CHANGES IN THE CAREER DECIDEDNESS OF EARLY SCHOOL LEAVERS

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ABSTRACT

This study investigated factors associated with changes in the occupational aspiration status (CA) of early school leavers in Newfoundland. The status of the occupational aspiration was represented by the presence or absence of an occupational goal in 1988 and 1992. Four CA groups were possible: no aspirations (NA), lost aspirations (LA), gained aspirations (GA) and maintained aspirations (MA).

While the literature on occupational aspirations and their correlates is large, only a few studies of the process of change in aspirations have been reported. A review of the literature suggested that there would be a relationship between CA and the following variables: gender, region of residence, employment experience, education experience and perception of goal-blockages. Statistical procedures consisted of three-way and four-way crosstabulations, three-way ANOVAs and loglinear analyses, according to the nature of the variables.

The four CA groups differed significantly in terms of the variables analyzed. Respondents in the NA group tended to be female, reside in rural regions, experience the lowest amounts of employment and education experience and perceive several goal-blockages. Similar numbers of males and females were in the LA group, with the majority living in rural areas. Employment experience was moderate, participation in education

was low and they tended to perceive a lack of work and difficulty in finding work they liked as goal-blockages. There was a concentration of females in the GA group, residing in both urban and rural areas. Work experience was moderate and education experience was low. This group perceived their lack of job search skills and their education as goal-blockages. Those in the MA group tended to be males residing in urban areas. They experienced the greatest amounts of work experience and were most likely to have attended school. In general, these early school leavers perceived goal-blockages less frequently than any other group.

Programming recommendations addressed the following issues: developing self-relevant aspirations with appropriate scripts; increasing the personal and economic realism of aspirations; coping with goal-blockages; creating employment and education opportunities; and processing experiences. Research to focus on the specific nature of the educational and employment experience was also suggested.

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CHAPTER 1 - OVERVIEW OF STUDY

Purpose and Significance of the Study

The purpose of this study was to investigate factors associated with changes in the occupational aspiration status of early school leavers in Newfoundland. While the literature on occupational aspirations and their correlates is large, only a few studies of the process of change in aspirations have been reported. In the current study, the status of the occupational aspiration was represented by the presence, or absence, of an occupational goal. Occupational aspiration was measured in a large sample of school dropouts at the time of school leaving and again approximately four years later. Four changes in occupational aspiration status (CA) were possible: no aspirations (NA) (career undecided), loss of aspirations (LA), gain of aspirations (GA) and maintenance of aspirations (MA).

This study explored the relationship between CA and the following independent variables: gender, region of residence, employment experience, education experience and perception of goal-blockages. Gender was chosen as an independent variable in this study because of the heavy emphasis in the aspiration literature on gender effects. Gender-related differences in aspirations have been investigated by many researchers (see for example Apostal & Bilden, 1991; Berman & Haug, 1979; Danziger, 1983; Dunne et al, 1981; Fiorentine & Cole, 1992;

Franken, 1983; Jacobs, 1987; Leung & Harmon, 1990; Looker & McNutt, 1989; Marjoribanks, 1985; Marini & Greenberger, 1978; and Saha, 1982). The findings of such studies have revealed that differences in the occupational aspirations of males and females may be attributed to such factors as self-perceptions (Hollinger, 1983; Lapan & Jingeleski, 1992; Lent et al, 1986; Post-Kammer & Smith, 1985; and Zuckerman, 1985), perception of structural barriers and resulting mobility-discrepancies (Berman & Haug, 1979; Danziger, 1983; Firoentine & Cole, 1992) and sex-role socialization (Auster & Auster, 1981; Danziger, 1983; Firoentine & Cole, 1992; Franken, 1983; Jacobs, 1987; Kenkel & Gage, 1983; Looker & McNutt, 1989; Marini & Greenberger, 1978).

The relationship between occupational aspirations and an individual's region of residence has been explored extensively by researchers. The results of these studies have demonstrated fairly consistently that in general, rural youth express lower aspirations than their urban peers (Apostal & Bilden, 1991; Cobb & MacBrayne, 1990; Cobb et al, 1989; Hansen & McIntire, 1989; MacBrayne, 1987; McCracken & Barcinas, 1991; Odell, 1988; Shapiro & Crowley, 1982). Due to the large rural population in the province and the proven effect that region of residence has on the formation and change processes of occupational aspirations, early school leavers' region of residence was selected as an independent variable in this

study.

Several researchers assert that experience is the key to aspiration change (Cosby, 1974; Ginzberg, 1988; Herr & Cramer, 1992; Howell et al, 1977; Howell et al, 1984; Jenkins, 1983; Russell et al, 1992). Through experiences such as a temporary job or a training program, individuals are presented with opportunities to learn more about themselves and the world of work. Cognitive structures called schemas support this knowledge and are modified when necessary. These schemas play a central role in the formation and change processes of occupational aspirations as will be discussed later in this chapter.

