

FACTORS RELATED TO THE TRADITIONAL
OR NONTRADITIONAL CAREER CHOICE OF
FEMALES IN NEWFOUNDLAND HIGH SCHOOLS

CENTRE FOR NEWFOUNDLAND STUDIES

**TOTAL OF 10 PAGES ONLY
MAY BE XEROXED**

(Without Author's Permission)

IRIS J. DARCY



FACTORS RELATED TO THE TRADITIONAL
OR NONTRADITIONAL CAREER CHOICE
OF FEMALES IN NEWFOUNDLAND
HIGH SCHOOLS

by



Iris J. Darcy, B.A., B.Ed.

A Thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Education

Department of Educational Psychology
Memorial University of Newfoundland

April, 1987

St. John's

Newfoundland

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-39459-5

ABSTRACT

This study attempted to determine the factors related to the traditional or nontraditional career choice of females in Newfoundland high schools. The sample consisted of 289 grade twelve females from twenty-one schools. These students were also included in Tom Wiseman's 1982 study. His study focused on the factors associated with traditional or nontraditional aspirations and expectations of Newfoundland high school youth. This present study followed up on many of the grade nine girls who were part of Wiseman's sample.

In 1985, data from these grade twelve girls were gathered using two procedures. The first was a survey-type questionnaire which drew on questions from the two questionnaires used in Wiseman's study as well as other questions pertinent to the topic. The second procedure comprised personal interviews which were conducted with thirteen girls. The girls were categorized into four groups according to whether or not they changed their traditional or nontraditional career orientations over the three year period. A cross-tabulation analysis of the traditionalism change categories was used to find factors related to the change or stability of career choice in these girls.

The instruments used in this study gathered data on several factors related to the career choices of these girls including: the educational and occupational plans

of these girls, early childhood family experiences, the influence of significant others, the amount of occupational knowledge, perceived parental attitudes, and the aspirations and expectations of employment. Questions also focused on: perceptions of abilities and limitations regarding work, parental education levels, success criteria, and peer influence.

Several factors were determined to be associated with traditional or nontraditional career choice. Some of these included: role models, perceptions of self, involvement in traditional childhood work, and academic experience.

Recommendations for practice focused on developmental programming, self-concept formation, and earlier career education. Recommendations for research considered studying other related populations, attitudinal formation, and values exploration.

ACKNOWLEDGEMENTS

Several people helped make the completion of this thesis not only possible but also a very memorable learning experience.

Sincere thanks has to be given to Dr. William H. Spain. His encouragement, guidance, and patient assistance throughout this entire process will always be gratefully appreciated.

To my husband, Stephen Darcy, my deepest appreciation and love for his constant support and understanding.

To my parents, Patrick and Elizabeth Dunphy, for a lifetime of encouragement.

To Mrs. Gwen Brokenshire for her very generous help in organizing the questionnaire and in collecting the data for this thesis.

To Maureen Kent for her invaluable typing services.

Table of Contents

	Page
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	
CHAPTER	
I INTRODUCTION TO THE STUDY	1
Purpose	1
Significance and Rationale	1
Local Statistics	2
Goals of Education	3
Possible Related Factors	4
Internal Factors	4
External Factors	5
Theoretical Framework	9
Research Questions	13
Definition of Terms	15
Limitations of the Study	16
II REVIEW OF RELATED LITERATURE	17
Career Development	17
Women in the Labour Force	22
Reasons Why Women Chose Traditional or Nontraditional Careers	24
Empirical Studies of Related Factors	45

	Page
III METHODOLOGY	50
Procedures	50
The Sample	50
The Instruments	53
Interview Process	55
Analysis	57
Variables Considered in the Analysis	58
Personal/Internal Factors	59
Situational/External Factors	62
Limitations of the Study	65
IV ANALYSIS OF THE RESEARCH QUESTIONS	66
Research Question 1	66
Research Question 2	69
Research Question 3	74
Research Question 4	75
Research Question 5	83
Research Question 6	84
Research Question 7	87
Research Question 8	94
Research Question 9	96

	Page
V CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS	109
Group 1: Traditional/Traditional	109
Group 2: Nontraditional/Nontraditional	111
Group 3: Traditional/Nontraditional ...	112
Group 4: Nontraditional/Nontraditional	114
Implications	117
Recommendations	125
Recommendations for Practice	125
Developmental Programming	125
Self-Concept Formation	127
Change in Offering Time of Career Education 3101	128
Recommendations for Research	128
Study of Related Populations	128
Early Attitudinal Formation	129
Exploration of Values and Role Conflicts	129
BIBLIOGRAPHY	130
APPENDICES	140
Appendix 1 - Career Development Questionnaire	141
Appendix 2 - Form C (1982 Questionnaire)	151
Appendix 3 - Form D (1982 Questionnaire)	158

LIST OF TABLES

Table		Page
1	1982 Sample Size	52
2	1985 Sample Size	53
3	1985 Category Size	58
4	Percentage of Positive Responses to Questions Concerning Sex Roles, Work, and Family	68
5A	Percentage of Positive Responses to Questions Concerning Self-Concept - 1982 Results	72
5B	Percentage of Positive Responses to Questions Concerning Self-Concept - 1985 Results	73
6A	Percentage of Positive Responses to Questions Concerning Occupational Awareness and Knowledge - 1982 Results	76
6B	Percentage of Positive Responses to Questions Concerning Occupational Awareness and Knowledge - 1985 Results	77
7	Percentage of Positive Responses to Questions Concerning Aspirations and Expectations of Employment	80
7A	1982 Responses to the Question Concerning the Decision to Attend a Post-Secondary Institution	80
7B	1982 Responses to the Question Concerning Chosen Career Plan	81
7C	1985 Responses to the Question Concerning Chances of Getting a Job	82
8	Percentage of Positive Responses to Questions Concerning Early Childhood Experiences	85
9	Positive Responses to Questions Concerning Educational and Occupational Level of Parents	88

Table		Page
9A	Percentage of Positive Responses to Questions Concerning Parental Work	88
9B	Percentage of Positive Responses to Questions Concerning Father's Occupation	89
9C	Percentage of Positive Responses to Questions Concerning Mother's Education Level	90
10A	Percentage of Positive Responses to Questions Concerning Role Models - 1982 Results	92
10B	Percentage of Positive Responses to Questions Concerning Role Models - 1985 Results	93
11	Percentage of Positive Responses to Questions Concerning School Counsellors and Significant Others	97
11A	1985 Results to Questions Concerning Discussion of Career Plans	97
11B	1982 Perceived Attitude of Mother About Education	98
11C	1985 Perceived Attitude of Mother About Education	99
11D	1982 Perceived Attitude of Father About Education	100
11E	1985 Perceived Attitude of Father About Education	101
11F	1982 Education Plans of Peers	102
11G	1985 Education Plans of Peers	103
11H	1982 Results on Influence of Significant Others	104
11I	1982 Results on People Consulted About Career Choice	105
12	1985 Breakdown of Course Selections	108

CHAPTER I

INTRODUCTION TO THE STUDY

Purpose

The purpose of this study was to determine the factors that are related to the traditional or nontraditional career choice of females in Newfoundland high schools, and to explore nature of changes in career aspirations in the high school years.

Significance and Rationale

In the technologically changing society of today, more employment opportunities are opening in what have often been considered nontraditional employment areas for women. Although over 50% of the paid labour force is made up of women, Canada Employment and Immigration (1985) pointed out that:

... 63% of all women in the work force were segregated in three occupational groups: clerical, sales, and service. (p. 1)

In 1981, Earley held that the prospects for employment in these three traditional areas of work for women were diminishing. The effects of computerization, especially, were being felt in the clerical field. A Subcommittee Report of the Newfoundland Ministerial Advisory Committee on Women's Issues in Education (1983) pointed out that many of the new jobs in the Canadian labour force would be

in high technology fields, particularly in microelectronics and computer-related occupations. The Advisory Committee quoted the 1981 Dodge Report which [emphasized] that the growth in the labour force in coming years [would] largely come from the increased participation of women. (p. 3)

However, the report also noted that not many women would have the training or background required for these highly skilled jobs.

(a) Local Statistics

Statistics on the graduates of Memorial University of Newfoundland, May 1983 and on student enrollments, 1982-83 at the College of Trades and Technology; the College of Fisheries, Navigation, Marine Engineering and Electronics; the Bay St. George Community College; and Vocational Schools throughout Newfoundland indicated that the majority of Newfoundland females have graduated from, or were enrolled in, traditional female courses of study.

Montgomery (1983) stated that over 70% of the female students enrolled at the College of Trades and Technology were training for the traditional female trades of clerical work, cooking, hairdressing, and medical assistance. In 1982-83, the student population at the College of Fisheries, Navigation, Marine Engineering and Electronics was approximately 85% male. The female enrollment was as follows: (1) 26 out of 239 in

Electrical Engineering Technology; (2) 5 out of 406 in Nautical Science Technology; and (3) 5 out of 80 in Naval Architecture Technology. No females were enrolled in Mechanical Engineering Technology.

At the university level, the number of female and male graduates was almost equal. Montgomery (1983) noted that ten years ago only 30% of the graduates were females. She pointed out, however, that even in 1983 "the majority of the programs at the university [were] discouragingly lopsided" (p. 25). At the May 1983 graduation the following data were presented: (1) Engineering - 88% male, (2) Science - 63% male, (3) Business - 66% male, (4) Social Work - 97% female, and (5) Nursing - 98% female.

(b) Goals of Education

It has long been one goal of career education to provide individuals with knowledge about the opportunities open to them. It has even longer been the goal of education, in general, to assist young people in developing their skills to the best of their abilities. Implicit in this goal has been the need to help individuals work towards the best and the most fulfilling future possible for them. If high school girls are not considering the broadening career options open to them, then they are not developing their skills to the best of

4

their potential and it may even be argued that they are not working towards their most fulfilling future.

Possible Related Factors

Many authors have written about the possible reasons for female traditional or nontraditional career choice. While some have focused on single, isolated factors, others believe that a whole range of factors are evident which focus on ultimate career choice. These appear to focus on internal/personal factors and external/situational factors which, in turn, affect a person's career choice or aspiration.

Internal Factors

Some of the internal/personal factors mentioned in the literature are as follows.

(1) Role conflicts between the family and work exist for many females. Some writers hold that a woman could not do justice to both a family and a career (Almquist, 1971; Kerr, 1983; McLurre and Piel, 1978; Patterson, 1973; Yu, 1976).

(2) The self-concept of females in terms of perceptions of abilities and limitations has generally been held to be lower than that of males (Betz and Hackett, 1981; Farmer, 1976; Kammer, 1985; Olson, 1981; Super, 1969; Welsh, 1983; Yu, 1976).

(3) Knowledge and awareness of careers available in the world of work is believed to have been deficient for females (Gerson, 1983; McLurre and Piel, 1978).

(4) Attitudes of young people are still quite sex-role stereotypic (Austin Department of Occupational Education and Technology, 1979; Haring, 1984; Report of the Royal Commission on the Status of Women in Canada, 1974; Ruhland, 1978; Wolpe, 1974).

(5) Lack of risk-taking behavior in females has been believed by some to be an area of concern (Chusmir, 1983; Farmer, 1976; Welsh, 1983).

(6) Relatively low female aspirations may have reduced the career options of women (Bawker, 1983; Farmer, 1976; Olson, 1981; Ruhland, 1978).

External/Situational Factors

Some of the external/situational factors mentioned in the literature are as follows.

(1) Early sex-role training through society and the family has tended to encourage sex-role stereotyping:

Early experiences within the first social system, the family, teach typically that it is men who have authority to manage the family's place in the external world, while women handle the internal world of family and children. (Boyles and Newton, 1978; Chodoran, 1978 as cited in Gerson and Lee, 1982, p. 237)

(2) Lack of role models has been considered significant (Almquist, 1971; Block, 1981; Brooks, 1985;

Farmer, 1976; McLurre and Piel, 1978; Rühland, 1978; Self and Lopez, 1982; Welsh, 1983).

(3) Some counsellors are believed to have possessed personal biases which have prevented them from providing a broader range of career options to their female clients (Chusmir, 1983; Fitzgerald and Crites, 1978; McLurre and Piel, 1978; Patterson, 1973; Report of the Royal Commission on the Status of Women in Canada, 1973; Rühland, 1978; Schlossberg and Pietrofesa, 1978; Thomas, 1971).

(4) The education and SES of parents may have affected the career choice of young women (Block, 1981; Chusmir, 1983; Etaugh, 1974; Nagely, 1971; Report of the Royal Commission on the Status of Women, 1973; Rühland, 1978; Weeks, 1984; Wiseman, 1982).

(5) The education system has often been criticized for providing girls with inadequate training in high school (Astin as cited in Farmer, 1976; Fox and Renas, 1977; Sheinis, 1981).

(6) Lack of finances may have prevented some girls from entering nontraditional areas (Wiseman, 1982).

(7) The number of persons consulted about career plans may have affected nontraditional selections (Wiseman, 1982).

A fairly comprehensive study of the available literature on career education for women has indicated that all of these factors are possible reasons for

selection of traditional careers. However, many of the studies reviewed were somewhat narrow in that they focused on only one or two factors, when it is apparent that the phenomena of career choice is a multifaceted one that cannot be understood well if its factors are studied in isolation. Keith (1981), for instance, focused his questionnaire on work/family conflicts as a possible factor in career orientation. Betz and Hackett (1982) directed their questionnaire towards self-efficacy of females regarding educational requirements and job duties. Block, Denker, and Tittle (1981) used an interview format to ascertain information regarding career choice from high school students, but only asked two questions: (1) "Why did you choose that career?"; and (2) "Was there any particular person or experience that influenced your decision?" (p. 898). It is difficult to get objective, and comprehensive answers from such an approach. As well, as Almquist and Angrist (1971) pointed out, a person is not always aware of who or what influences his/her decisions (p. 265).

Other studies have used instruments which were limited to a very select population, thus eliminating appropriate generalization. Keith (1981) looked at female students from one mid-western university. McLurre and Piel (1978) directed their questionnaire towards gifted high school girls only. Kaplan and Donovan (1971) used a sample of women from the United States who had obtained

merit scholarships from 1956-60. Almquist and Angrist (1971) also studied college, not high school, women. Betz and Hackett (1981) looked at approximately 200 students (males and females) registered in a first year Psychology course at Ohio State University. Olson and Kansky (1981) studied the precollege, occupational aspirations and mathematical preparation of a relatively random sample of Wyoming's high school seniors. However, the authors, themselves, cautioned that the sample contained only mathematically able students. Weeks, Wise, and Duncan (1984) surveyed sixty-four females in only one home economics class in a suburban high school in Lexington, Kentucky. Kemmer (1985) looked at perceptions of abilities, expectations regarding high school success and beyond, and career goals of junior high students. Unfortunately, for the purposes of generalizability, their sample consisted of 128 grade eight students from a rural junior high class in Oregon. Studies are needed, then, with a focus on several possible factors sampling more than one narrow population, if useful generalizations and recommendations are to be made.

If one follows the goals of education and career education, one believes that achieving their greatest potential and becoming aware of all possible future options are important needs of high school students. Yet evidence exists illustrating that females are not

9

achieving their greatest potential because they are not considering all the options open to them.

Thus more comprehensive research is needed to discover the significant reasons why females are not entering nontraditional occupations. Hopefully some practical recommendations about career programming will result to help these girls expand their life horizons and achieve their full potential for future career satisfaction.

Theoretical Framework

A variety of theories of career development exist to help one to better understand the process of career development and choice. A review of the related literature indicates that certain personal/internal and situational/external factors may be related to the occupational choice of females. The theoretical framework for this study has been developed from the works of two theorists, John Krumboltz and Donald Super. In their studies both men have focused, to a degree, on the internal and external factors which influence career choice.

Before the framework of these two theories is discussed some mention should be made of the major views on career education for women. Patterson (1973, as cited in Fitzgerald and Crites, 1980) noted that career psychologists were more often suggesting that the theories

of career choice which currently existed could not adequately explain the vocational behavior of women. Zytowski, in 1969, gave nine postulates to characterize female occupational participation patterns (Fitzgerald and Crites, 1980). Psathos (1968 in Fitzgerald and Crites, 1980) described some factors affecting women's occupational roles as being the woman's intention to marry, the time of the marriage, and the attitude of the husband toward working wives. Osipow (1973 as cited in Fitzgerald and Crites, 1980) asserted that because of rapid social change in the area of vocation and sex, any theoretical proposals or generalizations made about women's career development would likely be premature. Fitzgerald and Crites (1980) pointed out that the lack of any universally accepted theory for women "should not be taken as a rationale for ignoring theory altogether" (p. 46). They held that while present career choice theories have been developed for men, these same theories have a lot to offer a career counsellor, unless this counsellor believed that females and males were very fundamentally different in their aspirations and needs. For Fitzgerald and Crites, all individuals, male or female, "share the basic human need for self-fulfillment through meaningful work" (p. 46) and:

Theoretical constructs such as self-concept implementation, person-environment interaction, and so on, are useful ways of thinking about individual career development that apply to a greater or lesser degree to all persons. (p. 46)

This study is based on this theoretical premise.

Krumboltz et al. (1975) developed a social learning approach to career selection. Basically, this theory holds that the career development process involves four factors:

- (1) genetic endowments and special abilities. These include attributes and abilities such as gender, race, physical appearance, and intellectual, motor, and perceptual behaviors (Osipow, 1983).
- (2) environmental conditions and events,
- (3) learning experiences, and
- (4) tasks approach skills.

The social learning approach to career selection maintains that the "external" factors of environmental conditions and learning experiences influence career choice. These are often beyond the control of the individual.

Krumboltz et al. also hold that more personal, "internal" factors influence career choice. Genetic endowment and special abilities "include inherited qualities which may set limits on the individual's career opportunities" (Zunker, 1981, p. 24).

Three kinds of learning, or consequences, are a result of a combination of these four factors. First are the self-observation generalizations. These are learned self-views based upon the life experiences of the individual. The second consequence is the task approach skills. These are affective and cognitive predispositions

that the individual illustrates in interpreting, predicting, and dealing with the environment. Finally, the third consequence is the action outcomes. These outcomes are decision-related behaviors that develop from generalizations, self-observations, and task approach skills (Osipow, 1983).

Donald Super's theory focuses on the importance of self-concept in terms of the career development process. Self-concept here refers to attitudes, and perceptions of abilities and limitations. According to Super, vocational self-concept develops through physical and mental growth, identification with working adults, observations of work, general environment and general experiences (Zunker, 1931). For Super:

The process of vocational development is essentially that of developing and implementing a self-concept: it is a compromise process in which the self-concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles and evaluations of the extent to which the results of role-playing meet with the approval of superiors and fellows. (Herr and Cramer, 1984, p. 12).

Self-concept formation, for Super, requires that a person recognizes his or her individuality, but at the same time be aware of his or her similarities with others. In a well-integrated individual, the self-concept is continually developing, changing through life as experiences deem necessary. As an individual matures, more recognitions about self become apparent. Such recognitions then lead to decisions about work and

education that are consistent with a person's self-concept (Osipow, 1983).

