

FACTORS RELATED TO THE TRADITIONALISM
OF CAREER CHOICE

CENTRE FOR NEWFOUNDLAND STUDIES

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FACTORS RELATED TO THE TRADITIONALISM OF CAREER CHOICE

by



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ABSTRACT

This study attempted to determine factors associated with traditional or non-traditional aspirations and expectations of Newfoundland high school youth. The sample consisted of 2584 students (1221 males and 1363 females) from twenty-four schools. Data from grades nine through eleven were gathered using a survey type of questionnaire and principal analysis was performed using chi-square analysis, rejecting the null hypothesis at the .05 level of significance.

The theoretical constructs of the research were based on Krumboltz's (1975) social learning theory of career decision making and instruments were designed to analyze perceived influencing factors. The instruments gathered data on the occupational and educational aspirations and plans of youth, the reasons for these plans, the nature of interest in the career, information about the job search conducted by the student, work experience, and parental occupations. Questions were also asked about birth order, number of siblings, physical disabilities, interests and talents, parental educational levels, perception of ability to finance education, perception of knowledge of educational institutions, perception of parent attitudes, educational ability, success criteria and peer influence.

Many factors, such as role models, family background, academic experience, were determined to be associated with

traditional or non-traditional career choice. Also some factors were associated with both traditional and non-traditional career choice, although not always in the inverse.

Recommendations for practice dealt with personalizing the career education process, provisions of information, group process, and dealing with failure. Recommendations for research considered the nature of perceived options and program design.

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CHAPTER I

INTRODUCTION TO THE STUDY

Purpose

The purpose of this study was to determine the factors which were associated with the development of traditional or non-traditional post secondary aspirations and expectations of Newfoundland high school youth.

Significance and Rationale

Newfoundland and Labrador is a province which is not rich in a variety of manufacturing, service or technical industries. Most communities in the Province have a traditional, single-industry dependence centered around the fishing, paper or mining industries. In this traditional work environment, it may be assumed that there will be patterns of attitudes and background characteristics associated with the occupational choices made by youth in that environment.

If students continue to perceive their career options in terms of the traditional patterns, and in terms of the related services such as education, medicine, crafts, trades and small business, then they may not be prepared to exploit opportunities associated with new developments, such as the

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development of offshore oil and gas. Newfoundland youth may be prepared only to benefit in the short-term from trades, semi-skilled and unskilled jobs which accompany the initial phases of development of this type, but will not be in as good a position to compete for employment at the managerial and technical levels. Indeed, one researcher (House, 1980) has suggested that significant numbers of Newfoundlanders may be unsuited for work in the oil industry because of fundamental attitudes toward work which are not congruent with the requirements of that industry.

The career decisions at which students arrive have repercussions for the remainder of their lives. Breton, McDonald & Richer (1972), however, have suggested that a person making a career decision

...is probably unaware of all the factors that impinge on his evaluations and probably even less conscious of the relative weight each experience bears to his current assessments. (p. 8)

Powell and Bloom (1966) concluded that an awareness of the motivations underlying students' choices was important if they were to be assisted with their occupational choices. Considering changes resulting from potential development opportunity in Newfoundland, the Newfoundland Teachers' Association (1982) felt that

... it will be primarily the responsibility of educators and educational institutions to prepare young people for coping with changes in their social environment which will essentially determine the manner in which they live for the next several years. (p. 20)

The approach to and context of a choice in a career decision situation should be of primary concern for educators. In the Newfoundland context, career education has been recognized as a school responsibility since 1959. Kennedy et al. (1981) suggested that students were in an exploration stage and should have opportunities to "broaden their views and gain information, experiences and insights which will open up new career possibilities for the future" (p. 11).

Information concerning vocational aspirations and expectations as they relate to the traditionalism of career choice, will assist educators in making decisions about the desirability of influencing change in traditional work patterns, the need for programs to affect any desired changes and the degree of focus required to help students deal with the impact of their background in making vocational choice.

When considering the expectations held for development in Newfoundland, even broader implications may be attached to the knowledge of background factors affecting the traditionalism of career choice. As Nolfi et al. (1978) have suggested,

... understanding the determinants of the decision to pursue additional schooling and the determinants of labor market success is therefore crucial if social policies aimed at increasing social equity and equality are to be effectively designed and their impact evaluated. (p. 5)

The goal of career education must be to enable youth to take advantage of available opportunity. It is not, as is mistakenly assumed by some, a program which guides, or even

forces, students toward an earlier choice of a career.

Figure 1 demonstrates a model of the career development process. As can be seen, the end result of the process is

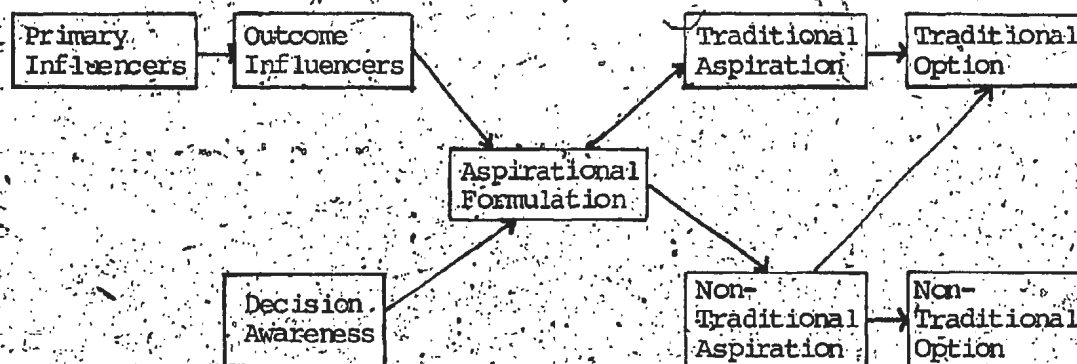


Figure 1

Career Choice Model

the generation of options, or alternative career moves. It is assumed that the options exist. The problem for the student, then, is to access them, and in a world that is changing as rapidly as is this world, most educators would also agree that it is desirable to generate as many options as possible, and preserve them as options for as long a time as is possible.

Understanding the aspirations of youth may provide a key to discovering how to open career alternatives. Career development which leads to traditional aspirations may result in the closing off of the less traditional options. A very clear example of this may be seen in the possible effects of course

selection in high school. The student with a traditional aspiration to go into the "trades", for example carpentry, may select courses designed to accommodate students making such choices. In making the decision in grades ten through twelve to take these courses, it becomes more difficult for the student to pursue options involving technical and university training. On the other hand, it is relatively easy for the student whose high school course selection has been oriented towards technical or university training to reorient towards the trades, if aspirations change in that direction.

It follows then, that if students are to be prepared to pursue non-traditional career options, one key will be for educators to help them develop non-traditional aspirations. An understanding of the background factors associated with development of non-traditional aspirations will give educators some of the information required to do this.

As will be explored later in the review of the literature, research designed to achieve this goal is highly contextual. Because the background factors in a traditional society such as Newfoundland's are idiosyncratic, it may not be possible to generalize the findings of studies in other areas to the situation in Newfoundland.

The theoretical framework adopted for this study was developed by Krumboltz, Mitchell and Gelatt (1975). In order to better understand how the influencers considered in the theory relate to the model, a brief summary of the theory follows.

The theory ... attempts to explain how educational and occupational preferences and skills are acquired and how selections of courses, occupations and fields of work are made. It identifies the interactions of genetic factors, environmental conditions, learning experiences, cognitive and emotional responses, and performance skills that produce movement along one career path or another. Combinations of these factors interact in different ways to produce different decisions.⁴

At each decision point the decider has one or more response or decision options. Internal (personal) and external (environmental) influencers (constraints or facilitators) shape the nature and number of these options and the way in which individuals respond to them. Sometimes so many options are available that the individual feels incapable of deciding. At other times options may be so limited or so disproportionate in value that the individual feels only one option is available. In fact this person might feel she or he has no choice. But always there are options, even if one of them is not to make a decision. A decision--the selection of an option from among two or more alternatives--may increase or decrease options available for future decisions. Some consequences are irreversible. The decision made within an environment becomes part of the new environment, and may itself become one of the constraints or facilitators in a new setting. This is another example of the interdependence of any series of learning experiences and decisions.

(Krumboltz, Mitchell, & Jones, 1976, p. 71)

The model considers the process associated with choosing a career path upon leaving high school and the preparatory steps (rationale) a student may avail of in preparation for that choice. This decision situation will have major implications for the student in terms of development opportunities, the student's state of readiness to avail of such opportunities and the degree of exploitation possible. The choice will be, for that student, of a traditional or non-traditional nature. It will be made from a set of perceived options which may or may not have been explored (career exploration) as a result

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of that student's degree of aspirational formulation which in turn will have been based on prevailing influencing factors as described in the social learning theory.

For the purpose of this study, only the first and last sections of the model were considered in the analysis-influencers and the traditionalism status of the decision-situation.

Traditionalism Scale

The traditionalism scale was applied to Newfoundland high school students based on their chosen career path, as it related to several traditionalism criteria. The score assigned to a student was comprised of eight variables which were given either a traditional or non-traditional weighting. The eight variables were:

(1) Whether the expressed career choice of a student was traditional or non-traditional in terms of the career possibilities traditionally associated with the community in which that student resided or attended school.

(2) The difference in the amount (time) of educational training a student planned in relation to the educational level of the same-sex parent (opposite-sex if same-sex parent was missing). A traditional weight was applied if the student's educational plans equaled or required up to two years more training than that of the parent's educational

level and a non-traditional weight was applied if the student's educational plans required less training or more than two years training than that of the parent's educational level.

(3) Whether the expressed career choice of a student was traditional or non-traditional for the sex of that student.

(4) Whether the expressed career choice of a student was considered an oil related career (arising as a direct result of oil development and possible only with oil development) and therefore non-traditional, or not related and therefore traditional.

(5) The length of time a student had lived in the community serviced by the school. A non-traditional weight was applied if the student lived in the community for less than two years, otherwise a traditional weight was applied.

(6) Whether a student indicated a need to leave Newfoundland (non-traditional) to prepare for the chosen career or indicated no need to leave (traditional).

(7) Whether a student felt likely to get the job desired in Newfoundland (traditional) or unlikely to get the desired job in Newfoundland (non-traditional).

(8) Whether a student felt likely to follow the same work pattern as one of the parents (traditional) or not follow the same work pattern (non-traditional).

Research Questions

The following research questions were derived from an analysis of the social learning theory of career decision making, and are stated in broad terms to reflect the four categories of primary influencers and the three categories of outcomes (resulting from the interaction of primary influencers) which may affect the career choice of Newfoundland youth. A description of the specific variables analyzed with respect to the questions may be found in Chapter III.

- (1) Are learning experiences related to the traditional or non-traditional nature of career choice?
 - (a) Is the role model related to the traditional or non-traditional nature of career choice?
 - (b) Is the degree (type) of vocational knowledge of a student related to the traditional or non-traditional nature of career choice?
 - (c) Is the academic experience of a student related to the traditional or non-traditional nature of career choice?
- (2) Are environmental conditions and events related to the traditional or non-traditional nature of career choice?
 - (a) Are school factors related to the traditional or non-traditional nature of career choice?
 - (b) Is the family background of a student related to the traditional or non-traditional nature of career choice?
 - (c) Are regional or economic differences related to the traditional or non-traditional nature of career choice?
- (3) Is a student's genetic endowment related to the traditional or non-traditional nature of career choice?

- (4) Are task approach skills (primary influencers or outcomes) related to the traditional or non-traditional nature of career choice?
- (5) Are the actions a student takes or plans to take related to the traditional or non-traditional nature of career choice.
- (6) Are the self-observation generalizations a student forms related to the traditional or non-traditional nature of career choice?

Definition of Terms

Aspiration - A particular educational or occupational goal a person desires to attain.