Ginzberg's theory of occupational choice examines the concept of "increasing realism of choice" (Ginzberg, 1988). The theory asserts that youth enter the labour market with unrealistic occupational goals which are modified based on employment experience. As youth experience the labour market, their knowledge of the work world increases and becomes more realistic. Knowledge and degree of realism can be measured by individuals' perception of goal-blockages to the attainment of their occupational goals. This theory has been supported by the work of several researchers (Cosby, 1974; Howell et al, 1977; Howell et al, 1984; Jenkins, 1983).

There are several reasons for investigating the formation and change process of occupational aspirations. Occupational

aspirations are believed to be predictive of actual occupational attainment (Cobb & MacBrayne, 1990; Farmer, 1985; Haller et al, 1974; Hansen & McIntire, 1989; Harvey & Kerin, 1978; Looker & McNutt, 1989; Sewell et al, 1969) and hence play a signficant role in the development of human resources. Occupational aspirations are also related to educational attainment. The process of searching to identify and gain entry into an education/training program is dependant upon an individual's occupational aspirations (Russell et al, 1992) as is reentry itself (Looker & McNutt, 1989; Spain, 1994). Other researchers have shown that the gender segregation in the occupational structure of the labour market is perpetuated by the traditional occupational aspirations of young women (Clemson, 1981; Kenkel & Gage; 1983; Looker & McNutt, 1989; Marini & Greenberger; 1978; O'Leary, 1974; Shapiro & Crowley, 1987). Finally, estimates of the percentage of youth who are undecided about a career reveals that career undecidedness or indecision is a natural occurrence and a common concern for this group (Salomone, 1982; Slaney; 1988). Being undecided or lacking an occupational aspiration is a normal stage of development which can be addressed through proper career guidance and counselling (Butcher, 1982; Hartman et al, 1986; Hartman et al, 1985; Holland & Holland, 1977; Lucas & Epperson, 1988; Salomone, 1982; Slaney, 1988).

It is thus evident that occupational aspirations play a

significant role in the career development of youth and the economic development of a society. An understanding of the change process and its influencing variables would enable practitioners to develop and implement interventions to help youth form and maintain occupational aspirations and ensure that these aspirations meet the demands of a changing economy, while also maintaining their personal relevancy.

Changing Economy

"The labour market for youth and young adults is increasing in complexity and in requirements. To be competitive and to have the opportunity to build career success, youth are required to be better trained, more aware and better prepared" (Canadian Guidance and Counselling Foundation, 1992, p.3). Canada's participation in the global economy has been accompanied by a national and provincial economic restructuring in response to the local and international demands of a changing society and the growing use of technology in all industries of the goods-producing and service sectors. These labour market trends are resulting in a change in the mix of jobs and the skills required to perform these jobs (Ministry of Skills Development, 1990). Technology, for example, is rendering some jobs and skills obsolete (such as tedious and repetitive semiskilled or unskilled tasks; manual tasks requiring substantial physical strength; and certain clerical duties) and there is a shift

toward a demand for more highly skilled technical workers. All industries are experiencing an increased demand for 'knowledge workers', individuals who possess high levels of education and training, are experts in their jobs, have well developed communication, problem-solving and decision-making skills, are computer literate and are skilled in many corporate functions (McCurdy, 1993; Ministry of Skills Development, 1990). Statistics on the country's rising skills requirements indicate that 64% of the jobs created by the year 2000 will require at least a high school diploma and approximately half of these will require seventeen years of education and training (CEIC, 1989). An examination of existing unemployment rates and workers' earnings reveals that those individuals with higher levels of education are more likely to be employed and have greater incomes (CEIC, 1991).

Early school leavers entering such a dynamic, competitive and challenging labour market are at an immediate disadvantage because they lack a high school diploma. Consequently, they are often restricted to 'bad jobs' in the traditional service industry which offer unstable employment, low wages, few benefits and little job security (CEIC, 1991; Economic Council of Canada, 1990). Youth must be made aware of the consequences of decreasing one's personal marketability by failing to complete high school. Interventions in the aspiration formation and change processes can encourage youth

to aspire to occupations which are in demand and offer stable employment, high pay and benefits, legal protection and a promising career as opposed to traditional occupations which offer an uncertain and potentially unfulfilling future. Because the 'good jobs' which are in high demand require advanced levels of education (Economic Council of Canada, 1990), a potential early school leaver's commitment to and motivation for achieving such an aspiration will mean that dropping out will cease to be an option. For the individual who has already quit school, formation and maintenance of such an aspiration would encourage reentry and completion of high school. In addition to enhancing one's personal career, the decision to stay in school or return to school will contribute to human resource development within the province and nation.