Both theories, then, focus on the influence of various factors on occupational choice. The framework of these two combined illustrate how both internal/personal factors and external/situational factors may affect the occupational choice of females. This theoretical framework will be presented in greater detail in the literature review of this study.

Research Questions

The following research questions are based on the idea that personal/internal factors and situational/external factors affect career choice, as outlined through the theories of Krumboltz.

1. Personal/Internal Factors

- a. To what degree are the attitudes of females regarding sex roles, work and family related to the traditional or non-traditional career choices of females in Newfoundland high schools?
- b. To what degree is the self-concept of females, in terms of perceptions of abilities and limitations, related to the traditional or nontraditional career

choices of females in Newfoundland high schools?

- c. Is the amount of occupational awareness and knowledge of an individual related to the traditional or nontraditional career choices of females in Newfoundland high schools?
- d. Are female expectations of employment related to the traditional or nontraditional career choices of females in Newfoundland high schools?

2. Situational/External Factors

- a. To what degree are family experiences, especially in early childhood, related to the traditional or nontraditional career choices of females in Newfoundland high schools?
- b. Is the education level and socioeconomic status of parents related to the traditional or nontraditional career choices of females in Newfoundland high schools?
- c. Is exposure to role models related to the traditional or nontraditional career choices of females in Newfoundland high schools?

- d. To what degree do school counsellors and/or significant others influence the traditional or nontraditional career choices of females in Newfoundland high schools?
- e. Is the amount of preparation given in the selection of high school courses related to the traditional or nontraditional career choices of females in Newfoundland high schools?

Definition of Terms

Aspiration: A particular educational or occupational goal a person desires to attain (Wiseman, 1982).

Expectation: A particular educational or occupational goal a person expects to attain (Wiseman, 1982).

External Factors: Environmental or situational influencers which affect an individual's career choice.

Internal Factors: Personal characteristics of an individual which affect the individual's career choice.

Self-concept: For purposes of this study, self-concept refers to an individual's perceptions of his or her abilities and limitations.

Nontraditional: In terms of occupational choice for women, it refers to those jobs which are presently

dominated by male workers or those jobs in which 33 1/3% or fewer of the workers are women (CEIC, 1984).

Traditional: In terms of occupational choice for women, it refers to those jobs which are presently dominated by female workers or those jobs in which approximately 66% or more of the workers are women.

Limitations of the Study

1. An individual interview format was carried out with some of the female students who completed the questionnaire. These interviews, however, took place with only a limited sample of females. Also, the majority of the females interviewed were enrolled in the academic, as opposed to general program. This sample, then, was not completely representative of the questionnaire sample. As a result, some caution must be taken with making generalizations to all the questionnaire sample.

2. This study is designed for the Newfoundland region and any generalizations to other regions must bear this fact in mind.

CHAPTER 2

REVIEW OF RELATED LITERATURE

(a) Career Development

A theoretical framework for this study has been developed from specific aspects of two theories by Krumboltz and Super. A discussion of these two theories should better explain how various personal/internal and situational/external factors influence career development and choice.

Krumboltz, Mitchell, and Gelatt as cited in Herr and Cramer (1984) have developed a social learning theory of career selection. In their theory they suggest that it is possible to focus on the events which have been most influential in determining career choice. The career development process, in this theory, involves four factors:

1. Genetic endowment and special abilities include inherited qualities which may limit or enhance an individual's career opportunities. These qualities may include physical appearance, personal characteristics, race, sex, and intelligence.

2. Environmental conditions and events include factors which may influence career choice but which may be beyond the individual's control. These could include family characteristics, technological developments, changes in social organizations, physical events such as earthquakes, floods, droughts, and hurricanes, number and

nature of job opportunities; and the availability of and demand for natural resources.

3. Learning experiences include both instrumental and associative learning experiences. Instrumental learning experiences are those an individual learns through the reactions of others, the reactions to consequences, and the direct observable results of actions. The consequences of learning activities and their later influence on career development and planning are determined by the individual's genetic endowment and the reinforcement or nonreinforcement of the activity.

Associative learning experiences include positive and negative reactions to pairs of neutral situations. For example, the statements: "All politicians are dishonest" and "All doctors are men" influence the perceptions an individual has for these occupations. These associations may also be learned through films, television, written materials, and observations.

4. Tasks approach skills include the skills an individual has developed such as emotional and cognitive responses, problem solving skills, mental set, and work habits. These factors largely affect the outcome of tasks and problems faced by the individual.

Krumboltz et al, stress that the unique learning experiences of each individual develop the primary influences that lead to career choice. These influences include: (1) self-observation generalizations from

performance in learned situations; (2) sets of developed skills that are used for environmental coping; and (3) career entry behavior such as selecting an educational institution or applying for a job.

Krumboltz et al. point out that occupational choice is affected by numerous learning experiences in various environmental circumstances and by the individual's own reactions to these experiences. This model suggests, then, that entering a particular job is not always a simple function of choice or preference. It is influenced by various environmental factors, many of which are beyond the individual's control (Herr and Cramer, 1984; Zunker, 1981).

In a similar fashion, Super also emphasizes the influence of personal and environmental factors over vocational choice.

Super established a developmental model of career development which stresses the interaction of environmental and personal variables, and is made up of ten major propositions:

- (1) People differ in their interests, abilities, and personalities.
- (2) By virtue of these characteristics they are qualified for a number of jobs.
- (3) Each of these occupations requires a pattern of interests, abilities, and personality traits.

- (4) Vocational competencies and preferences, and hence their self-concepts, change with experience and time.
- (5) This process may be summed up in a series of life stages of growth, exploration, establishment, maintenance, and decline.
- (6) The individual's socioeconomic level, personality characteristics, and the opportunities to which he/she is exposed, determine the nature of the career pattern.
- (7) Development through the life stages can be guided by facilitating the process of maturation of interests and abilities and by aiding in the development of the self-concept.
- (8) Developing and implementing a self-concept is essentially the process of vocational development.
- (9) The process of compromise between individual social factors; between reality and self-concept, is one of role-playing.
- (10) Life satisfactions and work satisfactions depend upon the extent to which the individual finds suitable outlets for his/her interests, abilities, personality traits and values (Herr and Cramer, 1984, p. 123).

In later years Super tried to make the idea of the self-concept more explicit. For Super, the formation of a

self-concept requires that a person recognize him or herself as a unique individual, maintaining an awareness of the similarities that one has with others. In a well-integrated individual the self-concept is continually developing, changing "...somewhat through life as experiences indicate that changes are necessary to reflect reality" (Osipow, 1983, p. 155).

In relation to the idea of change, Super also holds that most people play different roles throughout a life span. In fact, he suggests that nine roles emerge in approximate chronological order. They are, (1) child (including daughter or son); (2) student; (3) leisurite; (4) citizen; (5) worker (including nonworker or unemployed worker as ways of playing the role); (6) spouse; (7) homemaker; (8) parent; and (9) pensioner. These roles are played in four main theatres: (1) the home; (2) the community; (3) the school (including university and college); and (4) the workplace (Herr and Cramer, 1984). According to Super, people often play several roles in several theatres simultaneously, suggesting that family, occupation, leisure, and community roles affect each other. Each time a person contemplates giving up an old role or taking on a new one, decision points occur.

According to Super, then, decisions, including vocational decisions, are not made in a vacuum. They come about through the influence of a variety of factors. Super (1980) as cited in Herr and Cramer (1984) holds:

The decision points of a life career reflect encounters with a variety of personal and situational determinants. The former consist of the genetic constitution of the individual modified by his or her experiences (the environment and its situational determinants) in the womb, the home, and the community. The latter are the geographic, historic, social, and economic conditions in which the individual functions from infancy through adulthood and old age. (p. 294)

Similarities can be perceived between the theories of Super and Krumboltz. In Krumboltz, the four situational factors lead to the development of the primary influence of the self-observation generalization, which seems to be much like Super's self-concept. Both are fundamental to the ways that individuals approach decision situations involving careers.

(b) Women in the Labour Force - the Kinds of Jobs They Have

As discussed earlier in this study, women presently are not entering nontraditional occupations in very great numbers. At the National Consultation on Vocational Counselling by Canada Employment and Immigration (January 22, 1985), Bauer et al. stated that there has been a dramatic increase in the number of women in the paid labour force over the past 15 years (1960 - 31%; 1970 - 41%; 1980 - 54%). Yet, there has been little change in the kinds of jobs that women do. In 1980, 63% of all women in the work force were divided into three groups of occupations: clerical, service, and sales. The CEIC group maintained that such occupational segregation

limited the earning capabilities of women and restricted the possibilities for financial independence. As well, in the more traditional female work areas previously mentioned, opportunities for advancement are generally limited. A number of long-term benefits are available in nontraditional occupations. These often include higher salaries, increased expression of technical and creative abilities, and greater variety of job opportunities.

According to Keith (1981) females usually enter the fields of arts, humanities, education and social sciences, while males usually enter the physical sciences, agriculture, engineering and business.

Haring (1984) quoted the U.S. Bureau of Census (1981):

More than half of all working women today are in relatively low-pay, low-prestige clerical and service domains. Many of the remaining working women have chosen traditionally female professions such as teaching, librarianship and nursing. (p. 301)

Rudd and McKenry (1980) and Work (1982) also held that while more women are working today than ever before, they are still pursuing traditional and crowded occupations. Rudd and McKenry (1980), as well, pointed out that in 1978, over 90% of registered nurses, bookkeepers, bank tellers, and secretary-typists were women. In the same year, over 70% of cashiers, officer machine operators and teachers (other than university and college) were women. In contrast, only 34% of college

teachers, 30% of bank officials and accountants, and 11% of physicians were women.

(c) Reasons Why Females Choose Traditional or Nontraditional Careers

The literature focuses on internal/personal factors and external/situational factors which affect the traditional or nontraditional career choice of females.

Some of the internal/personal factors mentioned in the literature include:

(1) Role conflicts between the family and work.

Some females believe that a woman cannot do justice to both a family and a career. Yu (1976) wrote that young women who are ambiguous about a future which depends entirely upon marriage and motherhood will find it very difficult to commit themselves to any occupation, whether it is female-dominated or male-dominated. Feelings of uncertainty regarding the roles of mother/wife and worker cause conflicts between the roles. Pucinski (1971) also held that ambivalence often occurs between a career and homemaking for women. He maintained that while ambivalence is also known to males, society and tradition make a career central to the man's life. This same society and tradition make homemaking central to the woman's life. As a result, if a woman decides to pursue a career, conflicts may develop between her role as worker and her role as homemaker.

Kerr (1983) focused her attention on gifted girls. According to Kerr, gifted girls who see a conflict between a career and family may decide against careers which require any great sense of personal commitment. For Kerr, though, these are the careers which lead to high salary and status. These girls believe that a family and career cannot be successfully combined.

McLurre and Piel (1978) conducted a study to determine student perceptions of barriers to pursuing a scientific career. Although there was a 93% return from the 1,017 talented high school girls who had been screened, using ACT scores showing they possessed high ability in science and mathematics, none of the girls indicated they wished to pursue careers in science, mathematics or technology. The two items cited by the respondents as being the greatest barriers were (1) the conflict between home and career, and (2) the difficulty of preparation for a career in science.

Patterson (1973) asserted that girls have always been encouraged to view the primary female role as that of mother and homemaker. If a girl is also interested in a career, conflicts are bound to arise. According to Patterson, the concerned counsellor can help by teaching the girl that resolutions can occur if she accepts one of five possibilities: (1) being a wife and a mother, exclusively, (2) accepting her role of mother but taking employment with no real career implications, (3) having a

career with marriage, (4) having a career and marriage but viewing the career as most important, (5) attempting to balance both roles "so as to gain fulfillment through both nurturant and competitive achievement activities" (p. 371). Almqvist and Angrist (1971) maintain that if a woman wants to realistically aspire to a career, she needs exposure to appropriate role models who will illustrate how to satisfactorily combine a career and marriage. Finally, Farmer (1976) perceived one of the main factors inhibiting achievement and career motivation in many females to be home-career conflicts.

In summary, conflict between the traditional female role of homemaking, and the nontraditional female role of competition in a career exists in some form for most females confronting career choices. The way that this conflict is resolved will strongly influence the choices finally made. A deeper understanding of the nature of this conflict, and the factors that influence its resolution, should lead a better understanding of interventions within the school that could be helpful in assisting young women to their career choice.

(2) The self-concept of females is generally held to be different than that of males, especially in terms of perceptions of abilities and limitations on their ability to pursue nontraditional careers. Bardwick (1971) (as cited in Yu, 1976) said that females have a very traditional feminine self-concept which inhibits the

motivation a person needs to strive for achievement.

Super (1963) as cited in Osipow (1983) focused much of his work on self-concept formation. Super held that the formation of the self-concept requires a person to recognize him/herself as a unique individual, but at the same time to note the similarities he/she has with others.

In a person's search for identity a process of differentiation from others occurs. During this differentiation process, though, a process of identification goes on. A child's identification begins with the like-sexed parent and he/she develops behavior and self-images which are appropriate to gender-role stereotypes in society. Betz and Hackett (1981) studied self-efficacy expectations in order to explain the continued underrepresentation of women in many managerial and professional occupations. Their definition of self-efficacy expectations was very similar to the definition of self-concept used in this study. For them, self-efficacy expectations were "a person's beliefs concerning his or her ability to successfully perform a given task or behavior" (p. 400). Betz and Hackett held that a major factor in the restriction of career options for women, particularly in the more nontraditional occupations, has been low self-efficacy expectations.

Putnam and Hansen (1972, as cited in Welsh, 1983) believed that Super's ideas on self-concept in career development are applicable to women. According to them, a

young girl would seek an occupation in which she can play a role "appropriate to her self-concept" (p. 2). Casserly 1979; Fox, Brady, and Tobin, 1980, (as cited in Welsh, 1983) pointed out that for equal opportunity in the world of work, mastery of mathematics is of significant importance. Yet Olson and Kinsky (1981), while studying occupational aspirations and precollege mathematical preparation of senior high students entering the University of Wyoming, discovered that 37% of females as compared to 22% of males terminated their precollege mathematics in grade 10. Sixty-two percent of the females, but only 27% of males made occupational choices which required entry-level mathematics or less. Wilson (1982, as cited in Kammer, 1985) asserted that many women question their intellectual abilities to succeed in traditionally male-dominated occupations. Two of the many factors which Farmer (1976) listed as inhibiting achievement and career motivation in women were fear of success and lack of academic self-confidence.

(3) Knowledge and awareness of careers available in the world of work is believed to be poorly understood by females. In the 1978 McLurre and Piel study, this was found to be related to the career choice of females. According to these writers, high school females often did not enter careers in mathematics or science because they were not given information about these careers in high school.

Gaskell (1983) wrote that girls were not aware of the many careers open to them. They were given more information on traditionally female occupations than on nontraditional occupations. Gaskell held that this was both because the counselor thought of giving this information and because the girl asked for it. According to Gaskell, a background in science and mathematics is becoming increasingly important for future training and job prospects. It is important for guidance counsellors to discuss not only course selection but occupational choice with students, as well. Along with this, Gaskell also held that knowledge about the availability of jobs, the labour market, the routes into work, the pay levels, and the increasing number of women participating in the paid labour force are important in encouraging girls to consider all career options open to them.

(4) Attitudes of young people are still quite sex-role stereotypic. Haring (1984) stated that females often have negative attitudes with regard to nontraditional occupations. Haring quoted Ashby and Wittmaier (1978):

Most research in this area has focused on establishing that young people have gender-based job stereotypes and on the extent to which their perceptions can be modified through some form of intervention. (p. 303)

For Haring, this negative attitude stems from a lack of confidence among women regarding the "masculine" skills that are required to perform male-dominated jobs competently. These included "mathematics and science

abilities, independent thinking, and decision-making skills" (p. 302). Unfortunately, she did not go on to explain the ways in which females actually perceived their abilities in these skills, particularly independent thinking and decision-making. The 1973 Report of the Royal Commission on the Status of Women in Canada pointed out that although the attitudes of young people were changing, a girl would sometimes regard success in terms of personality and appearance and not in terms of ambition and intelligence. According to the report, it was important that adolescent girls be made aware of the fact that marriage may not be the only or exclusive preoccupation of their lives. Implied in this was the need for an individual to view him or herself in more than one life role. Patterson (1973) maintained that the adolescent girl, herself, was the most important limitation on effective career counselling. According to Patterson:

[Girls] have been encouraged to see the homemaker and mother role as the primary female role, while boys know from an early age that they will be expected to seek employment. (p. 270)

In the 1978 Ruhland, Brittle, Norris, and Oakes study of junior and senior high school females in Rolla, Missouri, at the junior high level, no significant relationships between career choice and sex-role attitudes were found. For the senior high, however, occupational aspirations were less traditional and of a higher status.

for females with more liberal sex-role attitudes. As the authors pointed out:

Somewhere between the beginning of junior high school and the end of senior high school the career horizons of young women shrink and internal psychological barriers limit what is perceived as possible. (p. 23)

The Austin Department of Occupational Education and Technology (1979) developed a program for recruitment into nontraditional careers. During the process the researchers discovered that elementary boys still wanted to be firemen, policemen, or football players, while the elementary girls still wanted to be nurses or teachers when they grew up. Studies of this age-group of children indicated that they not only choose occupations which are sex-typed for themselves but that they also readily acknowledged the possibility that men and women were equally suited for most jobs.

Sheperd and Hess (1975, as cited in the Austin Department of Occupational Education and Technology Programme, 1979) discovered that the number of boys and girls in the eighth grade who considered the occupations of doctor, banker, fire fighter, truck driver, plumber, and car repairer appropriate for both sexes had increased. However, the majority of both boys and girls still thought that these occupations were inappropriate jobs for women.

(5) Lack of risk-taking behavior in females as opposed to males may be an important area of concern. Farmer (1976) prepared a list of factors which she

believed inhibited the achievement and career motivation of women. One of these major factors was the lack of risk-taking behavior on the part of women. According to Farmer, females who choose the more traditional careers are often afraid to take a chance on the more nontraditional occupations. Fear of success and lack of academic self-confidence may account for this. Evans (1975, as cited in Chusmir, 1983) added several reasons why females often did not "risk" entering traditionally male-dominated jobs. These included: (1) fear of failure; (2) fear of what the community outside the work place would think; (3) fear that people (mostly males) in the new work place would not accept new female workers; and (4) fear of the unknown element associated with the new job content.

Finally, Welsh (1983), in her study of ninth-grade girls at high schools within the Middle States region, noted that even though these girls were doing well in school and were aspiring towards college, many of them were afraid to study for less traditional occupations. This was because they did not consider themselves to be academically outstanding when compared to others in their school.