Expectation - A particular educational or occupational goal a person expects to attain.

Career determinant (Variable) - Any factor, tangible or abstract, which has an influence upon the formulation or maintenance of aspirations or expectations.

Career path (choice) - The goal and methods of attaining this goal which a student plans after secondary school.

Traditionalism scale - A scale which assigns to the student a traditionalism score based on a count of a minimum of six of eight applicable variables, and which is used to determine the traditionalism status--traditional or non-traditional--of a student's career path/choice.

Traditional - (1) When considered in the general Newfoundland

context, it is that cultural continuity in social attitudes and institutions associated with Newfoundland.

(2) When describing the ~~career~~ path/choice of Newfoundland high school students, it is defined as a score on the traditionalism scale which is less than or equal to 0.143.

Non-traditional - (1) When considered in the general Newfoundland context, it is something which is considered different from the cultural continuity in social attitudes and institutions associated with Newfoundland.

(2) When describing the career path/choice of Newfoundland high school students, it is defined as a score on the traditionalism scale which is greater than 0.334.

Limitations of the Study

(1) The traditionalism scale was a new instrument and possible refinement may make it more discriminating of traditionally or non-traditionally oriented students than this study demonstrated.

(2) This study holds relevance for the Newfoundland region and any generalizations to other regions should be made in light of the unique stage of economic development the Province is now undergoing.

(3) Data collection for the students in St. John's did not include the administration of one of the two questionnaires. This meant that the traditionalism scores for St. John's students were estimated from incomplete information (six of eight variables), thus resulting in a somewhat higher proportion of missing cases from St. John's than from the remainder of the sample. In addition, where the independent variable in the analysis was taken from the form not administered in St. John's, conclusions about that variable may be generalized only to the population of Newfoundland outside metropolitan St. John's.

CHAPTER II

REVIEW OF RELATED LITERATURE

Vocational Development

A consideration of the theories relating to the area of vocational development and some of the corresponding research, has demonstrated a decided lack of agreement on which variables are of greatest importance in influencing the development of vocational aspirations and expectations. Such a large number of variables have been suggested, that it is difficult to decide which variables should even receive consideration. Nolfi et al. (1978) addressed the differing positions on the question of educational pursuits and career success.

Different analysts, reflecting different disciplinary points of view, have argued two very different explanatory cases. One group argues that psychological and personality variables such as motivation, family, personality characteristics, and attitudes are the most important determining variables, whereas another group has argued equally convincingly that such neutral variables as ability, previous schooling, and price predominate. Sometimes analysts have looked at the same data from these different perspectives and come to exactly opposite conclusions (p. 5)

A theoretical consideration of the factors which may be related to aspirations and expectations leaves one with a realization of the magnitude of the process interaction which takes place. Almost all of the vocational development theories take into account all, or most, of the related factors, and

may be considered as cross-disciplinary in these terms (Osipow, 1973; Tolbert, 1980). The particular viewpoints and emphases, though, may be somewhat different. Krumboltz et al. (1975) proposed a theoretical concept which acknowledged and attempted to incorporate these differing viewpoints and emphases, and focused specifically on educational and occupational decision making (as cited in Unruh, 1975). Yet, he felt that

... the theory allows for modification by future events. In no sense is it intended as a final statement. It should be congruent with presently known facts but it should also suggest further research that may lead to modifying part or all of the theory. (Krumboltz et al., 1976, p. 71)

Social Learning Theory of Career Decision Making

The theoretical constructs upon which this study was based, were derived from the Krumboltz et al. (1975) social learning theory of career selection, a relatively new consideration of vocational development.

The career choice model can now be expanded and outlined (Figure 2) to be congruent with the literature. The methods by which a student may deal with the career development process are viewed in light of the model as outlined in Figure 1.

Primary
Influencers

Outcome
Influencers

Aspirational
Formulations

Traditional-
ism Status

Option
Preparation

Career Access
Options

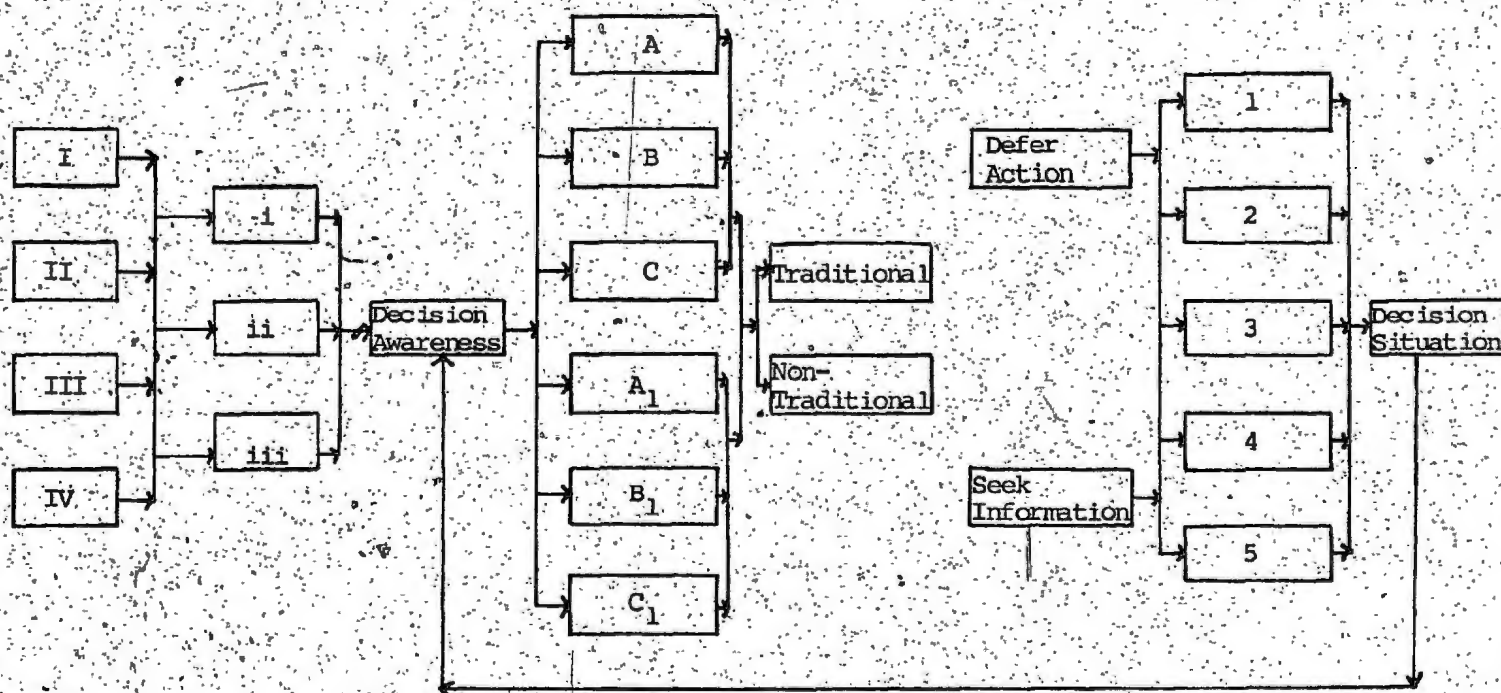


Figure 2

Career Choice Model (Expanded)

Figure 2 (Cont'd)

Career Choice Model - Explanatory KeyPrimary Influencers

- I. Learning experiences - Two types--(1) instrumental, in which the individual acts on the environment in such a way as to produce certain consequences.
(2) Associative, in which the individuals prevailing response pattern is a reaction to external stimuli.
- II. Environmental conditions and events - factors, planned or unplanned, due to human action or to natural forces, which are usually outside the control of any one individual.
- III. Genetic endowment and special abilities - inherited qualities which may set limits on individuals and suggests that certain individuals are born with greater or lesser predispositions to profit from certain types of learning experiences.
- IV. Task approach skills - brought to each new task or problem is a set of skills, performance standards and values, work habits, perceptual and cognitive processes, mental sets, and emotional responses which result from the unexplained interactions between genetic and environmental influencers.

Outcome Influencers

- i. Task approach skills - cognitive and performance abilities and emotional predispositions for coping with the environment, interpreting it in relation to self-observation generalizations, and making covert or overt predictions about future events.
- ii. Actions - entry behaviors - those actions which represent an overt step in a career progression.
- iii. Self-observation generalization - the observation of one's own performance in relation to the performance of others or one's own past performance and making generalizations about such performance.

Figure 2 (Cont'd)

Career Choice Model - Explanatory KeyDecision Awareness

- The student realizes that at some time in the future a decision regarding post-secondary plans has to be made.

Aspirational Formulations

- A. Formulated - the student knows what the career choice will be and feels no need for any preparation in terms of career exploration.
- B. Partially formulated - the student has a vague idea of what the career choice will be and feels no need for any preparation in terms of career exploration.
- C. Not formulated - the student has no notion of what the career choice will be and still feels no need for any preparation in terms of career exploration.
- A₁. Formulated - the student knows what the career choice will be but feels a need for career exploration in the specific area of choice.
- B₁. Partially formulated - the student has a vague idea of what the career choice will be but feels a need for career exploration in the general area of choice.
- C₁. Not formulated - the student has no notion of what the career choice will be but feels a need for career exploration to prepare for the decision situations.

Traditionalism Status

Traditional - based on several traditionalism criteria, it is an aspired career path which scores low on the traditionalism scale.

Non-traditional - based on several traditionalism criteria, it is an aspired career path which scores high on the traditionalism scale.

Figure 2 (Cont'd)

Career Choice Model - Explanatory KeyOption Preparation

Defer action - the student has no desire to prepare for the upcoming decision situation in terms of career exploration, regardless of the degree or type of aspirational formulation.

Seek information - the student wishes to be better prepared and more knowledgeable in career exploration for the upcoming decision situation, regardless of the degree or type of aspirational formulation.

Perceived Options

1. Post-secondary education - the student's career plans are very specific.
2. Post-secondary education - the student desires further education, at an institution, as a preparatory step towards a vague career plan but has no specific program in mind.
3. Job opportunity - the student desires a job which is the specific career plan for that student.
4. Job opportunity - the student desires a job but has no specific career plan in mind--this is possibly seen as an intermediate step.
5. Deferred - the student has no career plans and desires neither post-secondary education nor a job opportunity.

Decision Situation

- The student follows through on the post-secondary plans which have been decided upon in terms of a career goal based on aspirational formulation, or reverts to the focus of decision awareness.

Krumboltz's theory posits four categories of factors that influence the nature of career decision making (CDM). These are genetic endowment and special abilities, environmental conditions and events, learning experiences, and task approach skills.

Genetic endowment and special abilities include such things as race, sex, physical characteristics, intelligence and musical ability, to mention a few. Thus, the theory suggests that persons are born with certain inherited qualities which may set limits on their educational or occupational preferences, skills and selections. It also recognizes the possibility that individuals are born with greater or lesser predispositions to gain from learning experiences.

Environmental conditions and events tend to be beyond the control of any one individual even though they exercise an influence on decision making. They may be planned, unplanned, due to human action (social, cultural, political, or economic) or to natural forces (natural resources or disasters). Resulting from these factors are influencing events or conditions such as: number and nature of job opportunities; number and nature of training opportunities; social policies and procedures for selecting trainees and workers; rate of return for various occupations; labour laws and union rules; physical events such as earthquakes, droughts, floods, and hurricanes; availability of and demand for natural resources; technological developments; changes

in social organization, family training experiences or resources, educational system, and neighborhood and community influences.

Learning experiences, although recognized as exceedingly complex, are divided into two types. They are the instrumental and associative learning experiences.

Instrumental learning experiences result as individuals produce consequences by acting on the environment. Successive instrumental learning experiences are responsible for the skills necessary for successful career planning, development, and occupational or educational performance. Krumboltz attempts to avoid the question of values in relation to the exertion of control over the environment, by individuals, with a consequent effort on alternatives and actions. Neither does he advocate intervention models, even though several possible models can be drawn from the theory (Unruh, 1975).