Rationale

Occupational Aspiration

The following conceptualization of the term occupational aspiration draws on self-system literature, Gottfredson's (1981) and Ginzberg's (1988) career development theories and sociological research. An occupational aspiration is a type of possible self or image of the self in a future desired occupational state (Russell et al, 1992). As such, it is a cognitive structure or self-schema consisting of descriptive knowledge (cognitive content) and procedural knowledge (behavioral script) (Cross & Markus, 1991; Markus & Nurius,

1986; Markus & Ruvolo, 1987; Markus & Ruvolo, 1989; Markus & Wurf, 1987; Russell et al, 1992). The former represents an individual's self-knowledge about abilities, attributes and skills and the latter consists of self-relevant modes of behaving (Russell et al, 1992). Aspirations also have an affective component or valence which is positive in nature, that is, the process of attaining and the realization of the aspiration will support the individual's self-esteem and produce positive affect (Russell et al, 1992). Each individual has a range of aspirations which differ in terms of their elaboration, cognitive content, procedural knowledge, level of affect, and degree of realism. Realism stems from the individual's subjective estimate of the likelihood of achieving the particular aspiration (Cosby, 1974; Ginzberg, 1988; Howell et al, 1977; Jenkins, 1983). This estimate is based on an integration within the self-system (among self-schemas) and between the self-system and knowledge of the world of work. Integration improves as individuals move through various developmental stages, experience new situations and consequently learn more about themselves and the world of work. Also, individuals gradually develop more effective cognitive and metacognitive strategies which enable them to manage their new found knowledge, organize it and integrate it in an effective manner (Russell et al, 1992).

A well elaborated or developed realistic aspiration with

greatest likelihood of attainment is one in which the individual has analyzed the self (abilities, attributes, values, personality), occupational alternatives and external conditions (labour market boundaries) and has made a judgement or estimate of personal suitability and accessibility (probability of attainment). The aspiration must also have a strong positive associated valence in order to serve as an effective motivator of behavior.

Aspiration Formation and Change

Through experience, individuals gain knowledge about themselves and their environments and develop cognitive structures to support this knowledge. The range and nature of experiences to which an individual is exposed are governed by factors related to the self, family and environment. Variables related to the self may include gender (see for example Apostal & Bilden, 1991; Berman & Haug, 1979; Danziger, 1983; Dunne et al, 1981; Fiorentine & Cole, 1992; Franken, 1983; Jacobs, 1987, Leung & Harmon, 1990; Marjoribanks, 1985; Marini & Greenberger, 1978; and Saha, 1982), intelligence, academic achievement, and self-perceptions (Farmer, 1985; Hollinger, 1983; Lent et al, 1986; Marjoribanks, 1992b; Post-Kammer & Smith, 1985; and Zuckerman, 1985). Socioeconomic status (SES), parental education level and employment status and family size are considered family structure variables (see for example Auster & Auster, 1981; Bogie, 1976; Burlin, 1976;

Hansen & McIntire, 1989; Isaac et al, 1992; Kenkel & Gage, 1983; Mannheim & Seger, 1993; Marjoribanks, 1992a; McBroom, 1985; McCartin & Meyer, 1988; Picou & Carter, 1976; Shapiro & Crowley, 1982; Sewell et al, 1957; Trice et al, 1992). Region of residence represents an environment factor (Cobb & MacBrayne, 1990; Cobb et al, 1989; MacBrayne, 1987; McCracken & Barcinas, 1991; Odell, 1988; Young, 1984).

Self, family and environment factors influence an individual's experiences. For example, a person with low self-efficacy beliefs (self variable) may decline an interview for a summer job in anticipation of performing inadequately in the interview and failing to secure the job. The student from a low SES background may not be able to afford the luxurious experiences of the student from a wealthier family such as travel and private schools (family variable). Youth living in an urban area will gain exposure to a greater variety of potential career options in comparison to their rural peers who are generally restricted to a small number and range of more traditional alternatives (environment variable). In addition to the variability of the experiences as a consequence of self, family and environmental variables, an individual's perception of such experiences, the knowledge gained and subsequent changes in self will differ due to the influence of these factors.

The cognitive structures formed from knowledge gained

through experience are directly involved in the aspiration formation and change processes. As individuals experience new situations, they learn more about themselves and their environment. Knowledge structures change accordingly to accommodate this new information. As knowledge structures are modified, the individual's judgement of both personal suitability and of the accessibility of a particular occupational aspiration may change. Hence, aspirations may be revised in an effort to enhance estimates of personal suitability and accessibility. For example, the occupational aspiration of a youth may be to work as a primary teacher. If he secures a summer job as an instructor at a daycare, he may discover that he dislikes working with children. If this happens, it would be expected that this newfound self-knowledge would result in a change in his aspiration to better fit his interests, thus increasing the personal suitability of his aspiration. To provide another example, a female adolescent may aspire to work as a travel agent. Upon investigating her aspiration by means of a job shadowing experience at a local travel agency, she may discover that there is an extreme oversupply of travel agents in her local area. Her awareness of a potential goal-blockage to the attainment of her aspiration could result in a modification of her aspirations in response to labour market demands, thus increasing the accessibility of her aspiration.