(6) Females may be less aspiring than males and, hence, may severely reduce their career options. Bowker (1983) surveyed the number of women in administrative positions at 106 State universities. Only 21.3% of all

administrators were women although 78.7% were men. This number decreased significantly as the level of administrator increased. For example, Chief Officers of Administrative Duties involved 5.7% women and 94.3% men. Women represented 1.6% of the Presidents and Chancellors as compared to 98.4% who were men.* Yet Bowker held that there was no significant difference between the aspirations of males and females at this level. She reported that studies indicated that female students had lower career aspirations than male students, and female teachers at the elementary and secondary school level had "lower aspirations for administrative positions than [did] their male counterparts" (p. 66).

Ruhland et. al. (1978) asked 45 junior high and 73 senior high girls at a small, mid-western university town, to (1) choose an occupation they would be most interested in if they could be trained for any occupation they wanted; and (2) to state what occupation they thought they would actually pursue. Results indicated that a large number of girls, both at the junior high and senior high level, selected relatively innovative, nontraditional ideal choices. For the senior high girls, though, there was a much greater discrepancy between the ideal and probable choices.

Alper (1974, as cited in Farmer, 1976) discovered that women who had traditional female attitudes, beliefs, and orientations scores lower on measures of achievement

motivation than did females with more nontraditional attitudes, beliefs, and orientations. Harman (1972, as cited in Farmer, 1976) noted the females who had aspired to rather high level careers in their freshman year of college changed by the time they were college seniors to less demanding careers. Implied in the last two studies, then, was the need to provide reinforcement and encouragement to the girls who have the ability and interest to pursue their initial career aspirations.

It was already noted in Welsh (1983) that for equal opportunity in the world of work, mastery of mathematics was to be of significant importance. Olson and Kansky (1981) found, however, that decidedly more females than males (62% - 27%) chose to pursue occupations which required only first year mathematics or below. Interestingly, this sample was said to contain primarily mathematically able students. In this case, it would appear to have been lack of desire, rather than lack of ability, that governed decisions by women not to pursue high level careers.

Some of the external/situational factors mentioned in the literature areas follow.

(1) Early sex-role training through the family and society, which could tend to encourage sex-role stereotyping. Boyles and Newton; Chodorow (1978, as cited in Gerson and Lee, 1982) maintained that fears of responsibility and freedom were part of the human nature

of both men and women. However, females more so than males, have been trained to deal with these fears in ways that are not always "adaptive to vocational success" (p. 236). A child's first social system, the family, often teaches that it is the man who handles the external world of work while the woman handles the family and children in the internal world.

Almquist and Angrist (1971) wrote that women with nontraditional career aspirations often had enriching childhood and family experiences which provided "broader views of appropriate adult female roles" (p. 265). Lipmen-Blumen and Tickamyer (1975, as cited in Block et al., 1981) noted that while men were socialized to find fulfillment through both occupational and family roles, women were often taught to find their total fulfillment through the family. Kammer (1985) found that even in the eighth grade, boys felt their work would not be interrupted by family, while eighth-grade girls were searching for alternatives for combining a family and work. According to Angrist (1969, as cited in Block et al., 1981) learning of the appropriate adult sex role "is seen primarily as occupation directed for males and family directed for females" (p. 896).

(2) Lack of role models to appropriately encourage nontraditional career choice has also been viewed as a factor in much of the literature. Block et al (1981) surveyed 600 eleventh graders from New York City high

schools to determine perceived influences on career choices. For both males and females, family members were rated first as having the most influence on their career decision. The most influential variables, according to percentages cited, included: direct personal experience - 18.2%; family member in profession - 16.0%; and academic experiences - 14.5%.

Almquist and Angrist (1971), defined the role model not as somebody who influenced, motivated, persuaded, or rewarded a person, but as somebody who "merely [provided] a technical explication of how a role [was] to be performed" (p. 265). According to these authors, young women needed role models who could demonstrate how a career and marriage could be combined satisfactorily. For them, the mother was the most important model of this kind. From their longitudinal study of one class from the women's college of a small university, though, they noted that persons in the occupation and teachers seemed to be "the most important sources of personal influence on [female] occupational choice" (p. 273).

Noncareer-oriented women who stressed the importance of motherhood and family had little contact with career role models. They also wrote that career-oriented females were influenced by both male and female peers, while the noncareer-oriented women "chose occupations which were similar to those chosen by their female peers" (p. 277). Finally, they also found a relatively strong association,

during college years, between maternal employment and career salience.

Ruhland et al. (1978) mentioned the role-modelling effect of characters present in the media. According to these researchers, sex-role stereotyping of a career-related nature was often reduced for young women influenced by the media. Their study indicated that young women who viewed books, movies, or television as important career choice influences, often chose careers which were significantly more innovative than young women who did not have such influences.

According to Yu (1976) lack of professional role models in middle childhood affected female vocational choice. In particular, Yu identified mothers, who were satisfied and happy at work, as the group which was most apt to influence a less traditional view of the female role in their daughters.

Self and Lopez (1982) noted that although the number of women pursuing careers in high level managerial, professional, and technical areas was increasing, the total number was still quite small for women working in nontraditional occupations. They held that a major reason for the small number was that many young women had not been exposed to adult women who were working in career areas such as finance, engineering, law, and management.

(3) Counselors may possess personal biases which prevent them from providing their female clients with all

the possible career options open to them. Patterson (1973) pointed out that many counsellors did not make themselves aware of job discrimination and, hence, did "not prepare female clients to meet the challenge of finding career satisfaction in spite of discrimination" (p. 270). Waldman (1970, as cited in Patterson, 1973) held that some counsellors still thought a career was something a girl could "fall back on" (p. 269).

Thomas and Stewart (1971) studied counsellor responses to females with nontraditional career goals. Their results indicated that female counsellors, more so than male counsellors, gave higher scores of acceptance to both nontraditional ("deviate") and traditional ("conforming") clients. They also noted that regardless of sex, counsellors rated traditional career goals as being more appropriate than the nontraditional career goals. Also, regardless of sex, counsellors rated females who had nontraditional career goals to need counselling more so than females with traditional career goals. The authors concluded with the statement that:

The school counsellor is not completely free from the pressures of the society in which he[she] works. It may not be possible or appropriate that he[she] should become completely free of these pressures. (p. 357)

Nevertheless, they finished with the assertion that awareness of these areas where he/she was not "completely free" was important.

Allison and Allen (1978, as cited in Chusmir, 1983) suggested several reasons why women were still ending up in some of the lowest paid occupational fields. One of these was that school counsellors, along with family members and young people themselves, often discouraged females from taking the prerequisite courses needed for entrance into some of the nontraditional occupations. These discouragements affected the shape of a woman's career choice before she even entered college.

A finding by Ruhland et al. (1978) was that females who listed counsellors or teachers as having the most important influence on their decisions tended to make career choices which were very traditional. Thomas and Stewart (1971, as cited in Fitzgerald and Crites, 1980) asserted in their study that counsellors viewed females who had selected a nontraditional career choice as having made a choice which was less appropriate than the choices made by more traditional females. These nontraditional females were said to be more in need of counselling too.

Bingham and House (1973, as cited in Fitzgerald and Crites, 1980) noted that some counsellors in their study had "very negative attitudes towards women and work" (p. 53). Some male counsellors in this sample said "There must be something wrong with a woman who wants to do a traditionally masculine job" (p. 53).

Medvene and Collins (1976, as cited in Fitzgerald and Crites, 1980) compared the attitudes of psychotherapists,

advanced graduate students, and secondary school counsellors by having these groups consider twenty-five nontraditional occupations and rate their appropriateness for women. Results indicated that ninety percent of the male counsellors "rated less than half of the twenty-five occupations as being appropriate for women" (p. 53).

(4) The education and socioeconomic status of parents was believed by some to affect the career choice of young women. The 1973 Report of the Royal Commission on the Status of Women in Canada noted that the education level and SES of parents influenced opportunities for education. In 1966, if both the mother and father attended university, there was a fifty-one percent chance that their children would do likewise.

Etaugh (1974) wrote that males and females with working mothers perceived smaller sex-role differences in occupations than did children whose mothers did not work. As well, among the children of working mothers, those who had mothers working in professional occupations showed the highest level of academic achievement. Frieze, Ruble, and Parsons (1972, as cited in Etaugh, 1974) discovered a positive relationship between higher career aspirations and maternal employment, but not with the socioeconomic status. Nagely (1971) reported that the fathers of nontraditional females were often highly educated and more likely to accept female employment.

Ruhland et al. (1978) found that the encouragement of independence on the part of the mother often led young women to aspire to nontraditional jobs. These researchers also discovered that for the junior and senior high girls they studied from a small, midwestern university town, the socioeconomic status of the parents was "perhaps the most powerful factor influencing career aspirations" (p. 11). They found no evidence to suggest that the employment of mothers, by itself, would lead to career choices which were of a higher status or which were more innovative for the females studied. Chusmir (1983) cited some studies with conflicting results.

Hennig (1970, as cited in Chusmir, 1983) stated that the majority of mothers of nontraditional females were housewives. On the other hand, Tangri (1972) and Zuckerman (1980) (as cited in Chusmir, 1983) maintained that the mothers of nontraditional young women were educated just as well, or better than, the fathers. Greenfield (1978, as cited in Chusmir, 1983) also stated that the fathers of females who had nontraditional career goals were often very well-educated.

(5) The education system is often credited for providing girls with inadequate training in high school to prepare them for nontraditional job selection. Peng and Jaffe (1979, as cited in Lunneborg and Lunneborg, 1985) pointed out that the best predictor of a nontraditional career choice by both sexes was the number of mathematics

and science courses taken in high school. The 1973 Report of the Royal Commission on the Status of Women in Canada maintained that significant differences in the education of boys and girls first became evident in their selection of high school courses. Girls seemed to concentrate more on social studies while boys were more predominate in science and mathematics.

Sheinin (1981, as cited in Ferguson, 1981) proposed one possible reason for why so few Canadian women were entering science fields. She maintained that girls probably did not receive adequate training in the sciences during their high school years. She goes back even further than this to state that this inadequate high school training may be the result of inadequate encouragement and preparation for the sciences at the primary school level. Scott (1981) gave statistics on the percentages of high school students enrolled in the sciences during 1978-79 in Newfoundland. 8.6 percent of girls were enrolled in Physics, compared to 24.8 percent of the males; 12.3 percent of girls were enrolled in Chemistry compared to 17 percent of the boys; 75.3 percent of girls were enrolled in Biology compared to 53.9 percent of the boys. These statistics seemed to indicate that there were certain science courses which were viewed as more appropriate than others for girls.

More recent statistics, however, showed a somewhat different picture. In Newfoundland, the percentage of

girls enrolled in both Biology 3201 and Chemistry 3202, during 1984-85, was greater than the percentage of boys enrolled in these two courses. For Biology 3201 enrollment percentages were 60 percent female and 40 percent male. For Chemistry 3202 the percentages were 52 percent female, and 48 percent male. The boys still outnumbered the girls in Physics, though. The enrollment in Physics 3204 was 40 percent girls, and 60 percent boys. The real difference came, however, in enrollment percentages for the more traditional male/female courses. In 1984-85, Metalworking 2102 had 15 percent females and 85 percent males enrolled. Woodworking 2107 showed an enrollment of 18 percent females and 82 percent males. Drawing and Planning 2101 had 29 percent females and 71 percent males making up its enrollment. The enrollment for Nutrition 3101, perhaps considered a more traditional female course, was 83 percent females and 17 percent males. Finally, as one more example, Textiles 3101 showed an enrollment of 98 percent females and 2 percent males.

Astin (1974, as cited in Chusmir, 1983) looked at the issue again of science and mathematics and maintained that boys and girls performed equally well in science and mathematics up to about age 10. After that the performance of girls became "increasingly poorer" (p. 12). She suggested one possible reason for this to be the "...differential reinforcement on the part of parents and teachers" (p. 12).

(6) Lack of finances may be a factor discouraging some girls from entering nontraditional job areas. A research question by Wiseman (1982) considered how economic differences were related to the traditional or nontraditional nature of career choice in Newfoundland. His results indicated that as the economic considerations became more important, in students seemed to make more nontraditional career choices. He also pointed out that this could have been, in part, related to the student's regional area. The more isolated areas of the Province were associated with poorer economic conditions. Nontraditional choice would be related to improved personal economic outlook. Wiseman's study also showed that the more traditional career choices were made in the St. John's area. The further away one moved from the St. John's area, the greater the tendency for a student to select more nontraditional career choices. In isolated areas, the highest proportion of nontraditional career aspirations were expressed by students who were in grade nine at the time of the study.

(7) The number of people consulted on career choice may be related to the traditionalism or nontraditionalism of career choice. Wiseman (1982), while studying the effect of the role model on traditional or nontraditional career choice, concluded that the number of persons consulted did have an affect on the type of career chosen. Generally, it was discovered that students who did not

discuss their future career plans with anyone tended to have more traditional career aspirations. The less traditional career aspirations were made by students who had consulted several people about their future career choice. As the number of persons consulted increased, the career choice of the student became less traditional.

Empirical Studies of Related Factors (A Brief Overview)

Keith (1981) maintained that sex-role attitudes and family plans affected the career orientations of females. He gave a questionnaire to 181 undergraduate female students, 19-to-20 years old, at a mid-western state university. A four-fold typology of career orientations was developed: (1) conventional (feminine), (2) unconventional (masculine), (3) discontinuous involvement in the labour force (work/family plans - conventional), (4) continuous employment - unconventional. The results showed that 39% selected conventional fields of study and future work-family plans (conventional); 14% selected unconventional majors and unconventional work-family relationships; 23% selected unconventional majors and conventional work-family plans; 24% selected conventional occupational areas but unconventional work-family plans. Unconventional women were more often daughters of working women than their counterparts who made more traditional choices. Seventy percent of conventional women had

mothers who were employed. Unfortunately, no option was provided in the study for women to select continuous employment and a family. As well, the generalizability of this study has to be questioned since the sample was taken from a very narrow population.

McLurre and Piel (1978) conducted a survey to determine student perceptions of barriers to pursuing a nontraditional, scientific career. Although there was a 93% return from the 1,017 talented high school women who had been screened using ACT scores showing they possessed high ability in science and mathematics, none of the girls indicated they wished to pursue careers in science, mathematics or technology. Two items cited by the respondents as being the greatest barriers were: (1) the conflict between home and a career and (2) the difficulty of preparation for a career in science. Other important reasons noted were lack of encouragement from counsellors and teachers, and lack of information about science and technology careers. While the sample for this study was quite large, it was also narrow to the degree that it focused on very talented high school females as opposed to a representative sample of high school females, in general. On the other hand, it demonstrates the strength of other factors in influencing the career direction of women.

Hutt (1983) conducted a study which examined college students' perceptions of men's and women's career

patterns. A 15-item forced-choice questionnaire was developed on the career development of men and women. The respondents "agreed" or "disagreed" to the questions. The questionnaire was mailed to a random sample of 301 males and 204 females at a private university in the northeastern United States. Two hundred and seventy-four students returned the questionnaires. Results indicated that: (1) "The more education a woman has, the more likely she is to work," (73.77% of the males believed this; 71.20% of females); (2) "Men's attitudes about appropriate vocational roles for women were an important factor in determining what adult women will do," (M - 63.11%; F - 39.20%); (3) "College men [had] higher levels of aspiration than [did] college women of equal equity," (M - 27.87%; F - 10.48%). These results were limited to this one university. As well, the perceptions of career patterns and abilities may have been different for high school students.

Several other studies were directed towards university/college populations. While all research in this area was generally useful, a closer look at the high school population would be most beneficial. Betz and Hackett (1981) researched an interesting area of self-efficacy expectations, meaning: "A person's beliefs concerning his or her ability to successfully perform a given task or behavior". Their sample consisted of 134 females and 101 males from an introductory Psychology

course at Ohio State University. Twenty occupations were selected, representing a balance of both traditional and nontraditional ones. The levels of self-efficacy expectations were measured using two methods. The first asked the respondents to state whether or not they felt they could successfully complete the education required for each occupation. The second asked the subjects whether or not they felt they could successfully complete the job duties required for each occupation. Results indicated the following:

	Ability to Successfully Complete Education Requirements	Ability to Successfully Complete Job Duties
Males	6.9/10 (traditional) 6.9/10 (nontraditional)	7/10 (traditional) 7.2/10 (nontraditional)
Females	8/10 (traditional) 5.7/10 (nontraditional)	8.10 (traditional) 6/10 (nontraditional)

According to their ACT scores in English and Mathematics, there were no significant differences between these males and females. Further research is needed, then, to illustrate why females question their ability to succeed at nontraditional occupations.

Brooks et al. (1985) looked at "The Effects of Nontraditional Role-Modeling Intervention on Sex Typing of Occupational Preferences and Career Salience in Adolescent Females" (title). Their sample consisted of thirty junior high and twenty-five senior high girls. These girls were shown videos of women in nontraditional occupations;

discussed pay scales for nontraditional versus traditional jobs; talked to some women in nontraditional fields; had group discussions on the success stories of women in nontraditional occupational areas. An occupational checklist of twenty traditional, twenty nontraditional, and twenty neutral occupations was used as a "pre" and "post" measure. The results indicated that the intervention program had no significant effect on changing the vocational aspirations of young girls from traditional to nontraditional. Gottfredson (1981, as cited in Brooks et al., 1985) gave one possible explanation for this to be that in American society, occupational aspirations developed within a "range of acceptable sex-typed alternatives" (p. 274). This range became set between the ages of six and eight, and did not change except under very "unusual circumstances" (p. 274). The more hopeful explanation proposed by Brooks et al. was that sex-typed aspirations could, indeed, be changed, but successful interventions have not yet been discovered. Perhaps, then, intervention has to be continuous and has to start early in a child's development to ensure that he/she consider all possible career choices.

CHAPTER 3

METHODOLOGY

Procedures

This study used two procedures. The first was a survey, using a questionnaire developed to obtain information about factors which were related to the traditional or nontraditional career choice of females in Newfoundland high schools. This questionnaire was administered to a representative sample of grade 12 students throughout the province at the end of the 1984-85 school year.

The second procedure comprised personal interviews which were conducted with thirteen girls in the academic program to obtain indepth information about the factors which affected their nontraditional career choice. Telephone interviews were carried out with three girls in the general program.

The Sample

The sample for this study consisted of the grade 9 females in Wiseman's 1982 study. These girls were grade 12 students in 1985. Wiseman's study was concerned with the impact of the off-shore oil development situation in Newfoundland with respect to students' career aspirations. While he regarded his sample to be representative of

school children in the province with respect to the off-shore oil development situation at that time, he also pointed out that it was fairly representative of schools in the province in general (Wiseman, 1983). Wiseman's survey was administered when the province was in the first year of implementing a revised high school program. The grade 9 students in 1982 had to make decisions about courses and programs of study.

With the exception of four schools, all the schools which Wiseman used in his survey were also used in this study. The twenty-one schools surveyed were located in sixteen Newfoundland and Labrador communities. These sixteen communities were designated into the following areas: St. John's, Site 1 (Harbour Grace/Carbonear area), Site 2 (Placentia area), and Isolated (Western Newfoundland and Labrador). Two hundred eighty-nine grade 12 (level III) female students were surveyed by the questionnaire.