Associative learning experiences occur when the individual's prevailing response pattern is a reaction to external stimuli. This type of learning includes observational learning from real or fictitious models. "Therefore social-learning theory holds that learning takes place through observation as well as through direct experience" (Unruh, 1975, p. 10).

The fourth component of Krumboltz's model is task approach skills. Task approach skills are what an individual brings to each new task or problem, affecting the outcomes of

each task or problem, and are a result of "as yet unexplained interactions between genetic and environmental influences" (Krumboltz, et al., 1976, p. 73). These are skills, performance standards and values, work habits, perceptual and cognitive processes, mental sets, and emotional responses, all of which become modified as a result of differential outcomes. Therefore, they "are both factors which influence outcomes and outcomes themselves" (Krumboltz, et al., 1976, p. 73).

These four major influencers interact in varied and infinite patterns to produce three kinds of consequences or outcomes: self-observation generalizations; task approach skills; and actions.

Self-observation generalizations result from observing one's own performance in relation to one's past performance or the performance of others and deriving generalizations about oneself. Comparison with others or internal idealized standards is the key to these but the self-observations and conclusions may not necessarily be accurate. People may also tend to remember reactions to learning experiences rather than the specifics of the experience, therefore, the generalization may only be a vague feeling, for example, of confidence or discomfort. Interests, which reflect generalizations, are seen as a result of learning experiences. Therefore, the experiences have an "impact on an individual's future development of educational and occupational skills and selection of a course of study, an occupation, or a field

of work" (Krumboltz, et al., 1976, p. 74). The most important self-observation generalizations become preferences (an important outcome of learning experiences) which are the building blocks of career decisions.

Task approach skills are "cognitive and performance abilities and emotional predispositions for coping with the environment, interpreting it in relation to self-observation generalizations, and making covert or overt predictions about future events" (Krumboltz, et al., 1976, p. 74). They include career decision making skills such as value clarifying, goal setting, predicting future events, alternative generating, information seeking, estimating, reinterpreting past events, eliminating and selecting alternatives, planning and generalizing.

The third outcome is actions. Actions or behaviors will result from the previously described processes. The consequences of the actions will affect future behavior. This theory is specifically concerned with entry behavior which is considered as an overt step in career progression. Examples might be applying for a job, or choosing a specific post-secondary institution and making application.

Krumboltz, et al. (1976) suggested that, for one person, a number of possible career patterns may be possible at a given decision point. The path which that person chooses is a result of the interaction of influencers and the decision which is made in reaction to these. Change one or some of the influencers, and it is possible that a different path

might be chosen. The decision situation, therefore, is at a point in the developmental sequence of that person, rather than at the end. A person arrives at a certain point in time (decision situation) and a current activity but "... in no sense is that current activity the final career activity. As time continues, further events and learning experiences occur, and educational and occupational activities may change" (Krumboltz, et al., 1976, p. 75).

Krumboltz, et al. (1976) acknowledged that the theory has certain inadequacies. It does not explain how the various learning experiences are combined to yield a certain preference; it does not specify exactly what cognitive or behavioral processes represent effective decision making skills; and it does not make explicit how people learn which activities are associated with which occupations.

Nevertheless, the theory resulted from an extensive study by a team of researchers of the American Institutes for Research under contract to the National Institute of Education (Mitchell, Jones and Krumboltz, 1975).

Emerging from the theory were numerous propositions. According to Mitchell (1975), a number of testable hypotheses could be proposed for each proposition. The propositions were developed around three elements: factors influencing preferences; factors influencing career decision making skills; and factors influencing actual entry into training or occupational opportunities (Gelatt, 1975, p. 55). Mitchell (1975) summarized the propositions as follows:

1. Propositions IA1 through IA4. These propositions specify factors that positively influence educational preferences. They state that preferences develop when an individual: receives positive reinforcement for engaging in activities associated with successful performance of a course, occupation, or field of work; observes a valued model being reinforced; is positively reinforced by a valued person who models and/or advocates engaging in the course, occupation, or field; or is exposed to positive words and images associated with the course, occupation or field of work. (p. 42)
2. Propositions IB1 through IB4. These propositions discuss factors that negatively influence CDM. They suggest that individuals are less likely to express preferences for a course of study, an occupation, or field of work; if they have been punished and/or have not been positively reinforced for activities related to the course, occupation, or field of work; if they have observed a model receive punishment or little or no reinforcement for such activities; if they have been positively reinforced by a person who expresses negative opinions about the course, occupation or field of work; or if they have been exposed to negative words and images associated with the course, occupation, or field of work. (p. 45)
3. Propositions IIA1 through IIA3. These propositions focus on factors that positively influence CDM skills. They postulate that the individual is more likely to learn the skills and emotional responses necessary for career planning, self-observing, goal setting, and information seeking if s/he has been positively reinforced for these responses; has observed real or vicarious models engaged in effective CDM strategies; and/or has access to people and other resources with the necessary information. (p. 46)
4. Propositions IIB1 through IIB3. These propositions indicate the factors that negatively influence decision making skills. They suggest that an individual is less likely to learn the skills and emotional responses necessary for career planning, self-observing, goal setting and information seeking if that individual has been punished or not reinforced for such behavior; if s/he has observed real or vicarious models receive punishment or no reinforcement for attempting to engage in CDM activities; or if s/he has little or no access to people and other resources with the necessary information. (p. 47)

5. Propositions IIIA1 through IIIA3. These propositions identify factors that influence actual entry into educational, training, or occupational opportunities. They predict that an individual is more likely to take actions leading to enrollment in a given course or seek employment in a given occupation or field of work if that individual has recently expressed a preference for that course, occupation, or field of work; if s/he has been exposed to learning and employment opportunities in that course, occupation, or field of work; or if that individual's learned skills match the occupational requirements. (p. 47)
6. Propositions IIIB1 through IIIB2. These propositions entail factors that relatively influenced actual entry into educational, training or occupational opportunities. They postulate that an individual is less likely to take action leading to enrollment in a given course or employment in a given occupation or field of work if that individual finds that the cost of preparation is excessive in relation to future economic, social and personal rewards; or if s/he is denied access to the minimum resources necessary for entering that training or occupation or field of work. (p. 49)

Mitchell's (1975) analysis and synthesis of career decision making literature, as related to this theory, helped to shape the theory itself. Included were studies which were related directly and indirectly to portions and aspects of the theory. Literature which specifically supported the propositions, generally supportive literature, and non-conflicting evidence was presented. This review of the literature also presented evidence that the subject of career decision making has commanded considerable attention from theoreticians and empiricists, and somewhat less attention from program developers (Mitchell, 1975).

When considering research and development priorities, Jones (1975) felt

... such priorities cannot be specified by this ... theory. They have to be established as the users of this theory and its propositions make explicit the values and goals they wish to implement in research and practical settings. (p. 67)

General Investigative Conclusions

An analysis of influencing determinants of career choice has pointed to an interrelationship among many of the variables considered (Breton et al., 1972; Deosaran, 1976; Porter, Porter & Blishen, 1973; Rehberg & Wesby, 1967. Also, among variables, there have been different effects for persons of different backgrounds, therefore further compounding the interrelationships (Cherry, 1974; Tseng, 1972). However, controlling for certain variables has assisted the evaluation of other variables (Breton et al., 1972; Porter et al., 1973; Yuen, Tinsley & Tinsley, 1980).

No single variable, in isolation, can be said to explain the formation of aspirations. An underlying value orientation may also be involved to the extent that it may be necessary to relate students' actual feelings about aspirations to the social implications of the aspiration. Therefore, students' aspirations need to be treated within the social system in which they live (Deosaran, 1976). This seems to suggest that research based on a localized context is necessary to fit the research to that context.

Some of the more prominent influencing variables of career related behavior, orientations and decisions as isolated

in some of the literature reviews, were the social class membership, racial or ethnic identification, religious affiliation, family size, language, birth order, other attributes of one's social origins, location of residence, ability, information access, type of high school and program, personality traits, and the role of significant others (Breton et al., 1972; Deosaran, 1976).

Many of the studies examined, found significant results on more than one variable (Breton et al., 1972; Nolfi et al., 1978; Porter et al., 1973). For example, the Breton et al. (1972) study of social and academic factors in the career decisions of Canadian youth was a nation wide study and involved, in the initially collected sample of 1965-66, 373 secondary schools (as defined for the purpose of the study), 145,817 secondary students and 7,887 secondary teachers. From his analysis he found the most important background factors to be father's educational status, the education of the parents, the size of the community of residence, the region of the country, linguistic affiliation, the size of the family, birth order, and the overall pattern of authority between parents and children. Ethnic origin and religious affiliation were also relevant. An interesting note was that after initial collection of data, about one-third of the respondents were without a career goal.

As well, many of the studies demonstrated the previously described interrelations of variables and also demonstrated that consideration be given to some of these relationships.

(Anderson, 1980; Porter et al., 1973; Punch & Sheridan, 1978; Sauter, Seidl & Karban, 1980). For example, Punch and Sheridan (1978) found that sex might be an important factor in tracing the relationship between social class, mental ability and aspirations. They also found that significant influencers, ranked in importance, were parents (greatest), teachers, and peers (least).

Other studies addressed particular concerns, but because of their extensiveness considered many factors. For example, Porter et al. (1973) did a study to determine educational accessibility and equality. Their sample consisted of approximately 9,000 Ontario high school students who were asked about their hopes and expectations for education and work. They also surveyed about 3,000 of the parents of the students. They were asked how they saw their children's educational futures. Although financial concerns were primary, they also considered the impact of many non-financial or cultural factors. The study demonstrated, for example, that there was a striking relationship between social class as measured on a scale of father's occupation, education and income, and important aspects of education.

No studies were found to examine the traditionalism of career choice as outlined in this study. Studies related to the traditional nature of career decision making have focused on only isolated variables which were a part of the criteria for this study's analysis of traditionalism. For example, Sauter, Seidl and Karban (1980) found that women choosing

traditional roles had traditional attitudes toward female behavior; guidance counsellors influenced only women with traditional role choices; and the mother working outside the home had an influence on non-traditional choice.

Related Research Findings

Williams (1972) found students' educational goals to be molded by socialization pressures in their family and school environments. Parents, teachers and peers were analysed as influences. Parents most, and then teachers, were found to be significant influencers. Peers received no support as an influencer.

Krippner (1963) found that although students may prefer different vocations, they will reflect the families occupational and socioeconomic level. Sampson and Loesch (1981) decided that work values and job knowledge may be important factors in career decision making but that they are independent of each other. Howell (1978) has argued that a socialization effect is responsible. That is, instead of transmitting its effects directly, occupational knowledge in high school tends to influence career plans which, in turn, affect early status attainment. He found occupational knowledge to be associated with social economic status (SES), family size, and curriculum assignment. This knowledge also showed a moderate and positive association with career aspirations.

Hutner (1972) found that mother's educational attainment

and the child's IQ, aptitude and achievement were directly and significantly related. Mother's education was also directly related to the parents' and teachers' expectations of the child. He also found that high school students were usually unaffected by maternal employment. Keith (1981), however, demonstrated that for middle class women, maternal employment was associated with career involvement while parental occupations were not. Banducci (1967) found that children of working mothers tended to have higher educational aspirations and expectations than children of non-working mothers, and at the lower SES level, tended to earn higher grades.

Osborn (1971) demonstrated that students tended to achieve and have attitudes, aspirations and expectations consistent with the educational level of their same-sex parent. The assumption of a more powerful influence of the mother in the development of her children was not supported. Anderson (1980) found similar results. She concluded that parental education was important and found strong support for the importance of the same-sex parent. She also concluded that there was strong evidence for the operation of traditional sex roles which constrained the educational options of young women, even in a sample of fairly privileged families.

