six

Objective: This session highlighted the connection between assertive behaviour and effective career planning. A variety of the practical skills involved in job search were discussed.

The use of "I" messages was explained and practiced as a means of expressing difficult, often negative messages. A step by step guide to constructing effective "I" messages was distributed and the participants who then involved themselves in a group activity focussed on the development and application of assertive statements.

Samples of letters of inquiry, application letters, and resumes were presented in the second part of the session. This was followed by an in-depth discussion of the job interview; necessary documentation, preparation, the interview process and typical interview questions. Participants were asked to prepare their own resume for the next session.

Session Seven

Objective: This session explored a wide variety of career development and life issues. A role model presented her experiences and views on self-knowledge, education, and effective job search.

The role model for this session was a past graduate of the New Beginnings

program and a long time recipient of Social Services benefits. Since completion of the program the role model has achieved her high school equivalency, obtained a job as Program Coordinator for a local community centre, assisted in youth corrections, and qualified for the position of Financial Assistance Officer with the Department of Social Services.

The significance of volunteering for work experience was emphasized during this session. In addition, the role model and the program participants discussed the importance of having good self-esteem, an adequate educational background, and a high level of motivation.

Session Eight

Objective: This session provided a conclusion to the topic of job search skills by focusing on the interview process. The issue of effective decision making was introduced. Several activities reiterated these themes.

The four stages of the interviewing process were outlined for the participants and a handout containing typical interview questions was distributed for future reference. In pairs, the women practiced the roles of interviewee and interviewer and a subsequent discussion revealed a series of personal problem areas.

In the second portion of this session the discussion centered on the importance of an effective decision-making strategy in resolving both career and personal dilemmas. A decision-making model was reviewed and application of the model was realized when

decision-making model was reviewed and application of the model was realized when the group helped to determine possible alternatives for a number of problems that were presented for discussion by individual members. The concept of time management was also integrated into the problem resolution process.

Participants were asked to continue with their resumes and to complete a short homework assignment on decision-making.

Session Nine

Objective: A tour of the Career Information Resource Centre (CIRC) was conducted during this session. The objective was to enhance individual career plans by providing access to additional career resources.

A career counsellor at the facility explained the role of the resource centre and gave a brief tour of the facility. Participants were then given the opportunity to review the wide range of available career materials and to investigate personally relevant career/training options. Several new occupational alternatives were explored..

Session Ten

Objective: This session served to link all of the career planning concepts discussed in the last nine sessions and to address any outstanding concerns. The importance of self esteem and motivation in career and life planning was emphasized.

The session began with a short discussion of the visit to the CIRC and a review of

the previous assignment on decision-making. Questions were answered regarding a
number of unresolved issues and several resume samples were examined.

A film entitled "For Richer - For Poorer" was shown to the participants in an
effort to demonstrate how several real-life women have surmounted financial and
emotional obstacles to achieve meaningful lifestyles and careers. Issues such as poverty,
single parenting, self esteem, decision-making, and motivation were addressed. The film
not only provided a connection for the various program components but it reflected, to a
significant degree, the present and future challenges facing many of the New Beginnings
participants. A discussion period followed.

Group members were advised of the date for the post-questionnaire.