A breakdown of Wiseman's female sample is shown in Table 1.

Table 1.
1982 Sample Size
(Wiseman, 1982, p. 35)

Region	Sex	Grade Nine
St. John's	Female	82
Site 1	Female	226
Site 2	Female	86
Isolated	Female	116
Total	Female	510

The 1985 sample was not as large as the 1982 sample. This was due to several factors. Firstly, this study focused on students who had made career choices. One hundred seven grade 12 females in grade 9 had not established a career choice. These girls, then, were classified as "undecided" and were not included in the present study. Secondly, as was mentioned previously, four schools included in Wiseman's study were not included in this present study. One of these schools was a relatively large high school from St. John's. The girls in this high school had come from a junior high school in Wiseman's study. Thirdly, a number of students either dropped out of school or moved to a different school. Approximately 160 students would be included here. Fourthly, it is possible that one class was not administered the survey at a school in the Site 1 region.

Table 2
1985 Sample Size

Region	Sex	Grade Twelve
St. John's	Female	62
Site 1	Female	105
Site 2	Female	38
Isolated	Female	84
Total	Female	289

The Instrument

One questionnaire was used to collect data in this survey. This instrument drew on questions from the two questionnaires used in Wiseman's study as well as other questions pertinent to the topic.

The first questionnaire used in Wiseman's study, Form C - Data Sheet (see Appendix), was developed by Mildred St. Croix-Cahill (1981) in conjunction with her study of high school students' work attitudes. Her questionnaire consisted of twenty-five questions designed to obtain information on the educational and occupational aspirations of youth in Newfoundland high schools. Specific questions were asked about reasons for career plans, the occupation of the parents, the nature of the career interest, the work experience of the student, and

information about the student's job search (Wiseman, 1983). Of these twenty-five questions, sixteen of them were selected to be included in this present study. The questions selected related to factors mentioned in the literature which appeared to be particularly related to occupational choice. Some of these factors included the effects of significant others (e.g., parents, counsellors, teachers, friends) on career choice; the effect of knowing someone in a particular career (e.g., role models); previous work experience and its effect on career choice; and the effect of parental occupations on career choice.

The second questionnaire used in Wiseman's study, Form D - Career Development Survey (see Appendix), was developed by Tom Wiseman (1983) in order to observe the development of vocational expectations and aspirations of Newfoundland high school youth as well as the traditionalism of career choice. Twenty-five questions were also included in this instrument. For the present study, ten out of twenty-five questions were used. As with Form C, questions were selected because they focused on factors mentioned in the literature which possibly affect female occupational choice. Some of these factors included knowledge/awareness of programs offered; knowledge of places to go to find out about specific careers; parental attitudes regarding post-secondary education; perception of ability; influence of significant others (e.g., parents, teachers, counsellor, friends) in

deciding upon a career; expectations of career success; and influence and importance of experience and education on occupational choice.

Four other questions were also added to the twenty-six previously mentioned questions to complete the questionnaire for this study. These four questions were included to focus on factors, mentioned quite often in the literature, that specifically affected female career choice. These questions focused on the effects of family/work conflicts, personal attitudes, counselling support, and the education system in general on the traditional or nontraditional career choice of Newfoundland high school girls.

Interview Process

The thirteen girls personally interviewed came from both the urban and rural areas. All were academic students and all were high-achievers in school. These girls had selected nontraditional career goals. However, the occupations they chose, while still nontraditional for women, are becoming more accepted for both sexes (e.g., lawyer, doctor, engineer, dentist).

The interviews took place in the girls' schools during May and June of 1985. Each interview lasted approximately 30 minutes. Several of the questions asked on the questionnaire were also asked during the

interviews. This was done in order to obtain information which would further explain the questionnaire responses.

The main interview questions asked were as follows:

- (1) How did you become interested in this career?
- (2) Have you received much support for this career choice? From where did this support come?
- (3) What was it about this career which interested you?
- (4) What do you think your chances are for future job success?
- (5) What was your most important consideration in choosing a career?
- (6) What were your childhood household duties like? Were they the same for all members of your family?
- (7) Did you know anyone working in your chosen career?
- (8) Do you want to combine a family and a career? Do you think you can? How?
- (9) Are your parents working? What are their occupations?

Three telephone interviews were carried out with girls in the Site 1 and Isolated areas. These interviews were carried out for two reasons: (1) because the girls in the general program were not included in the other personal interviews, and (2) the girls were not in school during the summer months. The personal interviews were finished during the last school week of June.

The telephone interviews took place during July, 1985. These interviews lasted for approximately 10

minutes. Similar questions as were asked of the academic girls were also asked of the general girls. These included:

- (1) How did you become interested in this career?
- (2) Have you received much support for this career choice? From where did this support come?
- (3) Did you know anyone working in your chosen career?
- (4) What were your childhood household duties?
- (5) Do you want to combine a family and a career?
- (6) What was it about this career which interested you?
- (7) If your parents are working, what are their occupations?

Analysis

In the analysis conducted in this study, the females were divided into four groups. The first group was referred to as the "traditional/traditional" group. These were the girls who were traditional in their career choice in 1982 and who retained their traditional career choice in 1985. The second group was classified as "nontraditional/traditional". These girls selected nontraditional careers in 1982 but changed to a traditional career selection in 1985. The third group, called "nontraditional/nontraditional", selected nontraditional careers in 1982 and 1985. Finally, group four was referred to as "traditional/nontraditional".

These girls selected traditional career choices in 1982 but changed to nontraditional career choices in 1985.

The breakdown of the number of girls in each category can be seen in Table 3.

Table 3
1985 Category Size

Category	Size
Traditional/Traditional	95
Traditional/Nontraditional	16
Nontraditional/Traditional	54
Nontraditional/Nontraditional	17
Total	182

Variables Considered in the Analysis

A cross-tabulation analysis of the traditionalism change categories of the girls was used to find factors related to the change or stability of career choice in the girls studied over the three year period.

The variables considered in the analysis are presented below along with the corresponding and related questionnaire items from the 1982 and 1985 studies.

Personal/Internal Factors

- (I) The attitudes of females regarding sex roles, work, and family.

Questionnaire Items

- (1982)
- (1) Did you participate actively in family decision-making? (e.g., holidays, moving, chores)
 - (2) How much were you involved in traditional childhood work? Have you ever had a part-time or full-time job? What was it?
- (1985)
- (1) Do you believe that men have more career opportunities than women?
 - (2) Do you plan to marry in the next five years?
 - (3) Is it necessary for both a husband and wife to work?
 - (4) Which of the following best describes your plans to combine marriage and a career?

- (II) The self-esteem of females in terms of perceptions of abilities and limitations.

Questionnaire Items

- (1982)
- (1) Compared to other people your age, what are your chances of obtaining work in Newfoundland?
 - (2) How do you rate yourself in school ability compared with other students in your class at school?
 - (3) Do you think you have the ability to complete university regardless of whether you will attend or not?
 - (4) What kinds of grades (marks) do you expect to get this year and what kind do you think you are capable of?
- (1985)
- (1) How do you rate yourself in school ability compared to the other students in your class at school?
 - (2) Compared to other people your age, what are your chances of getting a job?
 - (3) Compared to other people your age, what are your chances of success in your planned career or job?
 - (4) Do you believe that men have more career opportunities than women?

(III) The amount of occupational awareness and knowledge of an individual (post-secondary).

Questionnaire Items

(1982) (1) How much do you feel you know about what each of these institutions are like and the kinds of programs offered at them: hospital nursing schools, College of Trades and Technology, Memorial University, College of Fisheries, vocational schools?

(1985) (1) How much do you know about what each of these educational institutions are like, and the kinds of programs offered at each of them?: Memorial University, College of Trades, College of Fisheries, Vocational Schools, Hospital Nursing Schools, Bay St. George-Community College, Grenfell College, Other Career Academies, Training Outside Newfoundland.

(IV) Aspirations and expectations of employment.

Questionnaire Items

(1982) (1) Do you know what you want to do after you finish high school? If yes, describe the career or job.

- (2) Do you plan to continue your education immediately after high school? If yes, indicate in the spaces below the institution and program that you are most interested in.
- (1985) (1) What job or type of work do you expect or hope to be doing in the future?
- (2) If you are going to continue your education next year or the year after, check the one institution that interests you the most and fill in the course or program if you know it.
- (3) Compared to other people your age, what are your chances of getting a job?

Situational/External-Factors

- (I) Early childhood family experiences.

Questionnaire Items

- (1982) (1) Do you participate actively in family decisions? (e.g., holidays, moving, chores)
- (2) Involvement in traditional childhood work - Have you ever had a part-time job? What was it? Have you ever had a full-time job? What was it?

(II) Education level and socioeconomic status of parents.

Questionnaire Items

- (1982) (1) Does your father work?
 (2) What is your father's occupation?
 (3) Does your mother work?
 (4) What is your parents' education level?

(III) Exposure to specific occupational role models.

Questionnaire Items

- (1982) (1) Do you know anyone working in your chosen career?: friend, relative.
 (1985) (1) Do you know anyone working in this occupational area?" father, mother, relative, friend, acquaintance, other.

(IV) The influence of significant others, including guidance counsellors, parents, friends, teachers, or members of the community.

Questionnaire Items

- (1982) (1) Have you discussed your occupational plans with anyone?: parents, friend, teacher, principal, someone who does the work, relative, guidance counsellor, other.

- (2) How do your mother and father feel about your continuing your education after high school?
- (3) What do you think your best friends will do about their education?
- (4) Right now, how important are the following in helping you decide what to do?:
parents, friends, teacher, counsellor,
other persons in community, economic conditions.

- (1985) (1) Have you discussed your occupational plans with anyone?: parents, friend, teacher, principal, someone who does the work, relative, parent's friend, guidance counsellor, Canada employment, other.
- (2) How do your mother and father feel about your continuing your education after high school?
- (3) What do you think your best friends will do about their education after high school?

(V) The courses selected to take in high school.

Questionnaire Items

- (1985) (1) Check the courses in the list below that you have done since beginning Level I:
- General Science, Physical Science,
Environmental Science, Biology, Computer
Studies, Career Education, Foods, Drawing
and Planning, Typing, Chemistry, Earth
Science, Geology, Physics, Clothing,
Textiles, Woodworking, Home Maintenance,
Metal Working.

Tests of significance were not used since the purpose was to set up hypotheses to further research rather than make conclusions. The risk of Type II error would have been high with tests of significance.

Limitations of the Study

Two main limitations exist to this present study. Firstly, none of the girls in the general population were interviewed personally. While telephone interviews were conducted with these girls, more indepth interviews could have occurred in person. Secondly, 107 girls were categorized as "undecided" in their career choice. It cannot be presumed, then, that conclusions for those making grade 9 choices would apply to those not having a grade 9 choice. A study of these undecided ninth graders would be useful.

CHAPTER 4

ANALYSIS

In this chapter each research question will be examined by analyzing student responses to questionnaire items related to each research question. For each section in this chapter the research question will be presented followed by a list of the corresponding questionnaire items, a discussion of the results, and a table illustrating these results.

Research Question 1: What are the attitudes of females regarding sex roles, work, and family related to the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows:

1982

- (1) Do you participate in family decisions (e.g., holidays, moving, chores)?
- (2) How much were you involved in traditional childhood work? Have you ever had a part-time job? Have you ever had a full-time job?

1985

- (1) Do you believe that men have more career opportunities than women?
- (2) Do you plan to marry in the next five years?
- (3) Is it necessary for both a husband and wife to work?
- (4) Which best describes your plans to combine marriage and a career?

The traditional/nontraditional group was involved the most in family decision-making and traditional childhood work. The traditional/traditional group was just behind the traditional/nontraditional group in this area. The nontraditional/nontraditional group was least involved in family decision-making and traditional childhood work.

The traditional/nontraditional group, more than any other group, believed that men had more career opportunities than women. The traditional/traditional group was just behind in this area. The vast majority of girls in the nontraditional/nontraditional group did not believe that men had more career opportunities than women.

Almost all of the nontraditional/nontraditional girls planned not to marry in the next five years. The nontraditional/traditional group, more than any other group, planned to marry in the next five years.

Most of the nontraditional/nontraditional girls thought it was necessary for both a husband and wife to work, and most planned to combine a full career and marriage. The nontraditional/traditional group included

Table 4
Percentage of Positive Responses to
Questions Concerning Sex Roles,
Work, and Family

Questionnaire Items	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional					
	No.	Total No.	No.	Total No.	No.	Total No.	No.	Total No.				
Participation in family decisions	60	87.0	49	9	100.0	9	28	90.3	31	6	66.7	9
Involvement in traditional childhood work	7	10.3	68	1	11.1	9	2	6.3	32	0	0.0	9
Belief that men have more career opportunities than women	34	37.9	95	8	90.0	16	18	33.3	54	4	23.5	17
Plans to marry in the next five years	25	27.2	92	3	18.8	16	17	32.1	54	1	5.9	17
Is it necessary for both a husband and wife to work?	62	66.0	94	12	75.0	16	39	73.6	53	13	76.5	17
Plans to combine a full career and marriage	63	67.0	94	13	81.3	16	33	62.3	53	13	76.5	17

No. = the number of people in each group who answered positively to this question.
Total No. = the total number of people in this group (positive and negative answers combined).

the smallest number of girls who wished to combine a full career and marriage.

The girls making nontraditional choices who were interviewed, indicated that they had often shared childhood work with their brothers. That is, they often took care of the lawn, garbage, etc. - chores traditionally associated with males. These girls also said they were treated equally in other areas. One girl exclaimed that whenever she and her brother got into an argument it was always "Both of you go to your rooms - not [Joanne] go to your room". These girls also planned to combine a full career and marriage but were sometimes uncertain about how important a career would be once a family came along. The results of the analysis of each item are shown in Table 4.

Research Question 2: How is the self-concept of students in terms of perceptions of abilities and limitations related to the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows:

1982

- (1) Do you think you have the ability to complete university regardless of whether you will attend or not?

- (2) How do you rate yourself in school ability compared with other students in your class at school?
- (3) What kinds of grades (marks) do you expect to get this year and what kind do you think you are capable of?

1985

- (1) Compared to other people your age, what are your chances of success in your planned career or job?
- (2) Compared to other people your age, what are your chances of getting a job?
- (3) How do you rate yourself in school ability compared to other students in your class at school?
- (4) Do you believe that men have more career opportunities than women?

In 1982, the traditional/nontraditional and the nontraditional/nontraditional groups were the most confident in their school abilities.

In 1982, the same two groups were also most confident in their abilities to complete university. The traditional/traditional and the nontraditional/traditional groups were equally not as confident as the first two groups in their abilities to complete university.

Similarly, the traditional/nontraditional and the nontraditional/nontraditional groups in 1982 were more confident than the other two groups in their ability to get "A's" in school.

In 1985, none of the groups were overly confident about their chances of getting a job. However, the traditional/nontraditional and the nontraditional/nontraditional felt most confident that their chances were very good.

In 1985, the traditional/nontraditional and the nontraditional/nontraditional groups again were most confident in their belief that they were "among the best" or "better than most" in self-rated school ability. The same pattern was evident for estimates of future career success.

In 1985, the traditional/traditional and traditional/nontraditional groups felt strongest that men did have more career opportunities than women.

The girls who were personally interviewed were academic students and high-achievers in school. These girls were classified into the nontraditional/nontraditional category. All of the girls interviewed seemed to exhibit a great amount of confidence. They were confident about their academic abilities and about their future success in their desired occupations.

The results of the analysis of each item are shown in Table 5.

Table 5A
Percentage of Positive Responses to
Questions Concerning Self-Concept
1992 Results

Questionnaire Items	Traditional/ Traditional			Traditional/ Nontraditional			Nontraditional/ Traditional			Nontraditional/ Nontraditional		
	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.
Comparative school ability - "among the best"	9	33.0	69	2	22.2	9	3	9.4	32	1	11.1	9
Comparative school ability - "above average"	13	16.8	69	3	33.3	9	11	34.4	32	3	31.3	9
Ability to complete assignment definitely - "yes"	8	11.0	68	1	10.0	10	10	32.3	31	5	55.6	9
Ability to complete assignment probably - "yes"	33	48.5	68	9	90.0	10	12	38.7	31	3	33.3	9
School marks satisfactory of - "A's"	20	49.2	61	7	77.8	9	18	60.0	30	7	87.5	8

Table 5b

Percentage of Positive Responses to
Questions Concerning Self-Concept
1995 Results

Questionnaire Items	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional	
	No.	%	Total No.	No.	%	Total No.	No.	%
Chances of getting a job = "excellent"	9	8.4	95	0	0.0	15	4	7.4
Chances of getting a job = "very good"	27	28.4	95	7	46.7	15	20	37.0
Self-rated school achievement = "among the best"	12	12.6	95	3	20.0	15	7	13.0
Self-rated school achievement = "better than most"	17	17.9	95	5	33.3	15	10	18.5
Do men have more educational opportunities than women?	36	37.0	95	8	50.0	16	18	33.36
Chances of success: self-estimate = "very good"	21	22.3	94	7	43.8	16	14	25.9
Chances of success: self-estimate = "fairly good"	42	44.7	94	8	50.0	16	23	42.6

Research Question 3: To what degree is occupational awareness and knowledge related to the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows.

1982

- (1) How much do you feel you know about what each of these institutions are like and the kinds of programs offered at them: Hospital Nursing Schools, College of Trades and Technology, Memorial University, College of Fisheries, Vocational Schools?

1985

- (1) How much do you know about what each of these educational institutions are like, and the kinds of programs offered at each of them: Memorial University, College of Trades, College of Fisheries, Vocational School, Hospital Nursing Schools, Bay St. George Community College, Grenfell College, Other Career Academies, Training Outside Newfoundland.

In 1982, the nontraditional/nontraditional group said they knew the most about the Hospital Nursing Schools and Memorial University. The nontraditional/traditional group felt more knowledgeable about the College of Trades and Technology than the other three groups. The traditional/

traditional group claimed to know slightly more than the nontraditional/traditional group about the College of Fisheries. For the District Vocational Schools, the traditional/traditional group felt they knew the most followed by the nontraditional/nontraditional group.

In 1985, there was not a lot of difference regarding the girls' knowledge of many of these institutions. However, the nontraditional/nontraditional group said they knew more about Memorial University and universities and schools outside of Newfoundland than did the other three groups. The nontraditional/traditional group, though, was just slightly behind the nontraditional/nontraditional group with perceived knowledge of these two institutions. The traditional/nontraditional group felt they knew the least about the College of Trades and Technology. The traditional/traditional group and the nontraditional/traditional group said they knew more about the District Vocational Schools than the other two groups.

The results of the analysis of each item are shown in Table 6.