Marini and Greenberger (1978) found the occupational aspirations and expectations of adolescents to be highly differentiated by sex. Girls perceived the male dominated

job they aspired to as less accessible than boys perceived the female dominated jobs to which they aspired. Both SES background and academic achievement had greater effects on occupational aspirations for boys than girls.

Yuen, Tinsley and Tinsley (1980) concluded that maximum prediction of women's career orientation could be obtained when knowledge of age, marital status and vocational needs are combined. Therefore, vocational needs and situational characteristics were significant predictors of career orientation when considered together. Considered alone, this was not so. Auster and Auster (1981), from their comprehensive literature review, cited related factors under family influence as mother's influence, father's influence, parental support, SES, sibship size and sibling position. Also noted were peer group influences and professional influences. They proposed a profile of the typical female entering a non-traditional career:

- (1) The mother works, probably in a high level, non-traditional occupation.
- (2) The father is an achievement role model and source of occupational identification for the daughter's career orientation.
- (3) Both parents are supportive of their daughter's career orientation.
- (4) Family SES is high.
- (5) Family size is small and she is first born or early born among female siblings.
- (6) The peer group is supportive.
- (7) The influence of a vocational counsellor is negligible.

Cherry (1974) suggested that ambition is related to home and school factors--that the social composition of the school is an important determinant of ambition. In the study, it seemed that children from working class homes, in schools with mainly working class pupils, appeared to have had less interest in breaking with working class occupational traditions than did similar children mixing with pupils from more varied home backgrounds. Rehbert and Wesby (1967) suggested that the father's education is a partial determinant of a student's occupation and hence, the social status of the family, that paternal education and occupation influenced adolescent educational expectancies both through parental encouragement and independently of it, and that the larger the family size the greater the reduction, not only in the frequency with which the parents encouraged their children to continue their education beyond high school, but also in the effectiveness of any given frequency level of parental educational encouragement.

Jackson, Naqmi and Munnahan (1974) found that high identification of male students with their fathers in rural economically deprived areas resulted in higher levels of aspiration, more self-confidence and greater satisfaction with school experiences. The father identification was related to high school achievement and to the post high school aspirations of rural youth. Also, the strength and quality of a son's identification with his father influenced his patterns of socialization and development.

Tseng (1972) found that in comparison to similar aged high school students, dropouts, as a group, had parents of lower educational levels, and fathers whose occupations could be characterized by lower levels of difficulty, responsibility and prestige. They received less encouragement from parents regarding education, perceived their relationship with their fathers to be less fruitful, and perceived their father's attitudes towards them to be lower in acceptance and higher in avoidance. Dropouts also showed a lower level of achievement motivation, had lower accuracy in perceiving the occupational prestige hierarchy, showed lower occupational aspiration and chose occupations of the types which are of a lower level of difficulty, responsibility and prestige.

CHAPTER III

METHODOLOGY

Procedures

This study involved the use of a survey type questionnaire which was designed to assess possible factors related to the traditionalism of post-secondary aspirations and expectations of Newfoundland high school students.

The questionnaire was administered to students in grades nine, ten, and eleven, throughout the Province, along with several other questionnaires being distributed by the Institute for Educational Research and Development at Memorial University of Newfoundland, as part of a major study investigating vocational development in an oil development context.

The Sample

The sample for the major study, hence the sample for this study, consisted of 3084 high school students in twenty-one schools. These schools were located in, or serviced eighteen Newfoundland and Labrador communities, chosen for their proximity to areas designated as being developed, proposed for development or not proposed for development in relation to off-shore oil activity. The "no proposal areas" were relatively isolated areas on the south and west coasts

of Newfoundland and in Labrador, which had not been designated as potential sites for development of the off-shore.

One area in the Province, St. John's, was considered to be feeling an actual impact of the off-shore development at the time of the survey. Two other sites were selected as potential impact sites. Both sites had been designated by the provincial government as potential development sites and had active development committees in being. One of the sites enjoyed a relatively high level of services and a relatively more varied occupational outlook than did the other site.

The instruments were administered to students in grade nine, ten, and eleven classrooms in the schools surveyed. A breakdown of the final sample by grade, sex and development area is shown in Table 1.

Table 1
Sample Size

Development Region	Sex	Grade Nine	Grade Ten	Grade Eleven	Totals
St. John's	Male	101	67	67	235
	Female	82	107	88	277
Site 1	Male	189	180	148	515
	Female	226	186	171	583
Site 2	Male	100	60	32	192
	Female	86	62	27	175
Isolated	Male	117	78	82	277
	Female	116	125	87	328
Total	Male	507	385	329	1221
	Female	510	480	371	1363
Grand Total	-	1017	865	702	2584

An interesting aspect of the sample is that in addition to being representative of the Province's school children with respect to the off-shore oil development situation at the time, in the opinion of the author, it also seemed to be representative of schools in the Province as a whole. At the time of the survey, the Province was in the first year of implementation of a new high school program, which increased the age of school leaving from grade eleven, to the completion of grade twelve. The grade elevens in the sample, therefore, were the last students to complete high school under the old program and the grade tens were the first students to begin high school under the new program. The grade nine students had been confronted with decisions about courses and programs coincidentally with the administration of the questionnaire.

The Instruments

Two questionnaires were used to collect data in this survey. Form C was entitled "Data Sheet" while Form D was entitled "Career Development Survey." Copies of these instruments are enclosed as appendices A and B.

Form C. Form C was developed by St. Croix (undated), in conjunction with her study of work attitudes of high school students. The twenty-five questions of this instrument obtain information on the occupational and educational aspirations and plans of youth. Questions are also asked

about reasons for these plans, the nature of interest in the career, information about the job search conducted by the student, the work experience of the student and occupation of the parents.

Form D. Form D was developed for the purpose of this study and consisted of twenty-five questions which were related to the development of vocational aspirations and expectations, and by extension, possibly related to the traditionalism of career choice.

The item pool was generated from a consideration of vocational development theories, in particular Krumboltz's theory of career decision making, the development of the career choice model, and related research as described in the literature. From the item pool, and in consultation with several graduate students, a research assistant and a professor, items were selected which the literature indicated were important for consideration and which were not already included in Form C.

Questions were asked about birth order, number of siblings, physical disabilities, interests and talents, educational level of parents, perception of ability to finance education, perception of knowledge of educational institutions, perception of parent attitudes, educational ability, success criteria and peer influence.

Method of Data Collection

For the major study, a total of five forms were administered on two separate days. The total student time involved was approximately two hours. Form D was administered the first day, and Form C was administered during the second day.

In the schools outside St. John's, all high school classes were administered the questionnaires. In the St. John's schools, the principals selected six classes of each grade to represent a cross section of academic ability. Form D was not administered within St. John's.

A research assistant distributed the questionnaires to the classroom teacher and gave each teacher an explanation of the administrative procedure. The classroom teachers administered the questionnaires while the research assistant circulated among classrooms to offer any needed clarification. In some schools, where distance required that the questionnaires be delivered by mail, a set of administrative instructions accompanied the questionnaires.

Confidentiality

In order to protect student anonymity, all student forms were given a number code to correspond to their name, grade and school. All data was subsequently handled by these code numbers with the master list accessible only to the researchers. Identification coding for the St. John's schools was

completed by the school board with the master list inaccessible to the researchers.

Preparation for Analysis

Once data were collected, sample forms were analyzed to assess patterns of student responses and to generate a coding scheme. When the coding scheme was developed, a team of five coders was trained so that consistency of coding could be achieved.

Traditionalism Scale

The theoretical basis for this study lay in the social learning theory of career decision making. The data analysis focused on the previously defined influencers and the traditionalism of career aspirations as outlined in the model.

The level of traditionalism of career aspirations was computed in the following manner. Eight variables were identified as being related to the traditionalism of career choice. They were:

- (1) If there was a tradition of the career or occupation in the community of residence (traditional).
- (2) If the career or occupation would be considered in the community to be traditionally appropriate to the sex of the person (traditional).

(3) If the career or occupation was toward direct employment in the oil industry (non-traditional).

(4) If the student was a long-term (two or more years) resident of the community (non-traditional).

(5) If the respondent felt it was necessary to leave Newfoundland to train for the occupation or career (non-traditional).

(6) If the respondent felt it was necessary to leave Newfoundland to find work in the occupation or career (non-traditional).

(7) If the career or occupation selected was the same as that of the same-sexed parent (traditional).

(8) If the length of training required was significantly different (2 or more years) than that of the same-sexed parent (non-traditional).

Responses to these questions were coded 0 if traditional, and 1 if non-traditional, for a total possible traditional score range of 0 to 8. Because there were a number of cases with missing data, it was decided to include all cases with data for at least six of the eight variables. The traditionalism of vocational aspiration, then, was the average of at least six of the eight traditionalism variables.

The distribution of responses for each of the eight traditionalism variables is shown in Table 2. Table 3 shows

Table 2

Frequency of Responses to Traditionalism Variables

Variable	Traditional	Non-Traditional	Total
Community tradition'	1754	369	2123
Parent-Child training			
programs of similar			
length	329	1452	1781
Traditionally same-sexed	1761	363	2124
Career in Oil Industry	2079	48	2127
Length of Community			
Residence	2594	115	2709
Training away from			
Newfoundland	1628	675	2303
Work away from Newfoundland	1979	377	2356
Work same as parent	296	1730	2026

Table 3

Distribution of Traditionalism Scores

Score	Frequency	%	Cum %
0.0	314	15.1	15.1
0.125	155	7.4	22.5
0.1429	126	6.0	28.5
0.1667	174	8.3	36.8
0.25	465	22.3	59.1
0.2857	77	3.7	62.8
0.3333	122	5.8	68.6
0.3750	315	15.1	83.7
0.4286	55	2.6	86.3
0.5000	187	9.0	95.3
0.5714	16	0.8	96.1
0.6250	57	2.7	98.8
0.6667	6	0.3	99.1
0.7143	5	0.2	99.3
0.7500	12	0.6	99.9
0.8333	1	0.1	100.0
Total	2076	100.0	-

the distribution of traditionalism scores, and Table 4 shows the correlations between the various variables. The correlations tend to be low, though significant in some cases. This suggests that each item made a relatively independent contribution to the variance of the traditionalism scores.

The items were selected because they reflected ways in which the career decisions of the students departed from the norm, given the context in which they lived. For example, the selection of a career in the oil industry was included because work in this industry has only recently become available locally. Only now has it become an occupation that persons might pursue within the Newfoundland context.

Persons who select careers not normally found in their community have also made non-traditional choices in the sense that information about the work is not apparent in the local environment.

The literature reviewed has suggested that career aspirations may be predicted from knowledge of the character of the community and home. The selection of items for the traditionalism scale attempted to capitalize on these relationships.

Statistical Analysis

The principal analysis procedure used was chi square analysis. Where monotonic relationships were suggested between traditionalism scores and variables analyzed, the

Table 4
Intercorrelations of Traditionalism Responses

Variable	2	3	4	5	6	7	8	Total
(1) Community Tradition	-.006	.155*	.117*	.016	.013	.076*	.087*	.480*
(2) Parent-Child Training Programs of Similar Length		-.010	.010	-.003	-.030	-.0001	.146*	.382*
(3) Traditionally same-sexed			-.030	.023	.124*	.073*	.064*	.412*
(4) Careers in Oil Industry				-.016	.004	-.001	-.046*	.155*
(5) Length of Community Residence					.086*	.021	.002	.202*
(6) Training away from Newfoundland						.309*	.057*	.506*
(7) Work away from Newfoundland							.061*	.469*
(8) Work the Same as Parent								.473*

* Significant at .05 level of significance.

interpretations were made from the percentages shown in the traditional and non-traditional columns. Such relationships should be viewed with some caution because the chi square analysis does not indicate the direction of the relationship. The traditionalism score was recategorized as high traditionalism, where the score was less than 0.143 and low traditionalism where the score was greater than 0.335. Moderate traditionalism was between the two extremes. This gave three groups of approximately the same size, although group size varied depending upon the amount of missing data in the analysis. The null hypothesis was rejected at the .05 level of significance.