It may be hypothesized that educational and employment experiences in particular would enhance the descriptive and procedural knowledge of occupational aspirations and have significant effects on estimates of personal suitability and accessibility. Such experiences expose individuals to the world of work in general and the nature of specific occupations in particular, thus enabling them to explore the self and a range of alternatives relating to personal preferences. Educational and employment experiences provide youth with opportunities to explore how aspects of the self such as interests, skills, values, personality and needs fit with different fields of work. Such experiences also increase the realism of individuals' estimates of accessibility by increasing knowledge of means to achieving particular occupational aspirations and potential goal-blockages or barriers to their achievement.

It may also be hypothesized that the perception of goal-blockages to the attainment of occupational aspirations may influence one's occupational aspirations. Goal-blockages or employment barriers include such factors as non-availability of jobs, lack of high school diploma, lack of job search skills, lack of experience and personal disability. Because adolescents are in the process of discovering a self-identity and have limited labour market experience, it is not uncommon for their aspirations to be less elaborate (not well developed

in terms of descriptive or procedural knowledge) and unrealistic, lacking in terms of personal suitability and accessibility. It is expected that as adolescents enter the labour market, either educationally or occupationally, experience more and learn more about themselves and the world of work, their aspirations will change and become more realistic in terms of cognitive content and behavioral scripts and personal suitability and accessibility.

Hypotheses

1) There is no relationship between change in occupational aspiration status and either gender or region of residence of early school leavers.

2) There is no relationship between change in occupational aspiration status, the 1989 employment experience, and gender or region of residence of early school leavers.

3) There is no relationship between change in occupational aspiration status, the 1991 employment experience of early school leavers, and gender or region of residence of early school leavers.

4) There is no relationship between change in occupational aspiration status, 1989 education experience, and gender or region of residence of early school leavers.

5) There is no relationship between change in occupational aspiration status, 1991 education experience, and gender or region of residence of early school leavers.

6) There is no relationship between change in occupational aspiration status, the perception of specific goal-blockages to obtaining employment including:

hard to find a job I like

lack of job search skills

disability employment barrier

age employment barrier (being too young)

money employment barrier (no money to travel/look for work)

lack of work experience

no high school diploma

lack of jobs

and gender or region of residence of early school leavers.

Definitions

change in occupational aspiration status (CA)

- The early school leaver's occupational aspirations were measured in Survey 1 (1988) and Survey 3 (1992). CA was calculated based on the presence or absence of an occupational aspiration at each survey time. Four CA groups were defined (NA, LA, GA, and MA).

no aspirations (NA)

- those individuals who failed to indicate an occupational aspiration in both Survey 1 (1988) and Survey 3 (1992)

lose aspirations (LA)

- those individuals who expressed an occupational aspiration in Survey 1 (1988) but did not in Survey 3 (1992)

gain aspirations (GA)

- those individuals who did not have an occupational aspiration in Survey 1 (1988) but did in Survey 3 (1992)

maintain aspirations (MA)

- those individuals who expressed an occupational aspiration in both surveys (1988 and 1992)

Limitations

1) The results of this study hold relevance for early school leavers in the unique economic context of Newfoundland, a predominantly rural province with a past reliance on traditional resource-based industry, the lowest labour force participation rate in Canada, and the highest unemployment rate both overall and for youth (Spain & Sharpe, 1990). Generalizations of findings to similar and different groups in other regions must be made with caution.

2) This study involves a secondary analysis of data collected for the longitudinal research project entitled 'Youth Transition into the Labour Market' (YTLM) (Spain & Sharpe, 1990; Spain et al, 1991). Therefore, this study is limited to an exploration of influences on aspiration formation and change for which data is available. However, a comprehensive review of factors believed to influence aspiration formation and change is provided in Chapter 2.

3) An individual's region of residence was determined by definitions of rural and urban as employed by the Newfoundland Department of Education. Urban areas included census metropolitan and agglomeration areas and communities with a population of 5000 or over with the remaining areas deemed rural (Spain & Sharpe, 1990). Therefore, results concerning

the effects of region of residence may not be generalizable to other locations.

CHAPTER 2 - LITERATURE REVIEW

Introduction

This chapter provides a comprehensive review of the available literature on aspirations. The chapter commences with an explanation of three theories accounting for aspiration formation and change. A cognitive perspective is examined by means of an indepth analysis of self-concept literature, with an emphasis on the self-system and possible self, and an overview of two developmental theories of aspiration formation (Gottfredson, 1981 & Ginzberg, 1988) is presented. Next, the definition of aspiration as applied in past and current sociological research is examined. Factors identified through empirical studies as influencing variables in the aspiration formation process are discussed. In particular, gender (socialization, structural barriers and self-perception), region of residence (rural/urban), and family structure variables (socioeconomic status, parents' education level and employment status and family size) are explored. The concepts of career decidedness, undecidedness and indecisiveness are investigated in order to supply plausible explanation for a seeming lack of aspiration among some individuals.