Research Question 4: To what degree are the aspirations and expectations of employment related to the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows:

Table 6A
Percentage of Positive Responses to
Questions Concerning Occupational
Knowledge
1982 Results

Questionnaire Items	Traditional/ Total		Traditional/ Total		Traditional/ Total		Traditional/ Total		Traditional/ Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Knowledge about Nursing Schools % lot	7	10.6	66	0	0.0	0	2	8.53	3	11.1
Knowledge about Nursing Schools % fair amount	28	67.4	66	3	33.3	0	12	18.2	5	55.6
Knowledge about the College of Trades and Technology % lot	2	3.1	64	2	22.2	0	4	12.9	3	0.0
Knowledge about the College of Trades and Technology % fair amount	14	21.9	64	0	0.0	0	7	22.6	3	25.0
Knowledge about Memorial University % lot	5	7.6	66	1	11.1	0	5	16.1	2	22.2
Knowledge about Memorial University % fair amount	17	25.8	66	2	22.2	0	8	25.8	5	55.6
Knowledge about the College of Fisheries % lot	3	3	64	0	0.0	0	0	0.0	0	0.0
Knowledge about the College of Fisheries % fair amount	9	14.1	64	0	0.0	0	5	16.7	2	11.1
Knowledge about Vocational Schools % lot	2	10.0	64	2	22.2	0	4	6.5	1	11.1
Knowledge about Vocational Schools % fair amount	28	41.8	64	0	0.0	0	10	12.1	3	12.1

Table 4a
Percentage of Positive Responses to
Questions Concerning Occupational
Awareness and Knowledge
1965 Results

Questionnaire Items	Traditional/ Traditional			Traditional/ Nontraditional			Nontraditional/ Nontraditional									
	"a lot"	"a fair amount"	"a lot"	"a lot"	"a fair amount"	"a lot"	"a lot"	"a fair amount"	"a lot"							
	No.	%	No.	%	No.	%	No.	%	No.	%						
Memorial University	15	15.8	42	44.2	4	25.0	5	31.3	16	10.2	24	45.3	5	20.4	9	52.9
College of Trades and Technology	16	16.8	37	38.9	0	0.0	5	31.3	9	17.1	18	34.6	1	6.7	7	46.7
College of Fisheries	1	3.1	14	14.2	0	0.0	2	12.5	3	5.8	9	37.3	0	0.0	1	6.7
Vocational Schools	12	12.9	29	31.2	0	0.0	3	20.0	7	13.5	14	26.9	1	6.7	2	11.3
Hospital Nursing Schools	12	12.9	16	16.8	1	6.3	5	31.3	6	11.5	10	19.2	1	6.7	1	20.0
Bay St. George College	1	1.1	6	6.3	0	0.0	0	0.0	2	3.8	1	1.9	1	6.7	0	0.0
Grenfell College	0	0.0	3	3.2	0	0.0	1	6.3	1	1.9	3	5.8	1	6.7	0	0.0
Other Career Academies	1	1.1	15	15.8	0	0.0	3	18.8	1	1.9	9	17.0	1	6.7	1	6.7
Schools Outside Newfoundland	4	4.2	1	1.2	0	0.0	4	25.0	3	5.7	6	11.3	1	6.7	1	20.0

Table AII (Cont'd)

Totals				
Memorial University	95	16	53	17
College of Trades and Technology	95	16	52	15
College of Fisheries	95	16	52	15
Vocational Schools	93	15	52	15
Hospital Nursing Schools	95	16	52	15
Bay St. George College	95	16	52	15
O'Connell College	95	16	52	15
Other Career Academies	95	16	53	15
Schools Outside Newfoundland	95	16	52	15

1982

- (1) Do you plan to continue your education once you have completed high school?

1985

- (1) What job or type of work do you expect or hope to be doing in the future? Try to be specific and name an occupation.
- (2) Compared to other people your age, what are your chances of getting a job?

In 1982, the traditional/nontraditional group and the nontraditional/nontraditional group were most anxious to attend a post-secondary institution.

With regard to chosen career plan in 1985, most of the nontraditional/nontraditional and traditional/nontraditional girls wanted to be professionals (e.g., doctor, lawyer, engineer, etc.). Careers in transportation/construction and crafts/trade fields had relatively no interest to any of the groups. Careers in the technical field were of most interest to the traditional/traditional and nontraditional/traditional girls. The traditional/traditional and nontraditional/traditional groups also were more interested in the clerical/secretarial field than the other two groups.

In 1985, the traditional/nontraditional and nontraditional/nontraditional groups said they were most confident about their chances of getting a job. The




Table 7

Percentage of Positive Responses to Questions Concerning Aspirations and Expectations of Employment

Table 7A

1982 Responses to the Question Concerning the Decision to Attend a Post-Secondary Institution

Response	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional					
	No.	Total No.	No.	Total No.	No.	Total No.	No.	Total No.				
Yes	82	86.3	95	15	93.8	16	47	87.0	54	16	94.1	17

Table 7B
1982 Responses to the Question Concerning
Chosen Career Plan

Response	Traditional/ Traditional			Traditional/ Nontraditional			Nontraditional/ Traditional			Nontraditional/ Nontraditional		
	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.	No.	%	Total No.
Owner or Manager	0	0.0	95	0	0.0	16	1	1.9	54	0	0.0	17
Professional	43	45.3	95	12	75.0	16	29	63.7	54	15	88.2	17
Technical	14	14.7	95	1	6.3	16	5	9.3	54	1	5.9	17
Clerical or Secretarial	14	14.7	95	0	0.0	16	7	13.0	54	0	0.0	17
Service or Recreation	22	23.2	95	3	18.8	16	11	20.4	54	1	5.9	17
Transportation or Construction	1	1.1	95	0	0.0	16	0	0.0	54	0	0.0	17
Crafts and Trade	1	1.1	95	0	0.0	16	1	1.9	54	0	0.0	17

Table X
1985 Responses to the Question Concerning
Chances of Getting a Job

Response	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional	
	No.	%	Total No.	No.	%	Total No.	No.	%
Chances of getting a job = "excellent"	8	88.4	95	0	0.0	15	4	26.4
Chances of getting a job = "very good"	27	28.4	95	7	46.7	15	20	37.0
Chances of getting a job = "average"	54	56.8	95	7	46.7	15	29	53.7
							54	47.1
							17	17

majority of girls in the traditional/traditional and nontraditional/traditional groups thought their chances of getting a job were "average".

The personally interviewed girls, while expressing confidence in their academic abilities, were also quite confident of their future success in their desired occupations.

Employability was very important to these girls. They believed that the fields they were interested in offered good employment prospects. They also held that they had a good chance of achieving success in their work.

Research Question 5: To what degree are childhood experiences, especially in early childhood, related to the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows:

1982

- (1) Do you participate actively in family decisions, e.g., holidays, moving, chores?
- (2) Were you, as a child, involved in traditional childhood work for a girl? (Did you ever have a part-time or full-time job?)

The traditional/nontraditional and nontraditional/traditional groups were involved the most in family

decision-making. The nontraditional/nontraditional group was involved the least in family decision-making.

The traditional/traditional and the traditional/nontraditional girls were involved the most in traditional childhood work. The nontraditional/nontraditional group was involved the least in traditional childhood work.

The personally interviewed girls, in early childhood, had separate duties from their brothers. They said, though, that they were open to "shared" duties. Many of them often took care of the lawn and garbage (i.e., chores traditionally associated with males). A couple of the girls who were always doing housework often did so because of their family's situation (e.g., the mother and father were both working and the brother or other sister was away studying).

A girl in the general population who was interviewed over the telephone explained her interest in mechanics was a result of her childhood work with her father. Her father was also a mechanic.

The results of the analysis of each item are shown in Table 8.

Research Question 6: To what degree is the education level and occupational status of parents related to the traditional or nontraditional career choice of females in Newfoundland schools?

Table 8
Percentage of Positive Responses to
Questions Concerning Early
Childhood Experiences

Questionnaire Items	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional	
	No.	Total No.	No.	Total No.	No.	Total No.	No.	Total No.
Participation in family decisions	60	69	9	100.0	9	28	90.1	31
Involve-ment in traditional childhood work	7	68	1	11.1	9	2	6.7	32
							70	85.0

The questionnaire items that applied to this research question were as follows:

1982

- (1) Does your father work?
- (2) Does your mother work?
- (3) What is your parents' educational level?
- (4) What is your father's occupation?

In 1982, the group with the fewest number of working fathers was the nontraditional/nontraditional group. The greatest number of working fathers came from the nontraditional/traditional group.

The traditional/nontraditional and the nontraditional/nontraditional groups were the groups with the most number of mothers working (full-time and part-time combined). The traditional/traditional group had the fewest number of working mothers.

The majority of the traditional/traditional mothers had "some school". Most of the mothers of the traditional/nontraditional and nontraditional/nontraditional girls had "high school". Only a very few mothers of any of the girls had some university level education. The mothers of the nontraditional/traditional girls, more so than any other group, had training from a nursing or vocational school.

The occupations of many of the traditional/nontraditional and nontraditional/nontraditional were

either owner/manager or in crafts/trade. A similar pattern was found for the fathers of the nontraditional/traditional girls. The largest number of fathers of the traditional/traditional girls worked as laborers.

Generally, for the personally interviewed girls, both parents were working. Some of the parents held professional occupations. Two fathers were teachers and one mother was a university professor. One mother was involved in the construction industry and several fathers were fishermen or trades people. A couple of the mothers were cashiers or secretaries. One mother, a receptionist, was adamant that her daughter receive more education than she received.

The results of the analysis of each item are shown in Table 9.

Research Question 7: To what degree is the exposure to role models related to the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows:

1982

(1) Do you know anyone working in this occupational area?

Table 9

Positive Responses to Questions
Concerning Educational and
Occupational Level of Parents

Table 9A

Percentage of Positive Responses
to Questions Concerning
Parental Work

Questionnaire Items	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional	
	No.	Total No.	No.	Total No.	No.	Total No.	No.	Total No.
Does your father work?	74	81.3	13	81.3	16	46	88.5	52
Does your mother work?								
- full-time	23	24.7	93	5	23.3	16	13	26.9
- part-time	8	8.6	93	4	25.0	16	9	17.3
							3	17.6
							12	70.6
							6	35.3
							3	17.6
							17	17

Table 98
Percentage of Positive Responses
to Questions Concerning
Father's Occupation

Responses	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional	
	No.	%	No.	%	No.	%	No.	%
Owner or Manager	4	4.1	3	18.8	9	17.3	3	18.8
Professional	10	11.1	3	6.3	4	7.7	2	12.5
Technical	3	3.3	1	6.3	2	3.8	1	6.3
Clerical or Secretarial	2	2.2	0	0.0	1	1.9	3	18.8
Sales	3	3.3	0	0.0	3	5.8	1	6.3
Service or Recreation	7	7.8	1	6.3	3	5.8	1	6.3
Fishing and Farming	18	20.0	2	12.5	5	9.6	0	0.0
Logging or Mining	0	0.0	0	0.0	0	0.0	1	6.3
Transport and Construction	10	11.1	2	12.5	2	3.8	0	0.0
Crafts and Trade	12	13.3	3	18.8	11	21.2	3	18.8
Laborer	18	20.0	2	12.5	8	15.4	1	6.3
Supervisor or Foreman	3	3.3	1	6.3	4	7.7	1	6.3
Total Numbers for Each Group	90		16		32		16	

Table 9C
Percentage of Positive Responses
to Questions Concerning
Mother's Education
Level

Responses	Traditional/ Traditional		Traditional/ Nontraditional		Nontraditional/ Traditional		Nontraditional/ Nontraditional	
	No.	%	No.	%	No.	%	No.	%
Some School	43	63.2	4	44.4	14	45.2	2	22.2
High School	11	16.2	5	55.6	7	22.6	3	33.3
Some University	3	4.4	0	0.0	0	0.0	1	11.1
University	3	4.4	0	0.0	1	3.2	1	11.1
Nursing School	1	1.5	0	0.0	2	6.5	0	0.0
Vocational/Technical School	2	2.9	0	0.0	2	6.5	0	0.0
Don't Know	5	7.4	0	0.0	5	16.1	2	22.2
Total Numbers for Each Group	68				31		9	

1985

- (1) Do you know anyone working in this occupational area
- father, relative, acquaintance, mother, friend,
other?

In 1982, the nontraditional/nontraditional group knew fewer people working in their chosen occupational area than any other group. The traditional/nontraditional group knew the greatest number of people followed by the traditional/traditional group.

In 1985 only one father from the four groups was working in his daughter's chosen occupational field. However, several of the traditional/traditional and traditional/nontraditional girls had a relative working in their chosen occupational area. Most of the traditional/traditional group also knew a friend, acquaintance, or other person working in their desired occupational area. Some nontraditional/nontraditional girls had a friend working in their occupational area but most did not know anybody working in this field. One mother of a traditional/nontraditional girl and two mothers of traditional/traditional girls were working in the girl's chosen occupation. The traditional/traditional group knew the greatest number of people in their chosen occupational area.

The results of the analysis of each item are shown in Table 10.

Table 18B
Percentage of Positive Responses
to Questions Concerning
Role Models
1985 Results

People working in respondent's chosen occupation	Traditional/ Traditional (N = 95)		Traditional/ Nontraditional (N = 16)		Nontraditional/ Traditional (N = 54)		Nontraditional/ Nontraditional (N = 17)	
	No.	%	No.	%	No.	%	No.	%
Father	1	1.1	0	0.0	0	0.0	0	0.0
Relative	32	33.6	6	37.5	8	44.8	3	17.6
Acquaintance	27	28.4	4	25.0	14	25.9	3	17.6
Mother	2	2.1	1	6.2	0	0.0	0	0.0
Friend	47	49.4	4	25.0	21	38.8	3	17.6
Other	6	6.3	0	0.0	3	5.5	3	17.6

Research Question 8: To what degree do school counsellors and/or significant others influence the traditional or nontraditional career choice of females in Newfoundland high schools?

The questionnaire items that applied to this research question were as follows:

1982

- (1) Have you discussed your occupational plans with anyone - parent(s), friend, teacher, principal, someone in work, relative, guidance counsellor, other?
- (2) How do your mother and father feel about your continuing your education after high school? *
- (3) What do you think your best friends will do about their education?
- (4) Right now, how important are the following in helping you decide what to do: parents, friends, teachers, counsellors, other persons in the community, economic conditions?

1985

- (1) Have you discussed your occupational plans with anyone - parent(s), friend, teacher, principal, someone who does the work, relative, parent's friend, guidance counsellor, Canada Employment, other?
- (2) How do your mother and father feel about your continuing your education after high school?

- (3) What do you think your best friends will do about their education after high school?

In 1982, the traditional/traditional group discussed their plans with more people than with any other group. The other three groups were around the same. In 1985, the traditional/nontraditional and nontraditional/nontraditional groups were lower in the number of people they consulted than the other two groups.

In 1982, post-secondary education was believed by the girls to be important to mothers in all four groups. It was seen as most important, though, for the mothers of girls in the nontraditional/traditional and nontraditional/nontraditional groups. In 1985, post-secondary education was still believed to be important to all the mothers. However, it was perceived by the girls as most important to the mothers of girls in the traditional/nontraditional group. In 1982, the girls in the nontraditional/nontraditional group believed that their fathers felt that post-secondary education was most important in the nontraditional/nontraditional group. In 1985, post-secondary education was seen by the girls to be most important to the traditional/nontraditional fathers.

In 1985, most of the friends of girls in all four groups planned to continue their education after high school. This was most important, though, to friends of girls in the nontraditional/nontraditional group. This was different from the 1982 results which showed post-

secondary education being most important to the traditional/nontraditional friends.

For the personally interviewed girls, exposure to significant people seemed to play an important role in their career selection. Seven out of fifteen students knew someone working in their field of interest. The school counsellor was mentioned twice as being particularly influential in the girls' career selections. However, it should be noted that counsellors were not in all the schools.

The encouragement given by parents seemed to be very important as well. For one particular school outside of St. John's, teacher encouragement was extremely important. Teachers at other schools encouraged these girls to "go on" with their education but did not say much else on this matter. For the school mentioned outside of St. John's, a very strong sense of school pride was evident. The interviewed students said that a lot of individual encouragement and support of career plans given by the teachers at this school.

The results of the analysis of each item are shown in Table 11.

Research Question 9: Is the amount of preparation given in the selection of high school courses related to the traditional or nontraditional career choice of females in Newfoundland high schools?