Variables Considered in the Analysis

The following variables were considered in the analysis and have been described under the major categories of influencers as outlined in the social learning theory of career decision making.

Learning Experiences

- Whether the student discussed the selected career with anyone, and the specific category of person consulted.
- Whether the student knew anyone in the selected career.
- The importance of specific categories of persons in helping the student make the career selection.
- The student's perception of peers' future academic plans.
- The anticipated salary in the selected career.

- The perceived knowledge of post-secondary institutions.
- The perceived sources of career information.
- The work experience of the student--part-time or full-time.
- The perceived availability of financial support for post-secondary institutions.
- The number of interests compatible or incompatible with the selected career.
- Whether the student experienced academic failure--subject or grade, or academic success--year skipped.

Environmental Conditions and Events

- school related factors--grade and program
- family background variables--birth order; family size; whether the student participated actively in family decisions; parental influences--which parents were living, their marital status, employment status, occupation, educational level, attitude toward post-secondary education, and work traditionalism (did each parent do the same work as their same-sex parent?).
- region or area in which the school was located
- the importance of economic conditions in helping the student make the career selection
- whether the student would be affected by oil development in the province, and the nature of such influence.

Genetic Endowment and Special Abilities

- the sex of the student
- the age of the student
- the existence of a physical handicap

Task Approach Skills (primary influencer)

- the importance of specific criteria as a definition of success
- the importance of school for attaining success
- the importance of work for attaining success

Task Approach Skills (outcomes)

- the length of interest in the selected career

Actions

- whether the career goal was established and the specific selection within that career goal
- whether the student intended further education beyond secondary school and if so, the specific institution chosen.
- the age at which the student planned to marry.

Self-observation Generalizations

- the school marks a student expected to achieve and which a student felt capable of achieving
- the academic ability of a student as compared to that student's classmates
- the perceived ability to complete university
- the degree of success expected compared to the student's agemates.

CHAPTER IV

ANALYSIS OF THE RESEARCH QUESTIONS

Research Question 1. Are learning experiences significantly related to the traditional or non-traditional nature of career choice?

Some learning experience variables were discovered to have a statistically significant level of association with traditional or non-traditional career choice. These variables will be outlined as they pertain to the three general research questions related to question one.

Research Question 1A. Is the role model related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 5, were found to be significant.

When considering the association a student had with a role model, it was found that those students not discussing their career plans with anyone tended toward more traditionalism in their aspirations than those who had. When a count was made of the total number of persons consulted, as more persons were consulted, the more non-traditional was the career choice of the student.

Students who reported that consultation with the teacher was very important tended to make choices that were less traditional and more non-traditional. The data indicated that as teachers were perceived to be less

Table 5
Relationship of the Traditionalism of Career Aspirations
to Learning Experience Variables

Learning experience variable (Role model association)	Variable Category	Traditional		Between		Non-Traditional	
		No.	%	No.	%	No.	%
Plans discussed with anyone*	Yes	497	27.8	733	40.9	560	31.3
	No	94	34.3	90	32.8	90	32.8
Count of the total number of persons consulted *	0	93	33.8	92	33.5	90	32.7
	1	125	30.6	169	41.3	115	28.1
	2	221	31.5	273	38.9	207	29.5
	3	103	20.8	220	44.4	172	34.7
	4	43	26.7	62	38.5	56	34.8
	5	5	20.8	10	41.7	9	37.5
Consulted teacher *	Yes	88	22.8	163	42.2	135	35.0
	No	507	30.0	665	39.3	518	30.7
Importance of teacher in helping decide career selection *	Most Important	75	15.4	207	42.6	204	42.0
	Average Importance	88	18.1	180	37.0	218	44.9
	Least Important	77	29.8	77	29.8	104	40.3
Consulted counsellor*	Yes	125	23.8	223	42.5	177	33.7
	No	470	30.3	605	39.0	475	30.6
Importance of counsellor in helping decide career selection *	Most Important	100	17.9	217	38.8	242	43.3
	Average Importance	104	25.1	139	33.6	171	41.3
	Least Important	39	16.2	98	40.7	104	43.2
Knowledge of person in job choice*	Yes	491	32.9	613	41.0	390	26.1
	No	95	18.5	179	34.9	239	46.6
Importance of friends in helping decide career selection*	Most Important	137	23.3	209	35.5	242	41.2
	Average Importance	68	16.7	157	38.5	183	44.9
	Least Important	40	15.9	103	40.9	109	43.3
Importance of community person in helping decide career selection*	Most Important	52	16.1	130	40.4	140	43.5
	Average Importance	67	30.5	75	34.1	78	35.5
	Least Important	120	18.2	242	36.8	296	45.0

* Chi-square significant at .05 level

important as a helping determinant, students tended to make more traditional career choices. Students who reported consulting with the counsellor also tended to make less traditional and more non-traditional career choices.

An interesting relationship was also observed when considering the reported importance of the counsellor's help. Students who reported that the counsellor's help was of average importance tended to make more traditional choices than did students who reported both that the counsellor was of little or much importance.

Consultation with parents, or with persons in the career choice, was not associated with the traditionalism of the choice. However, if students actually knew someone in the job, they tended to make more traditional choices than if they didn't know someone in the job.

As helpers in career selection, friends were considered as more important when students made more traditional choices as opposed to non-traditional choices. Although not significant, when friends were perceived to be continuing their education, there was a definite trend towards non-traditionalism.

The help of a person in the community had a relationship to choice which paralleled the finding for counsellors. That is, when assistance was reported as average importance, there was an association with traditionalism. When described as both more important or least important, the association was with less traditionalism and more non-traditionalism.

Research Question 1B. Is the degree (type) of vocational knowledge of a student related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 6, were found to be significant.

When asked the anticipated salary for their chosen career, students indicating high salaries (\$20-30,000) were associated with more non-traditional choice. Those students over \$30,000 tended to be strongly associated with traditionalism.

When availability of finances for attending different institutions was considered, the only significant results were obtained for Memorial University of Newfoundland (MUN). Those knowing definitely about financial support for MUN, one way or the other, were less traditional in their choice than those who were not sure. Those saying yes tended to be associated slightly more with non-traditional choice than those students saying no.

Indicating a knowledge of what the post-secondary institutions were like and what was offered at them showed significant results, generally in the direction of traditionalism. Although many of the students knowing about these institutions were associated with non-traditional paths, relative consideration of each institution demonstrated differences.

Knowing nothing about nursing school was associated with more non-traditional choice.

Knowing a lot about the College of Trades and Technology was associated with more traditional choice than was knowing nothing.

Table 6

Relationship of the Traditionalism of Career Aspirations
to Occupational Knowledge Variables

Learning experience variable (Vocational knowledge)	Variable Category	Traditional		Between		Non- Traditional	
		No.	%	No.	%	No.	%
Anticipated salary in chosen career *	Less than \$10,000	56	29.0	88	45.6	49	25.4
	10-15,000	181	32.3	211	37.6	169	30.1
	15-20,000	155	26.3	256	43.4	179	30.3
	20-25,000	79	23.1	145	42.4	118	34.5
	25-30,000	47	28.3	54	32.5	65	39.2
	More than \$30,000	43	42.2	26	25.5	33	32.4
Perceived financial support for MUN*	Yes	149	18.3	306	37.6	358	44.0
	Not sure	79	26.7	106	35.8	111	37.5
	No	36	15.4	100	42.7	98	41.9
Knowledge of Insti- tution - Nursing Schools *	A lot	95	19.3	210	42.6	188	38.1
	Little or nothing	166	19.4	301	35.1	390	45.5
Knowledge of Insti- tution - College of Trades & Technology	A lot	138	23.0	207	34.4	256	42.6
	Little or nothing	133	17.3	309	40.1	329	42.7
Knowledge of Insti- tution - Memorial University*	A lot	132	19.8	230	34.6	303	45.6
	Little or nothing	131	19.1	281	41.0	274	39.9
Knowledge of Insti- tution - College of Fisheries*	A lot	119	26.3	150	33.1	184	40.6
	Little or nothing	147	16.6	348	39.3	390	44.1
Knowledge of Insti- tution - Vocational Schools*	A lot	173	22.9	298	37.7	320	40.5
	Little or nothing	93	16.4	215	37.9	259	45.7
Count on the number of places listed as sources of career infor- mation *	0	28	17.2	70	42.9	65	39.9
	1	87	24.2	133	36.9	140	38.9
	2	91	23.5	133	34.4	163	42.1
	3	51	16.0	125	39.2	143	44.8
	4	24	16.4	60	41.1	62	42.5
	5	6	15.8	15	39.5	17	44.7
	6	0	0.0	6	42.9	8	57.1

* Chi-square significant at .05 level.

Table 6 (Cont'd)

Learning experience variable (Vocational Knowledge)	Variable Category	Traditional		Between		Non-Traditional	
		No.	%	No.	%	No.	%
Source of Career Information - Local school *	Listed	66	14.8	179	40.2	200	44.9
	Not Listed	221	22.4	364	37.0	400	40.6
Source of Career Information - Media*	Listed	15	12.0	49	39.2	61	48.8
	Not Listed	272	20.8	494	37.9	539	41.3
Part-time work experience*	Yes	315	29.7	439	41.4	306	28.9
	No	272	27.5	377	38.1	340	34.4
Number of interests compatible with the selected career*	0	504	30.3	678	40.7	482	29.0
	1	77	22.1	133	38.1	139	39.8
	2	11	20.4	15	27.8	28	51.9
	3	2	25.0	2	25.0	4	50.0
Number of interests not compatible with the selected career*	0	430	34.8	502	40.7	302	24.5
	1	90	21.7	148	35.7	176	42.5
	2	49	17.0	118	40.8	122	42.2
	3	23	20.2	52	45.6	39	34.2
	Four or more	3	12.0	8	32.0	14	56.0

* Chi-square significant at .05 level.

Knowing a lot about Memorial University was associated with more non-traditional choice.

Knowing a lot about the College of Fisheries and vocational schools was associated with more traditional choice while knowing nothing was associated with more non-traditional choice.

When asked to list all the places a student could go to enquire about career information, it was found that the larger the number of sources of information listed, the more non-traditional was the career choice.

Sources considered individually, indicated that both the high school and the media were associated with more non-traditional choice. Although not significant, when Memorial University or the school counsellor were listed as perceived sources of information, the association was also with more non-traditional choice.

The student's work experience was associated with traditional choice. Those students who worked part-time were associated with more traditional choice than those who did not. Those who did not work were associated with much more non-traditional choice. A similar trend (although not significant) was observed for those students who had experienced full-time (summer) work.

Also of interest in this section were the number of interests a student had which were compatible or incompatible with the indicated career choice. As the number of interests which were compatible with a student's career increased, the

more it was associated with non-traditionalism. The fewer the number of interests compatible, the more observable was an association with traditionalism. The total number of interests listed also had a positive association with non-traditional choice.

Research Question 1C. Is the academic experience of a student related to the traditional or non-traditional nature of career choice?

The following variable, as outlined in Table 7, was found to be significant.

Table 7

Relationship of the Traditionalism of Career Aspirations to Academic Experience

Learning experience variable (academic experience)	Variable Category	Traditional		Between		Non-Traditional	
		No.	%	No.	%	No.	%
Academic failure in a subject *	Yes	197	23.3	311	36.8	336	39.8
	No	87	15.1	229	39.8	260	45.1

* Chi-square significant at .05 level

When subject failure was considered, those who failed a subject were associated with more traditional and less non-traditional career choice. When more than one subject was failed, the choice became even more traditional. Mathematics

failure was observed as equivalent to no failure at all, in terms of its association with traditionalism status.