A Self-System Perspective on Aspirations

Cognitive Approach

Most current perspectives on the self-system have

discarded the traditional view of the self-concept as a unitary, monolithic, global entity characterized by stability. Instead, modern views conceive the self-system as a multifaceted dynamic structure containing a diverse collection of self-representations or self-schemas (Cross & Markus, 1991; Markus & Nurius, 1987; Markus & Wurf, 1987; Russell et al, 1993). Self-schemas, or generalizations about the self, based on past experience in particular domains, are affective-cognitive structures which provide structure and meaning to an individual's self-relevant experiences (Markus & Nurius, 1987; Markus & Nurius, 1986; Markus & Ruvolo, 1989). Each self-schema possesses a cognitive content (descriptive self-knowledge about abilities, attributes and skills) and procedural rules (scripts which relate to self-relevant modes of behaving) (Russell et al, 1993; Russell et al, 1992). Each self-schema also has an attached valence which is a function of the self esteem and affect associated with it (Russell et al, 1993; Russell et al, 1992). Because of this, activation of a self-schema may enhance self-esteem by attracting support from the social context (for example, praise from significant others), thus rendering a positive affective state in the person. The valence of a self-schema is relative, not absolute (Markus & Nurius, 1986; Russell et al, 1992). For example, the affective consequences of imagining the self as a mechanic or secretary will differ from one individual to

another as will its self-relevance.

Self-schema differ in terms of their centrality and tense (Markus & Wurf, 1987). With regard to the former, some self-conceptions are core, salient, identities which are the most elaborated of all, and hence have the greatest impact on information processing and behavior. Yet others are more peripheral (Markus & Wurf, 1987). Tense refers to the temporal perspective of a self-schema. A self-representation can refer to a past, current or future view of self (Markus & Wurf, 1987). It is the latter, the future or possible self yet to be achieved, which is the focus of this study.

Possible Selves

"Possible selves represent individual's ideas of what they might become, what they would like to become, and what they are afraid of becoming" (Markus & Nurius, 1987, p.157). As implied by this definition, the self-system perspective differentiates between aspiration (what one would like to become) and expectation (what one might become). This domain of self-knowledge which pertains to how individuals think about their potential and their future can refer to several different aspects of one's life (Markus & Nurius, 1986). In a study by Cross & Markus (1991) in which respondents were asked to describe their possible selves, the authors discovered that these selves could be categorized into specific categories. Examples of categories used to describe

possible selves included physical ("being in peak physical condition"), personal ("to be happy"), abilities/education ("getting a GPA of at least 3.7"), leisure ("to travel to Europe") and occupation ("to become a successful and respected engineer").

Although possible selves encompass both desired and undesired future selves for the individual, a possible self in the form of an occupational aspiration would represent a desired and hoped for end state. "In general, career aspirations would be relatively positive in their activation and realization would be expected to increase self-esteem" (Russell et al, 1992, p.8). The associated valence would be positive as the individual's self-esteem would be enhanced by reaching this goal and a positive affect would be associated with the achievement or realization of the possible self.

Formation of Possible Selves

Possible selves derive from representations of the self in the past but even though they are individualized and personalized, they are "distinctly social" (Markus & Nurius, 1986). Their social origin stems from the role that signficant others and society at large play in their formation. Individuals compare their own thoughts, feelings and characteristics with those of signficant others and envision themselves as possibly becoming what their role models are. "An individual is free to create any variety of

possible selves, yet the pool of possible selves derives from the categories made salient by the individual's particular sociocultural and historical context and from the models, images and symbols provided by the media and by the individual's immediate social experiences" (Markus & Nurius, 1986).

Markus & Ruvolo (1989) echo the assumption that an individual is free to create many types of possible selves and believe that one is "limited only by imagination" (p. 213). However, possible selves are generally most developed and consequently have their greatest impact on behavior in a domain for which the individual is "schematic" (Markus & Nurius, 1987; Markus & Ruvolo, 1989). This is the domain of one's current involvement, personal importance and expertise.

Russell et al (1992) propose another theory of the formation of possible selves. "The development and change of the self-system is a function of three major inputs: 1) the social context, 2) the perception of boundaries, and 3) the individual's skills and attributes such as personality and values, as mediated through the control processes and the social context" (Russell et al, 1992, p.10-11). Self-schema develop in a social context as certain characteristics or behaviors become highlighted, valued or salient (self-relevant) within the family, schools, peer group, and the broader social context. Thus, individuals, in interacting

with their environments, receive information about the nature of expected behavior and the value of that behavior. For example, a student may learn that academic achievement is expected and valued.