Table II
Percentage of Positive Responses to Questions Concerning
School Counsellors and Significant Others

Table IIIA
1985 Results of Responses to Questions Concerning
Discussion of Career Plans

Discussed Plans With:	Traditional/ Traditional (N = 95)		Traditional/ Nontraditional (N = 16)		Nontraditional/ Traditional (N = 54)		Nontraditional/ Nontraditional (N = 17)	
	No.	%	No.	%	No.	%	No.	%
Parents	89	93.6	13	81.2	50	92.5	14	82.1
Friend(s)	87	91.5	13	81.2	47	87.0	11	64.7
Teacher	44	46.3	7	43.7	22	40.7	4	23.5
Principal	8	8.4	0	0.0	3	5.5	1	5.8
Someone in Work Relative	43	45.2	7	43.7	18	33.3	6	35.2
Parent's Friend	52	54.7	11	68.7	26	48.1	4	23.5
Guidance Counsellor	21	22.1	5	31.2	13	24.0	1	5.8
Canada Employment	47	49.4	4	25.0	22	40.7	6	35.2
Other	5	5.2	0	0.0	0	0.0	0	0.0
	5	5.2	2	12.6	3	5.5	2	11.7

Table 11B
1982. Perceived Attitude of Mother About Education

Perceived Attitude of Mother:	Traditional/ Traditional (N = 68)		Traditional/ Nontraditional (N = 10)		Nontraditional/ Traditional (N = 23)		Nontraditional/ Nontraditional (N = 9)	
	No.	%	No.	%	No.	%	No.	%
Not to continue	10	0.0	1	10.0	0	0.0	0	0.0
Would probably like	420	29.4	2	20.0	3	9.4	0	0.0
Would definitely like	32	47.1	4	40.0	17	51.1	8	88.9
Insists	13	19.1	3	30.0	11	34.4	1	11.1
Don't know	3	4.4	0	0.0	1	3.1	0	0.0

Table 11C
1985 Perceived Attitude of Mother About Education

Perceived Attitude of Mother:	Traditional/ Traditional (N = 91)		Traditional/ Nontraditional (N = 16)		Nontraditional/ Traditional (N = 54)		Nontraditional/ Nontraditional (N = 17)	
	No.	%	No.	%	No.	%	No.	%
Not to continue	1	1.1	0	0.0	0	0.0	0	0.0
Would probably like	19	20.9	2	12.5	7	13.0	3	17.6
Would definitely like	57	62.6	7	43.8	35	64.8	10	58.8
Insists	12	13.2	7	43.8	10	18.5	4	23.5
Don't know	2	2.2	0	0.0	2	3.7	0	0.0

Table 10
1992 Perceived Attitude of Father About Education

Perceived Attitude of Father	Traditional/ Traditional (N = 65)		Traditional/ Nontraditional (N = 10)		Nontraditional/ Traditional (N = 31)		Nontraditional/ Nontraditional (N = 8)	
	No.	%	No.	%	No.	%	No.	%
Does not care	0	0.0	1	10.0	0	0.0	0	0.0
Would probably like	17	26.2	2	20.0	3	9.7	0	0.0
Would definitely like	28	43.1	4	40.0	15	48.4	6	75.0
Insists	14	21.5	2	20.0	11	35.5	2	25.5
Don't know	6	9.2	1	10.0	2	6.5	0	0.0

Table 11E
1985 Perceived Attitude of Father About Education

Perceived Attitude of Father:	Traditional/ Traditional (N = 83)		Traditional/ Nontraditional (N = 16)		Nontraditional/ Traditional (N = 51)		Nontraditional/ Nontraditional (N = 16)	
	No.	%	No.	%	No.	%	No.	%
Doesn't care	1	1.2	0	0.0	0	0.0	0	0.0
Would probably like	12	14.5	1	6.3	7	13.7	1	6.3
Would definitely like	56	67.5	11	68.8	32	60.4	10	62.5
Insists	12	14.5	4	25.0	11	20.8	4	25.0
Don't know	2	2.4	0	0.0	3	5.7	1	6.3

Table 11F
1982 Education Plans of Peers

Plans	Traditional/ Traditional (N = 68)		Traditional/ Nontraditional (N = 9)		Nontraditional/ Traditional (N = 32)		Nontraditional/ Nontraditional (N = 9)	
	No.	%	No.	%	No.	%	No.	%
Dropout	4	5.9	1	11.1	1	3.1	0	0.0
Finish School - Get Job	25	36.8	0	0.0	9	28.1	2	22.2
Finish School - Get Job Continue Education Later	6	8.8	1	11.1	2	6.3	2	22.2
Finish School - Continue Education	30	44.1	7	77.8	15	46.9	4	44.4

Table 11C
1985 Education Plans of Peers

Plans	Traditional/ Traditional (N = 95)		Traditional/ Nontraditional (N = 16)		Nontraditional/ Traditional (N = 54)		Nontraditional/ Nontraditional (N = 17)	
	No.	%	No.	%	No.	%	No.	%
Will not finish high school	1	1.1	0	0.0	0	0.0	0	0.0
Will not continue after high school	10	10.5	1	6.3	2	3.7	1	5.9
Will continue after high school	76	80.0	15	81.3	49	90.7	16	94.1
Will wait and continue later after high school	8	8.4	2	12.5	3	5.6	0	0.0

Table 11H
1982 Results on Influence of Significant Others

Influences (Scale of 1-5)	Traditional/ Traditional (N = 65)		Traditional/ Nontraditional (N = 10)		Nontraditional/ Traditional (N = 30)		Nontraditional/ Nontraditional (N = 9)	
	No.	%	No.	%	No.	%	No.	%
Parents: Most Imp.	44	67.7	6	60.0	22	73.3	5	55.6
2nd. Imp.	15	23.1	1	10.0	7	23.3	2	22.2
Friends: Most Imp.	9	13.5	2	20.0	4	14.8	0	0.0
2nd. Imp.	20	34.5	4	40.0	9	33.3	3	33.3
Teacher: Most Imp.	11	19.6	0	0.0	5	19.2	2	22.2
2nd. Imp.	23	41.1	6	60.0	7	26.9	2	22.2
Counselor: Most Imp.	11	16.6	2	20.0	6	26.1	3	33.3
2nd. Imp.	20	35.7	4	40.0	7	30.4	1	11.1
Community Person: Most Imp.	4	7.7	0	0.0	3	12.5	0	0.0
2nd. Imp.	12	23.1	3	30.0	5	20.8	3	33.3
Economic Conditions: Most Imp.	15	28.3	3	30.0	8	32.0	3	33.3
2nd. Imp.	12	22.6	2	20.0	9	36.0	2	22.2

Table III.
1982 Results on People Consulted About Career Choice

People Consulted:	Traditional/ Traditional (N = 95)		Traditional/ Nontraditional (N = 16)		Nontraditional/ Traditional (N = 54)		Nontraditional/ Nontraditional (N = 17)	
	No.	%	No.	%	No.	%	No.	%
Parents	66	69.4	11	68.2	38	70.3	14	82.3
Peers	61	64.2	11	68.7	35	64.8	11	64.7
Teacher	15	15.7	1	18.7	9	16.6	0	0.0
Counselor	12	12.6	6	37.5	6	11.1	1	17.6
Principal	1	1.0	0	0.0	1	1.8	0	0.0
Person in Career	1	1.1	0	0.0	1	1.8	1	5.8
Other Relatives	9	9.4	1	18.7	2	3.7	1	5.8
Others	1	1.0	0	0.0	1	1.8	0	0.0

The questionnaire item which applies to this research question is as follows:

1985

- (1) Check the courses in the list below which you have done since the beginning of Level I.

In 1985, enrollment was higher in General, Physical, and Environmental Science for the traditional/traditional and nontraditional/traditional girls than for the other two groups. These sciences are courses usually completed by students in the general program. Biology, Computer Studies, Chemistry, and Physics were courses completed most often by the nontraditional/nontraditional and traditional/nontraditional groups. The nontraditional/nontraditional group had the greatest number of girls in all these courses except Physics. A few more girls in the traditional/nontraditional group were registered for Physics than in the nontraditional/nontraditional group. Interestingly, the majority of girls in all four groups were registered for Typing, however the greatest number came from the traditional/nontraditional group. Clothing and Textiles were courses taken more often by girls in the traditional/traditional and nontraditional/traditional groups than the other two groups. The same pattern was present for the Home Maintenance and, interestingly, Woodworking courses.

The majority of the girls who were interviewed personally were enrolled in Chemistry and Physics. It would seem, then, that most of the girls who were doing well academically in school often registered for the academic science courses.

The results of the analysis of each item are shown in Table 12.

Table U
1985 Breakdown of Course Selections

Courses Selected:	Traditional/ Traditional (N = 93)		Traditional/ Monttraditional (N = 16)		Monttraditional/ Traditional (N = 54)		Monttraditional/ Monttraditional (N = 17)	
	No.	%	No.	%	No.	%	No.	%
General Science 1200	14	14.7	1	6.2	1	1.9	1	5.8
Physical Science 2205	15	15.7	0	0.0	7	12.8	0	0.0
Environmental Science 1205	33	34.7	2	12.5	12	22.2	7	41.2
Biology 2201	67	70.5	14	87.5	17	31.5	11	64.7
Biology 1201	57	60.0	14	87.5	40	74.1	14	82.4
Computer Studies 2206	40	42.1	11	68.7	18	33.3	9	52.9
Career Education 3101	12	11.6	1	18.7	20	37.0	1	5.8
Foodis 1100	31	32.6	7	43.7	18	33.3	5	29.4
Reading and Planning 1100	33	34.7	0	0.0	13	24.1	17	98.8
Typing 1102	46	48.8	10	62.5	23	42.6	9	52.9
Typing 2102	33	34.7	5	31.2	12	22.2	11	64.7
Chemistry 2207	12	11.6	7	43.7	26	48.1	11	64.7
Chemistry 1202	34	36.1	6	37.5	21	38.9	12	70.6
Earth Science 2203	18	18.9	4	25.0	8	14.8	1	5.8
Geology 1201	17	17.8	1	18.7	8	14.8	2	11.8
Physics 2204	21	22.1	5	31.2	12	22.2	5	29.4
Physics 1204	17	17.8	4	25.0	10	18.5	21	125
Clothing 1101	19	20.0	1	6.2	15	27.8	1	5.8
Textiles 1101	12	12.6	0	0.0	8	14.8	0	0.0
Woodworking 1107	7	7.4	0	0.0	5	9.3	1	5.8
Home Maintenance 3108	5	5.3	0	0.0	1	1.9	0	0.0
Metalworking 1102	1	1.0	0	0.0	0	0.0	0	0.0

CHAPTER 5

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS.

The purpose of this study was to investigate and examine the factors which are related to the traditional or nontraditional career choice of females in Newfoundland high schools. Throughout this study focus has been placed on four groups of females who were categorized according to their 1982 and 1985 career choices. The groups were: traditional/traditional, nontraditional/nontraditional, traditional/nontraditional, and nontraditional/traditional.

In an attempt to understand the career choices of females in Newfoundland high schools, a summary of the major findings on each of these four groups will be presented.

Group 1: Traditional/Traditional

The following list of findings on this group seem to describe the traditional/traditional group as just that - traditional.

- (1) More of these girls were enrolled in the general program than the 1985 nontraditional girls.
- (2) These girls had established their career goals earlier than the 1985 nontraditional girls.
- (3) These girls were more involved in traditional childhood work than the 1985 nontraditional girls.

- (4) Most of these girls grew up in their home communities.
- (5) The mothers of these girls, in 1982 and 1985, were less insistent that their daughters attend post-secondary institutions than the mothers of any other group.
- (6) In 1982, the fathers of these girls were less encouraging of their pursuit of post-secondary education than any other group. In 1985, a similar response was found, though less pronounced than 1982.
- (7) More of these traditional girls had more sources of information and consulted more people in 1982 and 1985 about their career choices than had the nontraditional groups.
- (8) In 1985, this group had the lowest enrollment in the technologically-oriented high school courses.
- (9) More of these girls were enrolled in Career Education 3101 than any other group.
- (10) In 1982 and 1985, this group had the lowest success expectations.
- (11) This group, in 1982 and 1985, planned to marry at an earlier age than the others.
- (12) In 1985, the following were very important to this group: "a steady income", "employment opportunities", "staying near home", "keeping out of debt", and "length of training".

- (13) "Comparative school ability" was perceived to be low by this group.
- (14) "Importance of work experience" and "importance of school for success" were low for this group, as compared to the other groups.

Group 2: Nontraditional/Nontraditional

Just as the traditional/traditional group exhibited relatively traditional characteristics and lifestyles, the nontraditional/nontraditional group illustrated nontraditional characteristics and lifestyle.

- (1) All of these girls were in either the academic or honours program.
- (2) In 1982, this group contained the greatest number of girls living in their community less than two years.
- (3) In 1982, the girls in this group did not have their career goals established as early as the two traditional groups.
- (4) None of these girls were involved in traditional childhood work.
- (5) Most of the friends of these girls were planning to continue their education after high school.
- (6) In 1982, most of their mothers and fathers "definitely wanted" or "insisted" that their daughters continue their education. In 1985, parental attitude was not as definite.

- (7) In 1982 and 1985, the "number of information sources" was fewer than for any other group.
- (8) In 1985, the "number of people consulted" was fewer than for the other three groups.
- (9) More of this group enrolled in technical high school courses than any other group.
- (10) This group had the fewest enrolled in Career Education 3101.
- (11) In 1982 and 1985, their preferred marriage age was older than any other group.
- (12) In 1982, "reaching their full potential" was most important to this group.
- (13) In 1982, "directing other people" was least important to this group.
- (14) In 1985, "importance of employment opportunities" was very important to this group while "staying near home" was not very important.
- (15) "Keeping out of debt" and "length of training" were less important to this group than to the traditional/traditional and nontraditional/traditional groups.

Group 3: Traditional/Nontraditional

The major findings on this group are presented below:

- (1) Post-secondary education was perceived as becoming significantly more important to parents in 1985 than for any other group.
- (2) In 1985, the "number of information sources" on careers was less than in 1982.
- (3) Marriage age preference in 1985 changed to later in life.
- (4) In 1982, "a steady income" and "reaching full potential" were equally important to this group.
- (5) In 1985, "employment opportunities" were important for this group but not as important as they were to the other three groups.
- (6) "Staying near home" was not as important to this group as it was to the other three groups in 1985.
- (7) In 1985, "keeping out of debt" and "amount of pay" were not as important to this group as they were to the other groups.
- (8) In 1982, "comparative success expectations" were almost identical for the traditional/nontraditional and the nontraditional/nontraditional groups.
- (9) In 1985, "chance of success - self-estimate" was highest for this group.
- (10) In 1982, this group was most confident that they would not "need to leave Newfoundland" in order to find employment.

- (11) Next to the nontraditional/nontraditional group, this group was most "willing to leave Newfoundland" if they had to in 1985.
- (12) In 1982, "comparative school ability" was higher for this group than any other group.
- (13) In 1982 and 1985 "importance of work for success" was ranked high by this group. In 1985 "importance of work experience" and "self-rated school ability" were also quite high.
- (14) In 1982, "importance of school for success" was more important to this group than to any other group. In 1985, this was approximately equal in importance for all four groups.
- (15) In 1982, this group, along with the traditional/traditional group, worked part-time more so than the other two groups.
- (16) In 1985, this group, along with the nontraditional/nontraditional group, held the most part-time jobs.

Group 4: Nontraditional/Traditional

The major findings on this group are presented below:

- (1) In 1982, more of these girls were in the general program than any other group. In 1985, there were slightly more traditional/traditional girls registered in general programs than this group.

- (2) Next to the traditional/traditional group, this group had lived the longest in their community.
- (3) This group did not establish their career goals quite as early as the other three groups.
- (4) In 1982, next to the nontraditional/nontraditional group, this group was involved the least amount in traditional childhood work.
- (5) In 1985, the friends of these girls, more than any other group, said they would not continue their education.
- (6) In 1982, the majority of these girls perceived their mothers as insisting they continue their education. In 1985, the majority of the girls perceived a change in their mothers' attitudes. The girls thought their mothers "would definitely like" them to continue their education but did not insist that they do so.
- (7) In 1982, the majority of fathers of girls in this group were perceived as insisting that their daughters continue their education after high school. However, it was perceived in 1985, that fewer fathers in this group wanted their daughters to continue their education than compared to any other group.
- (8) In 1982, the "number of information sources" was quite low, second to the nontraditional/

nontraditional group. In 1985 this increased to the second highest.

- (9) In 1982, the "number of people consulted" was low but increased in 1985.
- (10) In 1982, these girls were planning to marry at a later age than the traditional/traditional or traditional/nontraditional groups. In 1985, however, these girls said they were most likely to marry in the next five years.
- (11) In 1985, the following were important to this group: "staying near home", "keeping out of debt", "length of training", and "amount of pay".
- (12) In 1982 and 1985, "comparative success expectations" was the second lowest for this group.
- (13) In 1982 this group, more so, than any other group, felt they would have to "leave Newfoundland" in order to obtain employment. Yet in 1985, this group, more so than any other group, was not "willing to leave Newfoundland" in order to get a job.
- (14) In 1982 and 1985 a self-estimate of their "school ability" was relatively low, compared to the other three groups.

Implications

These findings seem to indicate that the general career direction of females in Newfoundland high schools may, in fact, be well established before beginning high school. A high school student may not always know the actual career she will pursue (e.g., nurse, teacher, secretary, doctor, lawyer, welder), but she is probably predisposed, however unconsciously, to either traditional or nontraditional options. For instance, even though the traditional/nontraditional and nontraditional/traditional groups seemed to change their career aspirations over a three year period, the evidence of this thesis supports the idea that most of these girls did not actually change their intrinsic nontraditional or traditional orientations. Their 1982 career choices may have been more the result of transient external influences, while their 1985 choices may have more accurately represented their basic orientations, which had not changed in the interim.

Whether or not they pursued this nontraditional or traditional path appears to have been dependent upon a number of factors. The nontraditional/traditional group, even though they initially selected a nontraditional path, exhibited a number of traditional characteristics which would work against the following through of a nontraditional career aspiration. For instance, as was pointed out earlier, many of the people in this group were

in the general program in 1982 and 1985. They had lived a long time in their home community; and in 1985, more than any other group, they said their friends were not planning to continue their education. In 1985, they represented the group who was most likely to marry in the next five years, with the traditional/traditional group in 1985, the following were very important to the nontraditional/traditional group: "a steady income", "employment opportunities", "staying near home", "keeping out of debt", "length of training", and "amount of pay". In a similar pattern, this group in 1982 and 1985, along with the traditional/traditional group, rated themselves as being very low in "school ability" and "success expectations". In 1982, a couple of factors which might have helped encourage this group to pursue their nontraditional choice were as follows: Next to the nontraditional/nontraditional group, they were involved the least amount in traditional childhood work. Next to the nontraditional/nontraditional group, the majority of mothers and fathers "definitely wanted" or "insisted" that their daughters pursue post-secondary education. Next to the nontraditional/nontraditional group, they represented the group who was least likely to marry early. However, as was previously mentioned, these students' expectations of themselves academically and in the world of work were just as low as the traditional/traditional group. This low self-concept would not encourage these girls to

continue their initial nontraditional career aspirations unless this was dealt with actively in some way. Coupled with this is the fact that in 1985 there was a slight change in the attitudes they perceived in their parents towards post-secondary education. While post-secondary education was still important to the parents in 1985 it was not seen by the girls as being quite as important as it was in 1982. The fathers' attitudes changed from being the second most encouraging of post-secondary education to the least encouraging in 1985. The girls' tendency towards a more traditional role was probably slower taking place.

Perhaps educators and/or parents sometimes find themselves encouraging someone for making a nontraditional career choice. However, they may not always actively suggest a nontraditional career choice to a student/child. Such encouragement would probably be very important for a group such as the nontraditional/traditional one. For a short amount of time they seem to indicate an interest in a nontraditional career. However, several factors may possibly prevent them from carrying out this idea:

(1) preconceived conditioned ideas and philosophies about the roles of men and women in the work force; (2) the lack of encouragement from significant other to pursue this field and; (3) inappropriate self-concepts, especially in terms of perceptions of abilities and limitations.

Because this group may have held rather traditional values for a number of years they would not be inclined to pursue

a nontraditional area - especially without adequate support and encouragement. Many of the girls in the nontraditional/traditional group would not be the high achievers in school. They may even be more unobtrusive than any other group and, as a result, could easily go unnoticed without intervention, then, they would follow the path of least resistance.

The traditional/nontraditional group, on the other hand, while initially choosing a traditional career path, exhibited a number of nontraditional characteristics which would have been related ultimately to their nontraditional career choice. For example, post-secondary education became significantly more important to the parents of these girls in 1985. In 1982, "a steady income" and "reaching full potential" were equally important to this group. None of the following were as important to this group as they were to the other three groups: "employment opportunities", "staying near home", "keeping out of debt", and "amount of pay". "Comparative success expectations" in 1982 were almost identically high for this group and the nontraditional/nontraditional group. In 1985, "chance of success - self-estimate" was highest for this group. In 1982, this group was most confident that they would not "need to leave Newfoundland", but in 1985, they were most "willing to leave Newfoundland" if they had to. In 1982 and 1985, "comparative school ability" was very high for this group. The importance of

work and school for success was very high for this group both in 1982 and 1985.

This group, then, appeared to be very confident and rather risk-taking in both 1982 and 1985. It would seem relatively natural for them; then, to switch from a traditional career choice in 1982 to a nontraditional one in 1985. It would also seem likely that this group would be noticed and, hence, perhaps given some support and encouragement.