As a general learning experience, students were asked how they became interested in their career choice. The reasons associated with more non-traditionalism were the perceived availability of work, television or radio influence, counsellor information, and, to a lesser degree, school work and home and community influences. The reasons associated with more traditionalism were seeing the work done, doing the work, and family and friends.

Research Question 2. Are environmental conditions and events related to the traditional or non-traditional nature of career choice?

Some environmental variables were discovered to have a statistically significant level of association with traditional or non-traditional career choice. These variables will be outlined as they pertain to the three general research questions related to question two.

Research Question 2A. Are school factors related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 8 were found to be significant.

Table 8

Relationship of the Traditionalism of Career Aspirations
to Environmental Variables (school-related factors)

Environmental variable (school related factors)	Variable Category	Traditional		Between		Non- Traditional	
		No.	%	No.	%	No.	%
Program in school *	Academic	421	26.8	627	40.0	521	33.2
	General	134	36.6	138	37.7	94	25.7
	Other	25	31.3	31	38.8	24	30.0
Grade in school *	Nine	194	25.9	298	39.8	257	34.3
	Ten	218	32.5	256	38.2	196	29.3
	Eleven	169	28.9	241	41.3	174	29.8

* Chi-square significant at .05 level

The type of school program was observed to have a significant relation with the traditionalism of aspirations. Those students enrolled in the academic program were associated with more non-traditional choice, whereas students enrolled in the general program were associated with more traditionalism.

There was also a tendency for choice in grade eleven to be more traditional and less non-traditional than choice in grade nine.

Research Question 2B. Is the family background of a student related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 9, were found to be significant.

Table 9

Relationship of the Traditionalism of Career Aspirations
to Environmental Variables (family background)

Environmental Variable (family background)	Variable Category	Traditional		Between		Non-Traditional	
		No.	%	No.	%	No.	%
Parents' marital status*	Married	254	20.4	484	38.8	508	40.8
	Other	30	17.5	54	31.6	87	50.9
Father's occupation*	owner/manager	69	35.9	76	39.6	47	24.5
	professional	54	32.9	73	44.5	37	22.6
	technical	24	28.2	27	31.8	34	40.0
	clerical/secretarial	11	32.4	15	44.1	8	23.5
	sales	19	31.7	28	46.7	13	21.7
	service/recreation	53	34.2	56	36.1	46	29.7
	fishing/fish processing	46	19.5	96	40.7	94	39.8
	logging/mining	4	21.1	8	42.1	7	36.8
	transport/communication	51	27.4	76	40.9	59	31.7
	crafts/trades	105	26.4	161	40.6	131	33.0
	labourer	71	26.4	117	43.5	81	30.1
	supervisor foreman	53	40.5	42	32.1	36	27.5
Mother's occupation*	owner/manager	24	30.4	35	44.3	20	25.3
	professional	39	27.3	57	39.9	47	32.9
	technical	69	45.7	50	33.1	32	21.2
	clerical/secretarial	44	26.3	70	41.9	53	31.7
	sales	74	31.0	94	39.3	71	29.7
	service/recreation	44	29.7	47	31.8	57	38.5
	fishing/fish processing	52	24.9	83	39.7	74	35.4
	labourer	62	30.1	80	38.8	64	31.1
	home duties	147	25.1	248	42.4	190	32.5
Father's attitude toward attending a post-secondary educational institution*	Does not care	9	24.3	12	32.4	16	43.2
	Probably would like	84	28.6	100	34.0	110	37.4
	Definitely would like	101	16.3	243	39.3	275	44.4
	Insists	53	19.1	116	41.7	109	39.2
	Don't know	22	24.2	28	30.8	41	45.1

* Chi-square significant at .05 level

Although not significant, it was observed that students who were the oldest sibling had less traditional aspirations than did youngest siblings.

Students whose parents were not of married status tended to make more non-traditional career choice.

The students who were associated with non-traditionalism had fathers whose occupations were technical, fishing, or logging. They were associated with more traditional career choice when the father's occupation was supervisor or foreman, or owner or manager. When mother's occupation was considered, students associated with traditionalism had mothers who had technical jobs, sales, or owner or manager. Non-traditional choice was associated with mothers who were in service and recreation, fishing, and to a lesser degree, home duties and professionals.

As students perceived fathers to indicate a greater desire for the student to attend a post secondary institution, the association was toward less traditionalism. Although not significant, when mothers were perceived to definitely like or insist on attendance, there was also a tendency for the association to be toward less traditional choice.

Research Question 2C. Are regional or economic differences related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 10, were found to be significant.

Table 10

Relationship of the Traditionalism of Career Aspirations
to Environmental Variables (regional differences)

Environmental Variable (Regional/ economic differences)	Variable Category	Traditional		Between		Non- Traditional	
		No.	%	No.	%	No.	%
School Area*	St. John's and Area	159	45.3	180	51.3	12	3.4
	Site 1	258	29.4	334	38.0	287	32.7
	Site 2	67	20.0	141	42.1	127	37.9
	Isolated Area	82	17.0	173	36.0	226	47.0
Importance of economic con- ditions in helping decide career selection*	Most Important	126	16.7	278	36.8	352	46.6
	Average Importance	35	19.4	74	41.1	71	39.4
	Least Important	86	26.3	123	37.6	118	36.1

*Chi-square significant at .05 level

Students in the St. John's area tended to make the most traditional choices. As one moved away from the proximity of this area, the trend was toward less traditionalism and toward much more non-traditional career choices. Students in isolated areas had the highest proportion of non-traditional choice.

Because of sample design, further analysis was carried out on the school area variable to ascertain if other variables might be associated with the direction of traditional status related to this variable. Significant interactions were

observed on the following variables: when grade was considered, Site 2 area had fewer grade elevens than the other areas and a higher ratio of grade nine to grade eleven students. As well, St. John's and Site 1 areas had slightly higher proportions of grade elevens than grade nines.

In the Site 2 area, fewer students were discussing their plans with anyone (associated with non-traditionalism), but the Isolated area was the same as for the St. John's and Site 2 areas.

In St. John's, more students cited "doing the work" as the reason for their career choice than in the other areas (associated with traditionalism).

Fewer persons in the isolated area knew someone in the career chosen (associated with non-traditionalism).

In St. John's, the father's occupation most cited was owner or manager (associated with traditionalism). In the Isolated area the father's occupation was predominantly fishing, and of those fathers whose occupations were technical, more were in the isolated area than any other area (both associated with non-traditionalism).

More students in the St. John's and Site 1 areas had part-time work experience than the other two areas (associated with traditionalism).

More students in the Site 1 area planned marriage earlier than the other areas. A trend of older marriage plans (associated with more non-traditional choice) increased from the Site 1 area to the Site 2 area to isolated areas. There

was no data available for the St. John's area.

When students were asked how important economic conditions were in helping them make their career selection, it was observed that as economic conditions became more important, the students were associated with much more non-traditional choice. Poor economic conditions may be associated with the more isolated areas of the Province.

Research Question 3. Is a student's genetic endowment related to the traditional or non-traditional nature of career choice?

None of the variables related to this category were found to be significant.

Research Question 4. Are task approach skills (primary influencers or outcomes) related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 11, were found to be significant.

Students who reported that they believed that school was very important for success tended to make less traditional career choices than did students who felt that school was of average or little importance.

Contrasted with this, students who felt that work experience was very important tended to make more traditional choices than did students who felt that it was of little importance, but about the same choices as students who believed it to be of average importance.

Table 11

Relationship of the Traditionalism of Career Aspirations to
Task Approach Skills Variables

Task Approach Skill Variable	Variable Category	Traditional		Between		Non-Traditional	
		No.	%	No.	%	No.	%
Importance of school for success*	(1) very important	98	14.2	269	39.0	322	46.7
	(2)	45	18.4	92	37.6	108	44.1
	(3)	77	36.0	70	32.7	67	31.3
	(4) average	40	21.7	74	40.2	70	38.0
	5,6,7/ not very important	18	28.1	25	39.1	21	32.8
Importance of work experience for success*	(1) very important	82	16.7	194	39.6	214	43.7
	(2)	98	25.8	138	36.3	144	37.9
	(3)	47	20.6	81	35.5	100	43.9
	(4) average	37	15.7	88	37.3	111	47.0
	5,6,7/ not very important	14	22.6	29	46.8	19	30.6
Length of interest in career choice*	Less than 6 mos.	119	29.8	144	36.0	137	34.3
	One to two yrs.	264	26.2	409	40.7	333	33.1
	More than 2 yrs.	207	33.0	252	40.1	169	26.9

* Chi-square significant at .05 level.

When length of interest in career choice was considered, less traditional choice was associated more with students whose interest was two years or less in extent, while more traditional choices were made if the interest was greater than two years in duration.

Table 12 presents the relationship of specific success criteria found to be significantly related to the traditionalism of career aspirations.

Although ranked at the top by all, students who made traditional choices viewed a steady income as more important than students associated with non-traditional choice.

Being admired by others was considered more important by students associated with traditionalism.

Directing other persons was considered slightly more important by students associated with non-traditionalism.

Being ones own boss was ranked more important and least important by students associated with non-traditional choice. Students who reported that this was of average importance tended to make more traditional choices.

Reaching ones full potential was considered much more important by students associated with non-traditional choice and much less important by students associated with traditionalism.

When the success variables were broken down by sex and crosstabulated with the traditionalism variable, there were also significant differences noted. These variables are outlined in Table 13. A three-way test of significance was not computed.

Table 12

Relationship of Criteria of Success to Traditionalism
of Career Aspirations

Success Criteria	Variable Category	Traditional		Between		Non- Traditional	
		No.	%	No.	%	No.	%
Steady Income*	Least Important	6	17.1	12	34.3	17	48.6
	Average Importance	71	15.0	180	38.0	223	47.0
	Most Important	191	22.4	326	38.3	334	39.2
Being Admired*	Least Important	93	19.8	176	37.4	201	42.8
	Average Importance	122	16.9	285	39.4	316	43.7
	Most Important	53	31.7	57	34.1	57	34.1
Directing Others*	Least Important	100	21.2	164	34.8	207	43.9
	Average Importance	160	19.9	311	38.7	332	41.3
	Most Important	8	9.4	42	49.4	35	41.2
Being ones own Boss*	Least Important	76	14.8	211	41.0	228	44.3
	Average Importance	169	23.5	263	36.6	287	39.9
	Most Important	23	18.1	44	34.6	60	47.2
Reaching full Potential*	Least Important	44	41.5	30	28.3	32	30.2
	Average Importance	133	18.4	291	40.2	299	41.4
	Most Important	91	17.2	196	37.0	243	45.8

*Chi-square significant at .05 level of significance.

Table 13

Relationship of the Traditionalism of Career Aspirations to
Success Criteria of Males and Females

Success Criteria	Sex	Variable Category	Traditional		Between		Non-Traditional	
			No.	%	No.	%	No.	%
Steady Income	M	Least Important	5	35.7	3	21.4	6	42.9
		Average Importance	30	14.9	66	32.7	106	52.5
		Most Important	98	25.1	138	35.4	154	39.5
	F	Least Important	1	4.8	9	42.9	11	52.4
		Average Importance	40	14.8	113	41.9	117	43.3
		Most Important	92	20.1	187	40.8	179	39.1
Being Admired	M	Least Important	49	22.6	70	33.6	14	43.8
		Average Importance	73	21.5	113	34.7	21	43.9
		Most Important	95	22.2	143	33.3	28	44.4
	F	Least Important	43	17.1	102	40.6	106	42.2
		Average Importance	51	12.9	172	43.3	172	43.5
		Most Important	39	37.9	35	34.0	29	28.2
Being ones own Boss	M	Least Important	42	17.9	82	35.0	110	47.0
		Average Importance	78	25.2	98	32.6	127	42.0
		Most Important	15	21.1	27	38.0	29	40.8
	F	Least Important	34	12.1	129	45.9	118	42.0
		Average Importance	92	22.2	163	39.4	159	38.4
		Most Important	7	12.7	17	30.9	31	56.4

The data are offered for inspection, as some interesting findings emerge.