Russell et al (1992) consider boundaries to be "the playing field" on which career development occurs and over which the individual has little control. There are several forms of boundaries such as family wealth, education costs, entrance requirements for educational and job opportunities and gender. Boundaries can be defined objectively; however, it is the self's perceptions of these boundaries that influence the formation of possible selves.

The capital which individuals bring to the labour market is a set of attributes such as intellectual and physical abilities, personality and temperament, skills and values. As in the case of boundaries, the self-perceptions of this set of attributes will influence the formation of possible selves.

Functions of Possible Selves

Possible selves are assumed to have two functions: they serve as motivators or incentives for behavior and they provide an evaluative or interpretive context for the current view of self (Cross & Markus, 1991; Markus & Nurius, 1987; Markus & Nurius, 1986; Markus & Ruvolo, 1991; Markus & Wurf, 1987).

> **Possible selves as motivators.** The repertoire of possible selves contained within an individual's self-system are the cognitive manifestations of enduring goals, aspirations, motives, fears, and threats. Possible selves provide specific cognitive form, organization, direction, and self-relevant meaning to these dynamics. As such they provide an essential link between the self-concept (or identity) and motivation (Markus & Nurius, 1987, p.158).

According to self-regulation theorists, self-controlled behavior is performed in the service of a goal (Markus & Wurf, 1987) and the crucial element of a goal which makes it an effective regulator of behavior is the personalized representation of the individual realizing that goal (Markus & Ruvolo, 1989). Thus a person with a possible self of becoming a nurse does not simply hold a vague abstraction of the future but instead vividly views the self as a competent professional, performing a variety of nursing duties, helping others become well, and so forth. This image of the self in the future state represents the cognitive content of the possible self (Markus & Nurius, 1986; Markus & Ruvolo, 1989; Russell et al, 1992). In addition to giving specific self-relevant form to one's self in future desired and undesired states, the possible self contains the means-ends patterns (plans and strategies) for achieving or avoiding these selves (Markus & Nurius, 1986; Markus & Nurius, 1987; Markus & Ruvolo, 1989). Behavioral strategies aimed at achieving one's aspiration, that is, procedural rules or scripts, would

provide direction for the individual with the nurse possible self. The specific script may include such actions as applying to nursing school, a job shadowing experience at a hospital, volunteering at a local nursing home, and writing a resume and conducting a job search prior to graduation. Possible selves are therefore considered action-oriented self-schemas, guiding one's actions toward particular end states, because they represent the "cognitive bridges" between the present and the future, (Cross & markus, 1991; Markus & Nurius, 1987; Markus & Ruvolo, 1989). Possible selves energize behavior in pursuit of imagined desired end states by enhancing goal related behavior aimed at decreasing the discrepancy between the current self and the future self (Cross & Markus, 1991).

Valence influences the individual's decision to engage in the behavior required to achieve the end state or aspiration (Markus & Ruvolo, 1989; Russell et al, 1992). A script could, however, be associated with conflicting affect, for example, graduating from high school versus boredom in school, and conflicting support for self-esteem, for example, academic achievement versus popularity with friends. The valence of a possible self and its subsequent role as a motivator may vary depending on the individual's position in the lifespan (Markus & Nurius, 1986). The nature of possible selves, their importance to the individual, their degree of cognitive and

affective elaboration and their link to specific plans and behavioral strategies will vary depending on the developmental stage of the individual. This developmental view of the motivational function of possible selves, such as an increasing behavioral commitment to achieving possible selves, was supported by a study by Cross & Markus (1991) which analyzed the possible selves of 4 age groups (18-24; 25-39; 40-59; 60 and older). Although the youngest group listed more positive possible selves and were much more confident in their ability to achieve their possible selves, they reported the fewest number of actions in the past month aimed at accomplishing their most hoped for goals. Cross & Markus (1991) suggest that their findings indicate that possible selves serve a greater motivational role with age.

Possible selves as evaluative/interpretive context. The second function of the possible self is to provide a context of additional meaning for the individual's current behavior. Attributes, abilities and actions of the self are evaluated not in isolation but interpreted in the surrounding context of possibility (Markus & Nurius, 1986). The affective evaluation of one's current self and the accompanying satisfaction depends on one's possible selves and hence one may experience a given state as happy and satisfying or miserable and unsatisfying (Cross & Markus, 1991). For example, the student with a physician possible self will interpret a C in biology

quite differently than the student who has a mechanic possible self. An individual's specific possible selves "furnish criteria against which outcomes are evaluated" (Markus & Nurius, 1986, p.956). In order for a possible self to perform this second function and act as a referent or standard by which current selves are evaluated and interpreted, it must be active in the working self-concept.