The literature and information gathered from the personal interviews supports many of these conclusions. Ruhland et al. (1978) asked junior and senior high girls from a small, midwestern town to (1) choose an occupation they would be most interested in if they could be trained for any occupation they wanted; and (2) to then state which occupation they would actually pursue. Results indicated that a large number of girls both at the junior and senior high level selected relatively innovative, nontraditional ideal choices. For the senior high girls, though, there was a much greater discrepancy between the ideal and probable choices.

Harmon (1972 as cited in Farmer, 1976) noted that females who had aspired to rather high level careers in their freshman year of college changed, by the time they were college seniors, to less demanding careers.

These two studies seem to agree with the finding here that some females aspire to pursue nontraditional

paths but for some reason do not do so. This implies that there is a need to provide reinforcement and encouragement to the girls who show an initial interest in nontraditional routes, or who have the ability to pursue nontraditional paths.

Encouragement from family members appears particularly important. Block et al. (1981) surveyed 600 eleventh graders from New York City to determine perceived influences on career choices. For both males and females, family members were rated first as having the most influence on their career decisions. Gene Shave (1984) also pointed to the importance of parents on their children's career decisions in his study of the factors related to post-secondary education decisions in academically capable students. Interestingly, the parents of the 1985 nontraditional girls were the most encouraging of their daughters continuing their education after high school. It must also be noted, though, that the majority of parents in all four groups wanted their daughters to continue their education.

All the girls interviewed mentioned the importance of their parents in helping them reach their career decision. One mother, who was divorced and working as a secretary to support her family, told her daughter to find a challenging career where she could make a good salary and be happy.

In line with this, Ruhland et al. (1978) found that the encouragement of independence on the part of the mother often led young women to aspire to nontraditional jobs.

A major conclusion of this present study on Newfoundland high school girls has been that a girl's self-concept, in terms of perceptions of abilities and limitations, has an important role in career choice. Putnam and Hansen (1972 as cited in Welsh, 1983) held that Super's ideas on self-concept in career development are applicable to women. According to them, a young girl would seek an occupation in which she could play a role "appropriate to her self-concept" (p. 2).

Betz and Hackett (1981) studied self-efficacy expectations in order to explain the continued underrepresentation of women in many managerial and professional occupations. Their definition of self-efficacy expectations was very similar to the definition of self-concept used in this study. For them, self-efficacy expectations were "a person's beliefs concerning his or her ability to successfully perform a given task or behavior" (p. 400). Betz and Hackett held that a major factor in the restriction of career options for women, particularly in the more nontraditional occupations, was low self-efficacy expectations.

All of the interviewed girls seemed to exhibit a great amount of confidence in their academic abilities and

also in their chances for future success in their desired occupations. One girl, who was interested in medicine said: "There's no way I want to be a nurse and get all the dirty jobs. I want to go straight for the top".

Several studies also support the conclusion of this study that career education has to begin before a person's last year of high school if it is to be successful. The Austin Department of Occupational Education and Technology (1979) developed a recruitment program into nontraditional careers. The researchers discovered that elementary boys still wanted to be policemen and firemen, while the elementary girls still wanted to be nurses or teachers when they grew up.

Ruhland et al. (1978), however, pointed to a change during junior high. These researchers found, by studying high school females in Missouri, that no significant relationships existed between career choice and sex-role attitudes. In senior high, however, only those females with more liberal sex-role attitudes were aspiring to nontraditional occupations. According to these authors:

...[by] the end of senior high school the career horizons of young women shrink and internal psychological barriers limit what is perceived as possible. (p. 23)

A great deal of confusion, then, seems to exist for the adolescent girls trying to decide on a career path. According to Patterson (1973):

[Girls] have been encouraged to see the homemaker and mother role as the primary female role, while boys knew from an early age that they will be expected to seek employment. (p. 270)

Even the interviewed girls who had decided upon nontraditional careers and who believed that having a career was important for men and women, sometimes expressed a sense of confusion with regard to a family and a career. All expressed an interest in both marriage and a career but were sometimes uncertain about how important a career would be once a family came along.

Recommendations

With such confusion existing, then, it would seem that help is needed for these students if they wish to discover the career options which are best for them. This leads to the recommendations for practice and research.

Recommendations for Practice

Developmental Programming

Since it is the conclusion of this study that attitudes influencing career aspirations develop much earlier than high school, early developmental programming) is important. This conclusion, however, raises a question of values. That is: Do educators have the right to change a child's natural orientation towards a particular lifestyle (i.e., early sex-role stereotyping)? Reaction

to such a question goes back to the rationale for this study. It is a fact that career education and counselling are ineffect in many Newfoundland high schools. It has long been a goal of career education to provide individuals with knowledge about the available opportunities open to them. It has even longer been a goal of education, in general, to assist young people in developing their abilities to the best of their potential. Implicit in this goal is the need to help individuals work towards their most fulfilling future. This study has, hopefully, supported the idea that females in Newfoundland high schools are not considering all the career opportunities open to them. This does not mean that all girls should follow nontraditional career paths. It means that all students should be exposed to the various options and then make the choice which is appropriate for them, considering the attitudes and values that they hold. It seems to follow, then, that since high school girls are not considering all the options open to them, exposure to such options should begin at an earlier age.

Within this programming, parental involvement should be encouraged. Parents should be informed of exactly what would be involved in such programming. Those who would be interested in more active involvement could also be encouraged to become involved with such a career education program, especially at the elementary level.

Self-Concept Formation

One small, but very positive part of the Career Education 3101 course is the emphasis upon self-awareness. Most of the traditional girls surveyed seemed to have lower self-concepts than the nontraditional girls. Self-concept formation, then, is very important and should consciously be encouraged and developed throughout a child's entire school career. This can begin in primary school where children are encouraged to respect each other. Children could be helped to recognize their abilities as well as limitations. In essence, they should be able to develop a realistic, but full picture of themselves. Far too often adolescents, especially, are quick to point out what is "wrong" with them. Perhaps if they had a more positive view of themselves they would be more willing to follow the life paths they truly wish to follow. More emphasis on the self-awareness component of the career education course is perhaps one way of encouraging this view of self. As well, the course could focus upon expanding the students' awareness of not just the professional careers but also the technical fields. In order to encourage students to consider all options open to them, the career education course could also show girls how their strengths could be applied in other than traditional female roles. On this basis follows the third recommendation:

Change in Offering Time of Career Education 3101

Career Education 3101 is being offered in most Newfoundland high schools. The data from this study show that the majority of females who are registered for this course have traditional career orientations. The reason for this is not clear. Perhaps the more nontraditional, academic girls are opting for more technological electives. Whatever the reason, this course could help the girls consider all career options. Unfortunately, this course comes too late (Level III) in their high school program. Many post-secondary institutions (i.e., College of Trades and Technology, and all District Vocational Schools) are now on a "first-come-first-served" basis. This means that if a Level III student, for example, is interested in the X-ray technology program at the College of Trades and Technology, then that student has to apply in Level II for acceptance into the program which would start after graduation. It is recommended, then, that this course start in Level I, if not earlier. This earlier start is one way of making young people aware of the changing social norms in the world today.

Recommendations for Research

Study of Related Populations

All of the girls who were personally interviewed for this study were working in the academic stream. Particularly since many of the traditional/traditional and nontraditional/traditional girls would be in the general

population, research should be carried out with girls in the general program.

Because the girls who were "undecided" in their career choice in ninth grade were not surveyed in the twelfth grade, a follow-up study of these girls should be done.

Early Attitudinal Formation

Some literature exists, in areas outside of Newfoundland, on the attitudes of young children towards career options. A study of children in Newfoundland primary and elementary schools would help to ascertain when and how career attitudes are formed in these children.

Exploration of Values and Role Conflicts

In order to work on a developmental program of career education a more in-depth exploration of the values and role conflicts of high school students should be carried out.

Grade Twelve Traditionalism

Further research is needed into the forces that make girls more traditional in grade 12 than they were in grade 9. More focus could perhaps be placed on what actually influences a girl in her last year of high school.

BIBLIOGRAPHY

- Alden, E. & Seiferth, B. (1981, May). Women in science and technology. The High School Journal, 64 (8), 322-325.
- Almquist, E. and Angrist, S. (1971, July). Role model influences on college women's career aspirations. Merrill-Palmer Quarterly, 17 (3), 264-279.
- Arnold, A. (1971). Career choices for the 70's. New York, N.Y.: Crowell-Collier Press.
- Austin Department of Occupational Education and Technology. (1979). Exemplary program for recruitment into nontraditional careers. Austin, Texas: Texas Education Agency.
- Baker, M. (1985). What will tomorrow bring? ... a study of the aspirations of adolescent women. Ottawa: Canadian Advisory Council on the Status of Women.
- Bate, B., and Self, L. (1983, Spring). The rhetoric of career success books for women. Journal of Communication, 33 (2), 149-165.
- Bauer, L., Latreille, M.; Witwicki, C. (1985). Counselling women on nontraditional occupations. Ottawa: National Consultation on Vocational Counselling.
- Bernard, M., and Gilliland, B. (1981, September). Sex bias in counselling: an examination of certain counsellor characteristics and their effect on counselling behavior. The School Counsellor, 29 (1), 35-40.
- Betz, E. (1982). Need fulfillment in the career development of women. Journal of Vocational Behavior, 20, 53-66.
- Betz, E. (1984, February). A study of career patterns of women college students. Journal of Vocational Behavior, 24 (3), 249-263.
- Betz, N., and Hackett, G. (1981, September). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. Journal of Counselling Psychology, 28 (5), 399-410.
- Block, J.; Denker, E., and Tittle, C. (1981). Perceived influences on career choices of eleventh graders: Sex, SES, and ethnic group comparisons. Sex Roles: A Journal of Research, 7 (9), 895-904.

Brooks, L. (1983). Sexist language in occupational information: Does it make a difference? Journal of Vocational Behavior, 23, 227-232.

Brooks, L.; Holahan, W., and Galligan, M. (1985, June). The effects of a nontraditional role-modeling intervention on sex typing of occupational preferences and career salience in adolescent females. Journal of Vocational Behavior, 26 (3), 264-276.

Bowker, J.; Hinkle, D., & Worner, W. (1983, Spring). Do women aspire to the same administrative positions as men? Educational Administration Quarterly, 19 (2), 64-81.

Breton, R. (1972). Social and academic factors in the career decisions of Canadian youth. Ottawa: Information Canada.

Calhoun, G., and Morse, Wm. (1977, July). Self-concept and self-esteem: Another perspective. Psychology in the Schools, 14 (3), 318-322.

Chamberlain, V.; Cummings, M., and Rensberger-Schul, K. (1985, June). A job seminar on nontraditional careers: A case study. Journal of Career Development, 316-326.

Chusmir, L. (1983, September). Characteristics and predictive dimensions of women who make non-traditional vocational choices. Personnel and Guidance Journal, 43-47.

Costick, R. (1978). Nonsexist career counselling for women. San Francisco, California: Far West Laboratories for Research and Development.

Crites, J. & Fitzgerald, L. (1980). Toward a career psychology of women: What do we know? What do they know? Journal of Counselling Psychology, 27 (1), 44-62.

Dreyfus-Gray, J. (1980, September). Counselling women who want both a profession and a family. Personnel and Guidance Journal, 59 (1), 43-45.

Earley, P. (1981). Girls, school and work: Technological change and female entry into non-traditional work areas. The Australian Journal of Education, 25, (3), 269-285.

- Etaugh, C. (1974, April). Effects of maternal employment on children: A review of recent research. Merrill-Palmer Quarterly, 20 (2), 71-98.
- Farmer, H. (1983). Career and homemaking plans for high school youth. Journal of Counselling Psychology, 30 (1) 40-45.
- Farmer, H. (1980). Environmental, background, and psychological variables related to optimize achievement and career motivation for high school girls. Journal of Vocational Behavior, 17, 58-70.
- Farmer, H. (1976). What inhibits achievement and career motivation in women? The Counselling Psychologist, 6 (2), 12-15.
- Ferguson, J. (1981). Who turns the wheels? Ottawa: Science Council of Canada.
- Franken, M. (1983). Sex role expectations in children's vocational aspirations and perceptions and perceptions of occupations. Psychology of Women Quarterly, 8 (1), 59-68.
- Galassi, M.; Jones, L., and Britt, M. (1985, December). Nontraditional career options for women: An evaluation of career guidance instruments. The Vocational Guidance Quarterly, 34 (2), 124-131.
- Gaskell, J. (1983, November). Counselling girls for equal opportunity. The School Guidance Worker, 39 (2), 35-38.
- Gerson, B. & Lee, S. (1982, December). Women and career competence: A theoretical and experiential model. Personnel and Guidance Journal, 61 (4), 236-239.
- Gray, J. (1980, September). Counselling women who want both a profession and a family. Personnel and Guidance Journal, 59 (1), 43-45.
- Greenfeld, S.; Geriner, L., and Wood, M. (1980). The "feminine mystique" in male-dominated jobs: A comparison of attitudes and background factors of women in male-dominated versus female-dominated jobs. Journal of Vocational Behavior, 17, 291-309.
- Haring, M., and Tyler, K. (1984, March). Counselling with women: The challenge of nontraditional careers. The School Counsellor, 31 (4), 301-309.
- Harkness, C. (1976). Career counselling. Springfield, Illinois: Charles C. Thomas Publishing Co.

- Heins, M.; Hendricks, J., and Martindale, L. (1982, April). The importance of extra-family support on career choices of women. Personnel and Guidance Journal, 60 (8), 455-9.
- Heller, B. (1978). A planning program to develop career path workshops for women students. New York, New York: Institute for Research and Development.
- Herr, E. & Cramer, S. (1984). Career guidance and counselling through the life span. Toronto: Little, Brown and Co.
- Hollinger, C. (1983, February). Self-perception and the career aspirations of mathematically talented female adolescents. Journal of Vocational Behavior, 22 (1), 49-59.
- Hoyt, K. (1978). Monographs on career education. U.S. Department of Health, Education, and Welfare.
- Hutt, C. (1983, May). College students' perceptions of male and female career patterns. Journal of College Student Personnel, 24 (3), 240-246.
- Information Canada. (1973). Report of the Royal Commission on the status of women in Canada. Ottawa.
- Jamar, D., and Ervay, S. (1983, Spring). The effect of teacher education on the career goals of women. Phi Delta Kappan, 64 (8), 593.
- Kammer, P. (1985, September). Career and lifestyle expectations of rural eighth grade students. The School Counsellor, 33 (1), 18-25.
- Kahn, S. (1983). Development and operation of the women's employment counselling unit. The Vocational Guidance Quarterly, 32 (2), 125-129.
- Kaplan, R. and Watley, D. (1971). Career or marriage?" Aspirations and achievements of able young women. Journal of Vocational Behavior, 1 (1), 29-43.
- Keith, P. (1981, March). Sex role attitudes, family plans and career orientations: Implications for counselling. The Vocational Guidance Quarterly, 29 (3), 244-252.

- Keller, M., and Rogers, J. (1983, November). The awareness, impressions, and use of a campus women's center by traditional and nontraditional women students. Journal of College Student Personnel, 24 (6), 550-556.
- Kelly, A.; Whyte, J. & Small, B. (1984). Girls into science and technology. Chicago: University of Chicago.
- Kennedy, Sister M.J.R. (1974). The relationship of locus of control to career and homemaking vocational choices and resistance to change of high school girls. Washington, D.C.: Catholic University of America.
- Kerr, B. (1983). Raising the career aspirations of gifted girls. The Vocational Guidance Quarterly, 32 (1).
- Lembeck, R. (1974). Job ideas for today's woman. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Lemkaw, J. (1984, February). Men in female-dominated professions: Distinguishing personality and background features. Journal of Vocational Behavior, 24 (1).
- Lueptow, L. (1980). Social change and sex-role change in adolescent orientations toward life, work, and achievement: 1965-1975. Social Psychology Quarterly, 43 (1), 48-59.
- Lunneborg, P. (1982). Role model influences of nontraditional professional women. Journal of Vocational Behavior, 20, 276-281.
- Lunneborg, P., and Lunneborg, C. (1985, January). Nontraditional and traditional female college graduates: What separates them from the men? Journal of College Student Personnel, 26 (1), 33-36.
- MacDonald, M. (1975, September/October). What counsellors should be concerned about in order to prepare young women for the eighties. The School Guidance Worker, 31 (1), 40-43.
- Montgomery, L. (1982). Report of a study commissioned on the problems of working women in Newfoundland and Labrador 1981-1982. St. John's: Department of Labour and Manpower, Government of Newfoundland and Labrador.

- Nagely, D. (1971, October). Traditional and pioneer working mothers. Journal of Vocational Behavior 1 (4), 331-341.
- Olson, M., and Kansky, B. (1981, November). Mathematical preparation versus career aspirations: sex-related differences among college bound Wyoming high school seniors. Journal for Research in Mathematics Education; 12 (5), 275-279.
- Orpwood, G., and Souque, J. (1983). Science education in Canadian schools, Vols. 1, 2, 3. Ottawa: Science Council of Canada.
- Osipow, S. (1983). Theories of career development. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Patterson, L. (1973, June). Girl's careers - expression of identity. The Vocational Guidance Quarterly, 21 (4), 269-275.
- Pedro, J.; Wolleat, P., and Fennema, E. (1980, September). Sex differences in the relationship of career interests and mathematics plans. The Vocational Guidance Quarterly, 29 (1), 25-34.
- Peters, H. & Hansen, J. (1977). Vocational guidance and career development. New York, N.Y.: Macmillan Publishing Co., Inc.
- Proceedings of the first national conference for women in science, engineering, and technology. (1983). Vancouver, B.C.
- Pryor, R. (1985, June). Eradicating sex role stereotypes: An application of Gottfredson's circumscription - compromise theory. The Vocational Guidance Quarterly, 277-282.
- Pucinski, R. & Pearlman-Hirsch, S. (Ed.). (1971). The courage to change. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Ridley, D. and Novak, J. (1983, December). Sex-related differences in high school science and mathematics enrolments: Do they give males a critical headstart toward science and mathematics related courses? The Alberta Journal of Educational Research, 29 (4), 308-318.
- Rudd, N. & McKenry, P. (1980, Winter). Working women: Issues and implications. Journal of Home Economics, 72 (4), 26-29.