There was an interesting apparent difference between the sexes with respect to the importance of a steady income, and its relationship to the traditionalism of career choice. Boys who listed this criterion as being both most, and ~~least~~, important, tended to make more traditional career choices than did boys who considered it to be of average importance. This statement is made cautiously in view of the fact that there were only fourteen boys who chose "least important". In contrast, for girls, the importance of the criteria was directly related to an increasing traditionalism of choice. Those listing it as least important made less traditional choices than did those who listed it as most important.

Another sex difference appeared with respect to the importance of being admired. The importance of this criterion did not make too much difference to the traditionalism of the choice of boys, but girls who listed it as most important tended to make more traditional choices.

The importance of being your own boss had very different effects for boys than girls. For boys, choice tended to be more traditional as the criterion became more important. For girls, choice tended to be less traditional as the criterion became more important.

The relationship of the success criteria, working with ideas, and reaching one's full potential, was about the same for both boys and girls. As these criteria became more important, boys and girls tended to make less traditional choices.

Research Question 5. Are the actions a student takes or plans to take, related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 14, were found to be significant.

Those students not choosing to go on for post-secondary education were associated with more non-traditional career choice than those who did. Non-traditional students also saw a greater need to leave Newfoundland to train for their chosen occupation.

Of those students who chose post-secondary education, those seeking training outside of Newfoundland were associated with non-traditional choice. University was also associated with non-traditional choice, as was College of Trades and the College of Fisheries to some degree. However, many of the other post-secondary institutions in Newfoundland showed a relatively high association with traditional choice. This was particularly true of persons who planned to attend nursing school and vocational school.

Students who indicated marriage plans at an older age, 26 or older, as opposed to a younger age, 21 or younger, were associated with much greater non-traditional choice.

Research Question 6. Are the self-observation generalizations a student forms, related to the traditional or non-traditional nature of career choice?

The following variables, as outlined in Table 15, were found to be significant.

The higher the school marks expected, the greater the

Table 14

Relationship of the Traditionalism of Career Aspirations to
Action Variables

Action Variable	Variable Category	Traditional		Between		Non-Traditional	
		No.	%	No.	%	No.	%
Plan to attend post-secondary institution*	Yes	492	28.8	699	40.9	518	30.3
	No	99	28.8	115	33.4	130	37.8
Need to leave Newfoundland for training*	Yes	11	2.0	194	34.4	359	63.7
	No	577	40.1	591	41.0	272	18.9
Post-secondary educational institution chosen*	No choice	80	32.4	83	33.6	84	34.0
	University	165	26.1	261	41.4	205	32.5
	College of Trades	149	37.9	133	33.8	111	28.2
	College of Fisheries	16	33.3	17	35.4	15	31.3
	Vocational School	104	38.1	122	44.7	47	17.2
	Nursing School (Hospital)	51	35.2	80	55.2	14	9.7
	Training outside Nfld.	8	4.0	82	41.0	110	55.0
	Other	9	19.1	13	27.7	25	53.2
Marriage age planned*	21 or younger	51	27.1	76	40.4	61	32.4
	22-25	161	19.2	332	39.5	347	41.3
	26 or older	43	14.0	105	34.2	159	51.8

*Chi-square significant at .05 level.

Table 15

Relationship of the Traditionalism of Career Aspirations to
Self-observation Variables

Self-observation generalization variable	Variable Category	Traditional		Between		Non- Traditional	
		No.	%	No.	%	No.	%
School marks expected*	A's	36	11.7	110	35.6	163	52.8
	B's	101	16.2	259	41.6	263	42.2
	C's	79	24.9	126	39.7	112	35.3
	D's	39	55.7	11	15.7	20	28.6
	F's	2	40.0	1	20.0	2	40.0
School marks capable of *	A's	107	15.1	268	37.7	335	47.2
	B's	117	23.4	183	36.7	199	39.9
	C's	15	23.1	29	44.6	21	32.3
	D's	3	30.0	5	50.0	2	20.0
	F's	1	50.0	1	50.0	0	0.0
Comparative School Ability*	Among the best	30	14.0	74	34.6	110	51.4
	Above average	38	13.8	105	38.2	132	48.0
	Average	158	19.0	343	41.3	330	39.7
	Below average	44	57.1	12	15.6	21	27.3
Ability to complete university*	Yes - definitely	31	10.4	111	37.4	155	52.2
	Yes - probably	105	17.9	234	39.9	247	42.2
	Not sure	75	20.7	141	39.0	146	40.3
	Probably not	69	42.3	50	30.7	44	27.0
Comparative Success Expectations*	(1) Much better	16	13.1	40	32.8	66	54.1
	(2)	43	16.6	86	33.2	130	50.2
	(3)	41	13.8	115	38.6	142	47.7
	(4) Equal	158	25.3	248	39.7	219	35.0
	5,6,7/ Worse	20	22.0	42	46.2	29	31.9

*Chi-square significant at .05 level

association with non-traditional choice. As the quality of the expected marks decreased, the association with more traditional choice became more apparent.

When students were asked what marks they thought they were capable of, basically the same results were observed, as was the case for marks they expected to receive.

When students rated themselves among the best or above average when compared to their classmates, the association was with much more non-traditional choice. Those students ranking themselves below average, were associated strongly with traditional choice.

The rating of one's ability to complete university followed a very similar pattern to comparative school ability. Being able to complete university was associated with non-traditionalism, whereas doubt in one's ability to do this was associated with more traditional career choice.

When asked to compare one's chances of attaining success within one's age group, students indicating greater success expectations were noted to be associated with more non-traditional choice--the greater that one's comparative success expectations became, the higher the incidence of non-traditional choice.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate factors related to the traditionalism of career choice in Newfoundland high school youth.

Although the model chosen was one in which the causal directions were well defined, the "snapshot" nature of the data collected may not have allowed such clear cut causal influence to be concluded, as equally plausible alternative explanations may have been available for some of the variables. While some alternative explanations are perceived in the paragraphs which follow, it is clear that readers may see interpretations that were not apparent to the author. This may particularly be the case because of the non-unitary nature of the traditionalism measure.

Non-Traditional Choice

Following is a list of factors that were associated with non-traditional career choice. Higher scores on the traditionalism scale were associated with these factors, implying that when these factors applied to a person, that person tended to make less traditional choices.

1. The student consulted several persons about career plans.

2. The student consulted with the teacher and the counsellor about career plans, and reported that the counsellor was either most, or least important as a helper in making the choice.

3. The student did not know anyone in the selected career area.

4. The student anticipated earning a high salary.

5. The student perceived university to be financially accessible.

6. The student reported knowing very little about nursing schools, College of Fisheries and Marine Technologies, and vocational schools, but a lot about Memorial University.

7. The student perceived a large number of sources of career information, with particular emphasis on the local school and the media.

8. The student did not work part-time.

9. The student reported a large number of interests of all types, including both those which supported and did not support career choice.

10. The student was enrolled in the academic program.

11. The student's parents were divorced or separated.

12. The occupation of the father was classified as

technical, fishing and logging.

13. The occupation of the mother was classified as being service and recreation, on fishing.

14. The father was perceived to be in favor of attendance at a post-secondary institution.

15. The student lived in Site 2 or isolated regions of the Province, thus the more severely economically depressed areas.

16. The student felt that directing others and reaching one's full potential were important indicators of success.

17. Female students felt that being one's own boss was an important criterion of success.

18. The student felt that school was very important for success.

19. The student had been interested in the chosen career for only a short (less than two years) time.

20. The student was planning to train for the chosen career at Memorial University or outside Newfoundland.

21. The student planned to marry at an older age.

22. The student expected to get high marks in school and thought that it was possible to get even better marks. The student also expected better marks than most of his or her peers and thought that there was a good chance to succeed in university. The student also reported believing that he or she had a better chance of succeeding than most of the peer group.

Traditional Choice

Traditional choice was also associated with the factors listed above for non-traditional choice, although not always in the inverse. Below are listed factors which were found to be characteristics of students who received lower scores on the traditionalism scale.

1. The student discussed career plans with fewer persons.
2. Teachers were seen to be less important as helpers in making career plans.
3. Friends were considered to be important as helpers in making career plans.
4. The student knew someone in the job or career selected.
5. The anticipated salary was either low, or the highest.
6. The student reported knowing a lot about the College of Trades, the College of Fisheries, and district vocational schools.
7. The student worked part-time.
8. The student reported many interests which reinforced career choices.
9. The student had failed one or more courses at school.
10. The student was enrolled in the general program.
11. The student was in grade eleven.
12. The father's occupation was classified as foreman, supervisor, owner or manager.
13. The student lived in Site 1 or St. John's, hence the more economically stable areas of the Province.
14. The school was thought to be of less importance for success in the career, while work experience was thought to be of more importance.
15. Female students thought a steady income, and being admired and respected by others were important indicators of success.

16. For male students, a steady income and being their own boss was an important indicator of success.
17. The student reported lower marks, and did not think better marks were possible. The student also ranked school performance as low, relative to the peer group, and ranked his or her chance of success in university as low.

Role Models

Role models, particularly those connected with the school, were associated with the nature of a student's career choice. This seems to be congruent with the propositions outlined by Mitchell (1975) as they related to the Krumboltz et al. (1976) theory, and also congruent with specific related research findings such as Williams (1972) and Howell (1978). Not discussing plans seemed to lead towards traditionalism, whereas consulting increasingly larger numbers of persons led to increasing non-traditionalism. Persons who seemed to significantly affect this were the teacher and the counsellor. As the teacher became less important, the student's career choice became more traditional, and strong association with the counsellor, by the student, was reflected in non-traditional choice.

Because of the influence school personnel seem to have on students, implications for curriculum content and career programming become important. If all students are to be made aware of non-traditional options, information regarding these options should be disseminated through regular classroom activities as well as specific career education programs. Teachers and counsellors have had greater exposure to non-

traditional options through their training experiences and this may have been transmitted to the non-traditionally oriented students. Memorial University was associated with non-traditionalism and this has been the major training ground for educators in the Province. Educators, therefore, should be made aware of their perceived influence by students and the direction it could possibly lead a student.

Friends, when perceived to be continuing their education, were associated with non-traditional choice by the student, but otherwise friends, parents, and job personnel were associated with traditional choice.

The fact that personnel in the job, and friends, had a tendency to be associated with traditional choice may have been because, in a traditional environment, traditional options were all that they could provide any information about. Schools can capitalize on the influence of these groups by insuring that organized career information programs are available, with representatives from less traditional work areas where possible. Group guidance, directed by trained personnel, may be one way to use the influence of the peer group to expand information about non-traditional career options.

Vocational knowledge was considered from many perspectives. When salary was a consideration, non-traditional students anticipated that a higher salary range was accessible than did most traditional students. The association of traditional students with the highest salary range was

probably due to the few numbers of respondents in that category and, because those concerned were probably seeking traditional professional occupations, such as law and medicine.

Perceived knowledge of the post-secondary institutions in the Province generally was associated with traditional choice, whereas lack of knowledge was associated with non-traditional choice.

This tends to suggest that information seeking has followed formation of the aspiration, and is consistent with the theoretical model. This poses a problem for educators, since one approach to career education is to base exploration activity on the declared occupational aspiration of the student. The data suggest that the information base of students is too narrow.