Working self-concept. The self-concept is a collection of all one's self-knowledge and self-conceptions. However, not all self-knowledge is available for thinking about the self at any given time.

> The working self-concept derives from the set of self-conceptions that are presently active in thought and memory. It can be viewed as a continually active, shifting array of available self-knowledge. The array changes as individuals experience variation in internal states and social circumstances. The content of the working self-concept depends on what self-conceptions have been active just before, on what has been elicited or made dominant by the particular social environment, and on what has been more purposely invoked by the individual in response to a given experience, event or situation (Markus & Nurius, 1986, p.957).

The working self-concept can therefore be viewed as a subset of an individual's total repertoire of self-representations, including core, peripheral and possible selves, that is active at a particular point in time (Markus & Nurius, 1987). The content of the working self-concept is assumed to regulate individual's on-going actions and reactions (Markus & Wurf, 1987) and therefore possible selves function as they become

part of this self-concept of the moment (Markus & Ruvolo, 1989; Russell et al, 1992). "As the individual approaches a goal, positive possible selves (representing the individual in the desired state) may dominate the working self-concept. To the extent that these positive possible selves can be maintained and competing or incongruent possible selves can be momentarily suppressed, the individual's actions will be focused, energized and organized by this possible self" (Markus & Ruvolo, 1989, p.214). Thus, in order to realize a desired goal or aspiration, the individual must keep the possible self representing this aspiration as a dominant or central element of the working self-concept. The more elaborated the active possible self, the more motivationally effective it will be (Markus & Ruvolo, 1989).

Change in Possible Selves

"Possible selves are the elements of the self-system that can most easily assume new form" (Cross & markus, 1991, p.233). They are the most vulnerable and responsive to changes in the environment and are the first form of self-schema to absorb such change (Markus & Nurius, 1986). Their vulnerability to change can be attributed to two factors. Firstly, possible selves are often not shared with or evident to others and thus are not reinforced by others through social interaction. Secondly, because possible selves are representations of the self in future states, they have yet to

be verified or confirmed by social experience (Markus & Nurius, 1986). Unlike past or current self-conceptions, possible selves are not firmly anchored in social reality (Cross & Markus, 1991; Markus & Nurius, 1987; Markus & Nurius, 1986). Unless these future self views are well elaborated or deliberately invoked and reaffirmed by the individual, they can easily slip out of the working self-concept and be replaced by other possibilities (Markus & Nurius, 1987). An individual may also reformulate possible selves in an effort to enhance self-esteem and increase satisfaction (Cross & Markus, 1991). For example, an individual may lower an occupational aspiration in an attempt to lower the discrepancy between the current self and the future self. In addition to actually changing a possible self, one may choose to pursue other avenues as a means to express that possible self (Cross & Markus, 1991). For example, an individual who has possible self of becoming a successful businessperson may decide to work for a major corporation as opposed to pursuing the avenue of entrepreneurship as previously planned.

Structure of the self-system. The changing nature of possible selves can also be interpreted in terms of the organization of the self-system. The self-system is organized both vertically and horizontally (Russell et al, 1992). A comprehensive vertical structure would result in a more integrated self-system than a diverse horizontal structure.

Vertical structure is influenced by relationships among the descriptive, behavioral and affective aspects of self-cognitions. "A career aspiration can be thought of as a possible self, although it is clear that an expression of an aspiration as a desired occupation is a very simple and concrete schema, quite low in the vertical structure of the self, and quite vague in its ability to direct complex career behavior" (Russell et al, 1992, p.4). Thus, according to Russell and her colleagues (1992) because aspirations may have poor vertical organization, they may not be well integrated on a cognitive, affective or behavioral basis with other self-schema. For example, a student aspires to become an author but has not taken into account that he has poor writing ability. A student aspires to become an engineer yet aspires to no education beyond high school, suggesting that procedural knowledge concerning occupational and educational aspirations are not linked. An example of a lack of affective integration would be the student who desires to become an physician (positive affect) but hates school (negative affect). The degree of integration among the cognitive, affective and behavioral components of the self-system plays a significant role in change as "the more highly integrated a system, the more resistent it will be to change" (Russell et al, 1992, p.6). Consequently, if an aspiration is expressed only as desired occupation, this would be a very simple and concrete

schema low on the vertical structure and not overly resistant to change. Perhaps the concept of integration can refer not only to integration among self-knowledge but also integration among self and other knowledge (e.g. occupational and labour market).

The structure of the self-system (horizontal and vertical organization) and its resulting level or degree of integration is also a function of an individual's control processes. "The control processes are those strategies employed by individuals in interacting with the self-system, and for governing development and change in the self-system" (Russell et al, 1992, p.14). Strategies can be classified as cognitive (relating to acquiring or learning self-knowledge such as elaboration, rehearsal, organization) and metacognitive (planning, monitoring, and self-regulation). It could be assumed that individuals who do not possess such strategies would not have an integrated self-system because they are unable to learn about the self (lack knowledge and awareness of self) or organize knowledge about the self (integrate various elements of self-knowledge and also integrate knowledge about the self with other knowledge such as world of work).