- Ruhland, D.; Brittle, M.; Norris, S., and Oakes, R. (1978). Determinants of career goals in junior and senior high school women. Rolla, Missouri: Missouri University, Office of Education, Women's Educational Equity Act Program.
- Schlossberg, N. (1972, October). A framework for counselling women. Personnel and Guidance Journal, 51 (2), 137-143.
- Self, C. & Lopez, F. (1982, November). Women in nontraditional fields: A career development seminar for college women. Journal of College Student Personnel, 23 (6), 545-546.
- Shack, S. (1973). Women in Canadian education: The two-thirds minority. Toronto: University of Toronto.
- Shave, G. (1984). Attitudinal factors related to the decision of academically capable students to pursue post-secondary education. Thesis, Memorial University of Newfoundland, St. John's, Newfoundland.
- Sheridan, K. (1982, October). Sex bias in therapy: Are counsellors immune? Personnel and Guidance Journal, 61 (2), 81-83.
- Sherman, J. (1983, Spring). Factors predicting girls' and boys' enrollment in college preparatory mathematics. Psychology of Women Quarterly, 7 (3), 272-280.
- Shields, B. (1974, October). How can I ask for help when I don't even know I need it? - The changing counselling needs of female students. School Guidance Worker, 30 (1).
- Slayton, J. (1978). I can be anything. New York, N.Y.: College Entrance Examination Board.
- Splete, H. (1982, June). Looking for a comprehensive career guidance program in the elementary school. The Vocational Guidance Quarterly, 30 (4), 301-307.
- Srebalus, D., Marinelli, R. & Messing, J. (1982). Career development concepts and procedures. Monterey, CA.: Brooks/Cole Publishing Co.
- Stack, J. (1978). Motives for occupational goal setting among male and female college students. Journal of Applied Psychology, 63 (5), 617-622.
- Statistics Canada. (1985). Women in Canada: A statistical report. Ottawa: Minister of Supply and Services.

- Stringer, D., and Duncan, E. (1985, March). Nontraditional occupations: A study of women who have made the choice. The Vocational Guidance Quarterly, 33 (3), 241-247.
- Strang, E. (1964). Vocational interests of men and women. Stanford, California: Stanford University Press.
- A Subcommittee Report of the Ministerial Advisory Committee on Women's Issues in Education. (1983). Towards equal opportunity for men and women in post-secondary education. St. John's: Department of Education, Government of Newfoundland and Labrador.
- Thomas, A., and Stewart, N. (1971). Counsellor response to female clients with deviate and conforming career goals. Journal of Counselling Psychology, 18 (4), 352-357.
- Thoroman, E. (1968). Vocational counselling of adults and young adults. Boston: Houghton Mifflin Co.
- Tully, P. (1987, January). Counselling issues of women and nontraditional careers. Guidance and Counselling, 2 (3), 48-55.
- Weeks, M.; Wise, G., and Duncan, C. (1984, Fall). The relationship between sex-role attitudes and career orientations of high school females and their mothers. Adolescence, 19 (75), 595-607.
- Welsh, M. (1983). Characteristics and career choices of adolescent girls - college board report. New York, New York: U.S. Department of Education College Entrance Examination Board.
- West, L. (1982). Reflections on self-awareness. Canadian Counsellor, 16 (3), 153-161.
- Wetherby, T. (1977). Conversations: Working women doing a man's job. Millbrae: Les Femmes.
- Wiseman, T. (1983). Factors related to the traditional or nontraditional career aspirations of Newfoundland youth. Thesis, Memorial University of Newfoundland, St. John's, Newfoundland.
- Women's Bureau of Labour Canada. (1986). When I grow up ... career expectations and aspirations of Canadian school children. Ottawa: Publications Distribution Centre Labour Canada.

- Work, C., Wheeler, J. & Williams, J. (1982, May). Guidance for nontraditional careers. Personnel and Guidance Journal, 60, 553-556.
- Yanico, B. (1981, December). Sex role self-concept and attitudes related to occupational daydreams and future fantasies of college women. Journal of Vocational Behavior, 19 (3), 290-301.
- Yu, M. (1976). Vocational guidance for women: Psychological and cultural implications. Paper presented at Memorial University of Newfoundland, St. John's; Newfoundland.
- Zunker, V. (1981). Career counselling. Monterey, CA.: Brooks/Cole Publishing Co.

APPENDICES

APPENDIX 2

CAREER DEVELOPMENT QUESTIONNAIRE

Third year follow-up

1. NAME: _____
2. SEX: Male _____ Female _____
3. Town where you live _____
4. Name of your School _____
5. When do you plan to graduate?
 1985 _____ 1986 _____ Don't know _____ Probably won't _____
6. What is your program?
 Academic _____ General _____ Work study _____ Special Ed _____
7. Check the courses in the list below that you have done since beginning Level I.

General Science 1200 _____	Chemistry 2202 _____
Physical Science 2205 _____	Chemistry 3202 _____
Environmental Science 3205 _____	Earth Science 2203 _____
Biology 2201 _____	Geology 3203 _____
Biology 3201 _____	Physics 2204 _____
Computer Studies 2206 _____	Physics 3204 _____
Career Education 3101 _____	Clothing 1101 _____
Foods 1100 _____	Textiles 3101 _____
Drawing and Planning 1100 _____	Woodworking 1107 _____
Typing 1102 _____	Home Maintenance 3108 _____
Typing 2102 _____	Metal working 1102 _____

8. What job or type of work do you expect or hope to be doing in the future? Try to be specific and name an occupation.

Check here if you are undecided. _____

or write in the name of the job or occupation below.

9. When did you decide on this occupation?

I haven't decided yet _____

Within the last six months _____

1 to 2 years ago _____

More than 2 years ago _____

10. What gave you the idea to try this occupation?

Check all that apply

T.V. _____

Radio _____

I read about it _____

I know someone who does the work _____

I learned about it in school _____

CHOICES _____

Someone told me about it _____
Who?: _____

Other: (Specify) _____

11. Do you know anyone working in this occupational area?

Check all that apply

I don't know anybody in this occupation _____

My Father _____

My Mother _____

A Relative _____

A Friend _____

An Acquaintance _____

Other: (specify) _____

12. Have you discussed your occupational plans with anyone?

Check all that apply in the list below.

I haven't discussed my plans with anyone_____

Parent(s)_____

Relative_____

My Friend_____

My Parent's Friend_____

Teacher_____

Guidance Counselor_____

Principal_____

Canada Employment_____

Someone who does
the work_____

Other_____

13. Right now, how important are each of the following in helping you to decide what to do in the future? Circle the number which best describes your feelings about each.

	MOST IMP	QUITE IMP	IMPORT- ANT	LESS IMP	NOT IMP
Availability of work now	1	2	3	4	5
Good chance of future employment	1	2	3	4	5
Staying near home	1	2	3	4	5
Keeping out of debt	1	2	3	4	5
Length or difficulty of training	1	2	3	4	5
Amount of pay	1	2	3	4	5

14. Compared to other people your age, what are your chances of success in your planned career or job? Circle one number.

VERY GOOD FAIRLY GOOD AVERAGE NOT GOOD POOR

1 2 3 4 5

15. What will you do next year?

I haven't decided_____

I'm going to take off the year to decide_____

I'm going to work next year_____

I'm going to take the year off, then go to work the year after_____

I'm going to continue my education next year_____

I'm going to take the year off, then continue my education the year after_____

16. If you are going to continue your education next year or the year after, check the one institution that interests you the most and fill in the course or program if you know it.

InstitutionProgram

Undecided_____

University_____

College of Trades_____

College of Fisheries_____

Vocational School_____

Hospital Nursing School_____

Bay St. George_____

Community College_____

Grenfell College_____

(Corner Brook)_____

Other Career Academies_____

Training Outside_____

Newfoundland_____

Other_____

17. How do your mother and father feel about your continuing your education after high school?

Check the one that applies most to your mother, then to your father.

	<u>Mother</u>	<u>Father</u>
Does not want me to continue after high school	_____	_____
Does not care whether or not I continue after high school.	_____	_____
Probably would like me to continue after high school.	_____	_____
Definitely would like me to continue after high school.	_____	_____
Insists that I continue after high school.	_____	_____
I don't know how they feel.	_____	_____

18. What do you think your best-friends will do about their education after high school?

Think about your 1 or 2 very best friends and check only one category.

They will not finish high school _____

They will finish high school,
but will not continue their education _____

They will finish high school
and continue their education next year _____

They will wait one or two years,
then continue their education _____

19. If you are not continuing your education, which of the following is the most important reason?

Check only one.

I couldn't do well in further education_____

I don't need more education to do the work I've decided on_____

I can't get enough money to pay for further education_____

I can get a job when I finish high school_____

I don't want to leave home at this time_____

20. Will you leave Newfoundland in order to find a job?

Yes_____ No_____

21. Do you believe that you will be affected by the development of an oil industry in Newfoundland?

Yes_____ No_____

Please explain why, or why not. _____

22. How do you rate yourself in SCHOOL ABILITY compared to the other students in your class at school? Circle one number.

AMONG THE BEST	BETTER THAN MOST	AVERAGE	BELOW AVERAGE	AMONG THE POOREST
1	2	3	4	5

23. Compared to other people your age, what are your chances of getting a job?

EXCELLENT	VERY GOOD	AVERAGE	NOT GOOD	VERY POOR
1	2	3	4	5

24. How important will work experience be in helping you achieve success?

VERY
IMPORTANT

QUITE
IMPORTANT

AVERAGE
IMPORTANCE

LITTLE
IMPORTANCE

NOT
IMPORTANT

1

2

3

4

5

25. How important will schooling be in helping you achieve success?

VERY
IMPORTANT

QUITE
IMPORTANT

AVERAGE
IMPORTANCE

LITTLE
IMPORTANCE

NOT
IMPORTANT

1

2

3

4

5

26. Have you ever had a part-time job while attending school?

Yes____ No____

27. Do you have a job now?

Yes____ No____

28. Do you believe that men have more career opportunities than do women?

Yes____ No____

29. How much do you know about what each of these educational institutions are like, and the kinds of programs offered at each of them?

	A LOT	A FAIR AMOUNT	A LITTLE	NOTHING
Memorial University	_____	_____	_____	_____
College of Trades	_____	_____	_____	_____
College of Fisheries	_____	_____	_____	_____
Vocational School	_____	_____	_____	_____
Hospital Nursing School	_____	_____	_____	_____
Bay St. George Community College	_____	_____	_____	_____
Grenfell College (Corner Brook)	_____	_____	_____	_____
Other Career Academies	_____	_____	_____	_____
Training Outside Newfoundland	_____	_____	_____	_____

THE FOLLOWING ARE TO BE ANSWERED BY FEMALE STUDENTS ONLY

30. Do you plan to marry in the next five years?

Yes____ No____ Already married____

31. Do you think it is necessary for both a husband and wife to work?

Yes____ No____

32. Which of the following best describes your plans to combine marriage and career?

CHECK ONLY ONE

I don't plan to ever marry.____

I will not work after I marry.____

I will work until children arrive, then
stop until they finish school. _____

I will work until children arrive, then
stop until they are school age. _____

I plan a full career after marriage, but no children____

I plan a full career after marriage with time off to
have children. _____

APPENDIX 2

1982 Questionnaire

Form C

Data Sheet

1. School Name: _____
2. Grade: 9 ____ 10 ____ 11 ____ 2a. Hometown: _____
3. Program: Academic ____ General ____ Other ____
4. How long have you lived in this^a area?:
Less than 2 years ____
2 to 6 years ____
10 to 19 years ____
More than 19 years ____
5. Age: 12 ____ 13 ____ 14 ____ 15 ____ 16 ____ 17 ____ 18 ____
19 ____
6. Sex: M ____ F ____
7. Do you know what you want to do after you finish high school?
Yes ____ No ____
If yes, describe the career or job: _____

8. Do you plan to continue your education immediately after high school?

Yes ☐ No ☐

If yes, indicate in the spaces below the institution and program that you are most interested in.

<u>Institution</u>	<u>Program or Course</u>
University	<input type="checkbox"/> _____
College of Trades & Technology	<input type="checkbox"/> _____
College of Fisheries	<input type="checkbox"/> _____
Vocational School	<input type="checkbox"/> _____
Nursing School	<input type="checkbox"/> _____
Training Outside of Nfld.	<input type="checkbox"/> Specify where and what _____
Other	<input type="checkbox"/> _____

9. (a) Some students work for a year or so after completing high school and then return for more education. Is this your plan?

Yes ☐ No ☐

- (b) If you answered no to question 8, do you plan to return for more education at some later date?

Yes ☐ No ☐

- (c) If yes, what do you plan to do next year? _____

10. If you do not plan to continue your education after high school, indicate your reasons.

For example: ☐ lack of interest in further education
☐ further education not needed for chosen career
☐ lack of finances
☐ availability of immediate employment
☐ other: specify _____

11. Have you talked to anyone about your present plan?

Yes ☐ No ☐

If yes, to whom? (Check as many as apply):

Parent ☐

Friend ☐

Teacher ☐

Guidance Counsellor ☐

Other: Specify _____

12. How long have you been interested in this career or job?

Less than 6 months ☐

1 to 2 years ☐

More than 2 years ☐

13. How did you become interested in this career or job?

14. Do you know anyone in this career or job?

Yes ___ No ___

If yes, who: Friend ___

Relative ___

Acquaintance ___

Other: Specify _____

15. Will you have to leave Newfoundland to prepare for your career or job?

Yes ___ No ___

16. What do you think is the average starting income for a person in this career or job which you hope to pursue after high school?

___ Less than \$10,000 per year

___ \$10,000 to \$15,000 per year

___ \$15,000 to \$20,000 per year

___ \$20,000 to \$25,000 per year

___ \$25,000 to \$30,000 per year

___ More than 30,000 per year

17. Do you think that careers or jobs as the one you have chosen are plentiful outside Newfoundland?

Yes ___ No ___

18. How likely is it, in your opinion, that you would be able to get the job you want in Newfoundland?

___ It is very likely that I could get this job.

___ It is fairly likely that I could get this job.

___ It is not very likely that I could get this job.

___ It is very unlikely that I could get this job.

19. Do you believe that you will be affected by the possible development of an oil industry in Newfoundland?

Yes ____ No ____

Why or why not? _____

20. What is your father's (or legal guardian's) job or occupation? If he is no longer working, write what he used to do when he did work in the correct space below. (Be as specific as you can: tell not only what he does but where he works. For example, "he fishes on a long liner", or "he sells insurance for a large company").

He is not working now, but his last job was: _____

21. Does your mother now have a job outside the home?

Yes, she has a full-time job. _____

Yes, she has a part-time job. _____

No, she does not have a job outside of the home. _____

22. If she is working or has ever worked outside the home either part-time or full-time, please describe her job in the correct space below. (Be specific: for example, "she is a cashier in a department store", or "she is a high school teacher").

She is not working now, but she used to work as _____

23. Have you ever had a part-time job?

Yes ____ No ____

24. Do you have a part-time job now? Yes ____ No ____

If yes, what is it? _____

25. Did you ever have a full-time job? Yes ___ No ___

If yes, when? _____

What was it? _____

APPENDIX 3

1982 Questionnaire

NAME: _____

GRADE: _____

SCHOOL: _____

Form D

Career Development Survey

1. In your family, where are you in order of birth:

the oldest ☒the youngest ☐in between ☐

2. How many people are there presently living at home: _____

3. Are your parents living:

both ☐mother ☐father ☐

4. What is your parent's marital status:

widowed ☐married ☐divorced ☐separated ☐single ☐

5. Do you have any physical handicaps/defects:

no —

yes —

If yes, explain: _____

6. Do you have any special interests, talents, or hobbies:

no —

yes —

If yes, specify: _____

7. Do you—participate actively in family decisions, e.g., holidays, moving, chores:

no —

yes —

8. What is your parents' educational level:

	<u>Mother</u>	<u>Father</u>
some schooling	—	—
completed high school	—	—
some university	—	—
completed university	—	—
completed nursing school	—	—
completed vocational (trades) or technical school	—	—
don't know	—	—

9. Do you think you could get enough money to go to the following schools when you finish high school. Answer for each even if you don't plan to go on with your studies.

Yes Probably Not Sure Unlikely No

hospital nursing schools	—	—	—	—	—
College of Trades and Technology..	—	—	—	—	—
Memorial University..	—	—	—	—	—
College of Fisheries..	—	—	—	—	—
vocational school	—	—	—	—	—

10. How much do you feel you know about what each of these institutions are like and the kinds of programs offered at them:

A Lot A Fair Amt. A Little Nothing

hospital nursing schools	+	—	—	—
College of Trades and Technology..	—	—	—	—
Memorial University..	—	—	—	—
College of Fisheries..	—	—	—	—
vocational school	—	—	—	—

11. List all the places where you could go to find out about jobs, university, other schools, careers, etc.

12. Have you ever failed a course: no
yes

If yes, specify: _____

- Have you ever failed a grade: no
yes

If yes, specify: _____

13. Have you ever skipped a year: no
yes

If yes, specify: _____

14. Do other people praise you for the special talents or abilities that you have:

no

yes

Specify: _____

15. How do your mother and father feel about your continuing your education after high school:

Mother Father

does not want me to continue after high school

does not care whether or not I continue after high school

probably would like me to continue after high school

definitely would like me to continue after high school

insists that I continue after high school

I don't know how they feel

16. What do you think your best friends will do about their education (think about your two or three very best friends):

drop out of high school ☐

finish high school and get a job ☐

finish high school, get a job for a few years,
then continue their education ☐

finish high school and continue their education . ☐

17. Did your father do the same work as his father:

no ☐

yes ☐

Did your mother do the same work as her mother:

no ☐

yes ☐

Do you think you will do the same work as one of your parents:

no ☐

yes ☐

18. If you get married, how old do you think you will be:

19. What kinds of grades (marks) do you expect to get this year and what kind do you think you are capable of:

	<u>Expect to Get</u>	<u>Capable Of</u>
mostly 80% and over (A's)	<input type="checkbox"/>	<input type="checkbox"/>
mostly 65% - 79% (B's)...	<input type="checkbox"/>	<input type="checkbox"/>
mostly 55% - 64% (C's)...	<input type="checkbox"/>	<input type="checkbox"/>
mostly 50% - 54% (D's)...	<input type="checkbox"/>	<input type="checkbox"/>
mostly less than 50% (F's)	<input type="checkbox"/>	<input type="checkbox"/>

20. How do you rate yourself in school ability compared with other students in your class at school:

among the best —

above average —

average —

below average —

among the poorest —

21. Do you think you have the ability to complete university regardless of whether you will attend or not:

yes, definitely —

yes, probably —

not sure either way —

probably not —

definitely not —

22. Right now, how important are the following in helping you decide what to do. Put a number one (1) by the most important, a two (2) by the next most important, etc.:

parents wishes and plans —

friends opinions and plans —

teachers opinion —

counsellor opinion —

other persons in the community —

economic conditions —

23. Success means different things to different people. The following are some signs of success:

- a. having a lot of money
- b. having a steady income or job
- c. being looked up to or admired by others
- d. being able to influence and direct other people
- e. being self-sufficient; one's own boss
- f. doing something outstanding or excellent
- g. developing intelligence to appreciate and work with ideas
- h. having close and satisfying friendships and relationships
- i. developing skills and abilities to their full potential

Which two are most important to you (write the corresponding letter):

most important —

next most important —

Which two are least important to you:

least important —

next least important —

24. Compared to other people your age, what are your chances of actually getting the success you want (circle one number):

Much Better

Equal

Much Worse

1 2 3 4 5 6 7

25. How important will schooling be in helping you achieve success (circle one number):

Much Better

Equal

Much Worse

1 2 3 4 5 6 7

How important will work experience be in helping you achieve success (circle one number):

Much Better

Equal

Much Worse

1 2 3 4 5 6 7