The educational problem is to expand options, but this will not be possible given the narrow information base. On the other hand, the strategy of planning exploration on the basis of the aspiration is educationally sound, even though it leads to a narrow information base. In his implementation of Creating a Career, Hennebury (1980) discovered that the relatively narrow information base described here did in fact occur, even in a structured exploration situation.

It is of some interest here, that Hennebury (1980); when reporting on student perceptions of career knowledge, discovered that students who actually had a significant knowledge base, tended to feel that they did not know very much. This was in contrast to control students who had not participated

in the career education program and were known not to be as knowledgeable.

These control students reported, that in fact, they knew quite a lot about career opportunities. In the present study, students were reporting how much they thought they knew. It may be that these students were actually more knowledgeable than they thought. In any case, in order to insure that options increase as a result of exploration, it may be important to give students the feeling, that they have learned a lot about their various opportunities. This is one area where further research is needed.

The sources of information the student perceived seemed to have relevance when considered against traditionalism of choice. A knowledge of many sources of information was associated with non-traditional choice, indicating that students making these choices may be more aware of opportunities around them. Again the school was linked with non-traditionalism and the importance of the education system as a medium for preparation for exploiting future development was reinforced. The association with the media demonstrated that it should be considered as a useful means of career exploration and should be considered in light of career programming. Certainly, multi media approaches should be considered in the classroom.

Work experience for students may be linked to their value system. Students who have had part-time work experience were associated with traditional choice and students who viewed work as important for success were also traditional. There may be a desire on the part of these students for

tangible rewards for their efforts. Therefore, they may be more apt to follow career paths which give more immediate feedback such as those associated with the traditional work environment of Newfoundland.

This creates problems for educators, however, because it suggests that work experience helps to formulate aspirations which reduce, rather than increase the options of the student. It may be thus because work available to youth tends to be in the traditional areas. While it may reinforce desirable work habits and provide rewards not available in a more academic classroom, it probably does not add to the vocational knowledge of the student to any significant extent. Unexplored in this study was the possibility that students who work perceive the financing of higher education to be more difficult.

There is, however, a belief that work experience is desirable for all students, and that perhaps it may be essential for some (Hamilton & Crouter, 1980). These data suggest that work experience is associated with more traditional aspirations, and therefore fewer, not more, career options. It would seem essential, therefore, that in programs of career education, the actual work experience be considered in all its aspects, to insure that students understand its full implications for them. This would be consistent with Hennebury (1980) who concluded that career education programs had to be personalized.

Having many interests, whether compatible or incompatible with a student's career choice, was associated with non-traditional choice. This reflects an overall greater

awareness, similar in some respects to a knowledge of where to seek information, and versatility on the part of non-traditionally oriented students. Greater emphasis on hobbies and interests in extra-curricular activities may assist in an expanded awareness for students, regarding their career choice.

The academic experience of a student in terms of subject failure, may be linked to a poorer self-concept and a perception by teachers of a student less able to succeed.

As well, the type of program a student was enrolled in seemed to make a difference to choice. The academic student, usually associated with academic success and a better ability to succeed educationally, was related to non-traditional choice, whereas the general student, usually associated with academic failure and a lesser ability to succeed educationally, was related to traditional choice. This is consistent with the findings of Tseng (1972) as they related to school dropouts.

From the data, it is not possible to say whether the history of failure has led to the traditional aspiration, or whether the traditional aspiration has led to the failure. Certainly, both arguments are plausible. Both arguments have also served as the basis for educational research and programs. The two arguments still have implications for research.

It may be that by changing the aspirations of students, changes can be effected in academic performance. This research has suggested that a structured, personalized program of career education might be helpful in changing aspirations in a less traditional direction. Research into the nature and structure of the process needs to be conducted.

It may be that by improving the academic success of students, aspirations can be made less traditional. This research suggests, however, that it must be true academic success. There is every indication that programs (for example, work study) which have been contrived to keep students in school, hence, succeeding, will not be efficient in changing aspirations as will programs which influence academic performance directly. This, of course, is a research area of enormous significance in its own right. This study is only another illustration of its importance.

Students in grade nine, as opposed to those in grade eleven, had less traditional aspirations. The possibility of a reality factor exerting some influence needs to be considered in the case of grade eleven students. The influence of two years of career exploration, and the overall maturation of the student, may suggest that as yet, non-traditional career options are not viewed as viable alternatives in Newfoundland and that a traditional career path is, for the present, a more realistic career goal.

Family Background

A consideration of family background variables demonstrated a relationship of traditionalism with parental marital status, parental occupations, and father's attitude toward post-secondary education. These factors seem similar to the factors related to the formation of aspirations and expectations as outlined by Rehberg and Wesby (1967), Jackson et al. (1974) and Tseng (1972).

Students from families where the parents were separated, divorced, or widowed tended to make less traditional career

choices. Assuming that, for the most part, these students are from families where the mother is the single parent, it is possible that the role model she presents as working mother provides an example of a non-traditional work role which is very personal.

Father's occupation also seemed to have significance in the breaking of traditional patterns in the work environment. Fathers whose occupations were technical, fishing or logging were associated with students making non-traditional choices. These students possibly see the traditional pattern of fishing and logging as unsatisfactory and aspire to a different level of work. Those students whose fathers were technical could also be more upwardly mobile in seeking jobs with more prestige. An analysis of mother's occupation showed a similar association.

Students whose fathers were supervisors, foreman, manager or owner tended to make more traditional choices. It is difficult to understand the association, though it might be related to career aspirations to continue in a family business.

In terms of educational practice, the implication is that role models in the family, and the attitudes and values that they convey are very importantly associated with the traditionalism of aspirations. The self-awareness aspects of a career education program should include a personalized exploration of family occupations and family attitudes and values with respect to those occupations. The student should

be aware, at least, of the implications of remaining in, or moving away from family work traditions. One aspect of this should be an exploration of family attitudes toward education, as the data shows that students who report that their fathers are strongly in favor of post-secondary education, make less traditional choices.

The region in which a student resided was associated with traditionalism of choice. In the larger centers with a better economic outlook, and where it was possible to observe a greater variety of work, career aspirations tended to be more traditional. In the smaller, more isolated centers, with more dependence on fishing and other traditional industries, aspirations tended to be less traditional. It is quite important to note that in these areas, a higher score on the traditionalism scale would not necessarily mean the selection of a career which was longterm. The level of education is typically quite low, so it is somewhat "non-traditional" just to finish high school. A person planning to travel to Toronto or Alberta to seek work is also "non-traditional". Remembering that a desire for financial security was characteristics of the entire sample, non-traditional aspirations in the isolated areas can be interpreted in part to be a desire to escape the less financially secure and uncertain economic situation in these areas. While students in these areas are considering, what for them are new, and non-traditional options, the new option may not offer more in terms of long-term, or life-long ability to

exploit new opportunity. Career education programs must address this issue with students in this situation.

Traditional choice was more associated with financial security than was non-traditional choice, although this was very important to all students. Students making traditional choices also tended to define success in terms of the admiration of others. Non-traditional aspirations were held by students who felt that reaching one's full potential was important. Non-traditional choosers also thought school was very important, felt that they did well in school and thought they had a good chance to succeed in their chosen career. It may be that these attitudes are the most important determinants of all, and if so, they represent an area where recommendations about programming are most difficult to make. These attitudes obviously are the product of years of experience within the present educational system. If Krumboltz et al. (1976) are correct, self-generalizations about academic ability and success are created by success experiences. Therefore, the implications for the educator are the same as earlier discussed for the problem of failure in the system. Success experiences are required, but they must be perceived by the student to be true successes. It may be that in the expanded high school program, if success and failure can be disassociated from course selection, aspirations may become less traditional. Thus, the problem for educators is made more complex. There is not much doubt that the academic program is most desirable from the point of view

of the range of options it is capable of generating for students. Almost inevitably, therefore, the general program will be associated with failure, an inability to succeed in the courses of choice. General programs are offered as a genuine attempt to provide success experience. This research indicates that if that goal is achieved, student aspirations may become less traditional. How then, may educators erase the image of failure possessed by the general program? This is a critical area for research.

Recommendations

During the preceding discussion the implications for application of this research, and areas of indicated need for further research were discussed. They may be summarized as follows.

Recommendations for Practice

Personalizing the Career Education Process. The data suggest a need for personalization of the career education process. One goal of career education programs will be to increase student awareness of the options available to them in such a way that the options will be seriously considered. While there will always be reality factors preventing students from exercising certain options, some process is required that will help students to understand reality as it applies to them. They also require an understanding of the

role played by their families, and their own views of success. Understandings such as this cannot be depersonalized and taught as a course. The process must permit students to relate their options meaningfully to their own circumstances. This study suggests that this process should start earlier, in grade eight and nine, when the students appear more disposed to consider non-traditional options, rather than later, when the problem is to get them to aspire less traditionally.

Provision of Information. The study showed that students with less traditional aspirations viewed both the school and media to be important information sources. Programs in school should utilize the media in as many contexts as possible to exploit this relationship. A particularly useful approach might be the structuring of social studies, current events, and other life activities to introduce students to other options.

Group Process. The possible influence of the peer group demonstrated in this study may be exploited through the use of group process as an alternative to lecture and individual project work. This might also be used as a way to expand the information base of students. Hennebury (1980) experienced some difficulties with this approach; however, the problems might be resolved if both groups and process are structured differently. He recommended smaller group size than classrooms.

Dealing with Failure. A weakness of an approach which encourages the expansion of options by the adoption of non-traditional aspirations, is that many students will fail to achieve their aspirations. Career education programs must be continuing, providing support to students until they leave school, assisting them to adjust their plans to their failures in healthy ways. The alternative is to prevent risk-taking by predicting failure in advance. This would be a conservative approach which would encourage traditional aspirations.

Recommendations for Research

Nature of Perceived Options. While this study examined aspirations, it did not obtain information about the nature of the options perceived by the students. Information about perceived options would help in understanding the development aspects of career development, particularly as it relates to the nature of student decision-making over time.

Program Design. Research is required into the development of program procedures which will best facilitate the personalizing of education. Procedures are needed to help students develop and accept non-traditional options.

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APPENDICES

APPENDIX 1

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 area?: less than 2 years _____

2 to 6 years _____

6 to 10 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.

InstitutionProgram or Course

University _____

College of Trades & Technology _____

College of Fisheries _____

Vocational School _____

Nursing School _____

Training Outside of Nfld. _____

Other _____

Specify where and what _____

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 2

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	<input type="checkbox"/>	<input type="checkbox"/>
completed high school	<input type="checkbox"/>	<input type="checkbox"/>
some university	<input type="checkbox"/>	<input type="checkbox"/>
completed university	<input type="checkbox"/>	<input type="checkbox"/>
completed nursing school	<input type="checkbox"/>	<input type="checkbox"/>
completed vocational (trades) or technical school	<input type="checkbox"/>	<input type="checkbox"/>
don't know	<input type="checkbox"/>	<input type="checkbox"/>

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.

	<u>Yes</u>	<u>Probably</u>	<u>Not Sure</u>	<u>Unlikely</u>	<u>No</u>
hospital nursing schools	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College of Trades and Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Memorial University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College of Fisheries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vocational school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

	<u>A Lot</u>	<u>A Fair Amount</u>	<u>A Little</u>	<u>Nothing</u>
hospital nursing schools ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College of Trades and Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Memorial University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College of Fisheries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vocational schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 subject: 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:

	<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	_____	_____

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:

Expect To Get Capable Of

mostly 80% and over (A's) ☐ ☐

mostly 65% - 79% (B's) ☐ ☐

mostly 55% - 64% (C's) ☐ ☐

mostly 50% - 54% (D's) ☐ ☐

mostly less than 50% (F's) ☐ ☐

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. ☐
 teacher 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):

Very Important		Important			Not Important	
1	2	3	4	5	6	7

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

Very Important		Important			Not Important	
1	2	3	4	5	6	7