Experience and change. Russell et al (1992) assert that experience is the key to change. Thus when the self is faced with information from the social context which is moderately

incongruent with the established self (minor incongruencies will be assimilated and large ones ignored), new possible selves may emerge to direct behavior in new ways. For example, an early school leaver who aspires to enter a trade and then discovers that a high school diploma is required for acceptance to tradeschool may change the aspiration to one which is more congruent with his or her current level of education. The person who aspires to become a French translator but repeatedly fails French courses at university may change aspirations to fit personal abilities and skills. Thus through experience, one learns about the self (abilities, skills, attributes, values) and the labour market (requirements, demands and boundaries such as education costs, entrance requirements for school and lack of job opportunities). Consequently, possible selves (aspirations) may change to reflect this increasing awareness, knowledge or understanding. The accuracy of these perceptions is crucial to the formation of possible selves which can actually be realized.

Similar to the concept of increasing realism of choice, central to occupational choice theories (to be elaborated on in a later section), aspirations of youth may change as they experience the realities of the labour market. A possible self must eventually be validated in experience, that is the individual needs behavioral evidence that the possible self

has actually been realized or is in the process of being realized (Russell et al, 1992). Thus as youth experience the labour market, if there is no evidence that they are working toward the realization of their aspirations, these aspirations are likely to change over time.

Summary of Self-System Perspective

According to the self-system literature, an aspiration would be considered a form of possible self or personalized representation of the self in a future state. A possible self is a self-schema which contains descriptive and procedural knowledge. The descriptive knowledge or cognitive content represents the picture which an individual has of the self attaining the occupational aspiration. The procedural knowledge consists of behavioral scripts which facilitate the acquisition of the occupational aspiration. The possible self also has an affective component or valence associated with the process of achieving (procedural knowledge) and the actual achievement of the future self or aspiration (descriptive knowledge). The formation process of possible selves is associated with an individual's social context, perception of boundaries and skills and attributes. Because they are not yet achieved and are often not shared with others, possible selves are quite vulnerable to change. Change is associated with the experience and the resulting knowledge gained about both the self and the work world. Change also depends on the

degree to which the possible self is integrated with other components of the self-system and also with knowledge of the work world. If the possible self is poor in vertical structure meaning that it is not well integrated with other components of the self-system on a cognitive, affective and behavioral basis, the likelihood of attainment is greatly reduced.

When active in the working self concept, the subset of an individual's total repertoire of self-representations active at any one time, the possible self acts as a motivator and regulator of behavior. Thus, in order for the individual to realize a desired end state, in this case an occupational aspiration, the individual must keep the possible self representing the aspiration dominant in the working self concept.

The probability of attainment or degree of realism is also a function of the degree to which an individual integrates knowledge of the self and the world of work. Knowledge of the world of work may include job descriptions, educational requirements for specific occupations, educational opportunities, and goal-blockages or employment barriers. By integrating self and occupational knowledge, occupational aspirations may be formed which have a higher degree of realism and greater likelihood of attainment as the individual has considered both internal personal factors and external

environmental factors in the process of forming the possible self.

This view that individuals must integrate knowledge about the self and the environment when making career decisions, as evident in the self-system literature, is also central to the career development theories of Gottfredson (1981) and Ginzberg (1988). Gottfredson suggests that through the process of circumscription, individuals make judgements of job-self comparability and accessibility. Determining accessibility, which involves an assessment of external factors, may require compromise in order to increase the occupational aspiration's degree of realism. Ginzberg proposes a notion of increasing realism of choice which suggests that as individuals experience the labour market, they learn more about external conditions such as goal-blockages. This knowledge of the work world is reflected in the increasing realism of their occupational aspirations as the individual considers both subjective and reality factors in decision making. The following two sections will explore both Gottfredson's and Ginzberg's developmental theories of occupational aspriations.

Gottfredson's Developmental Theory of Occupational Aspirations

Overview

Gottfredson's developmental theory of occupational aspirations is based on the assumption that "career development is a progressive process of narrowing occupational

alternatives according to emerging self-concepts" (Lapan & Jingeleski, 1992, p.82). According to this theory, aspirations are viewed as the result of perceptions of the self and world of work as individuals attempt to match salient personal characteristics with attributes of various occupations considered acceptable and accessible (Pryor, 1985). Gottfredson (1981) defines an occupational aspiration as "the single occupation named as one's best alternative at any given time" (p. 548). She proposes that individuals analyze occupations on the basis of occupational images or generalizations. These images are organized along three dimensions (sex type, prestige level and field) to form a cognitive map of the occupational world which is similar across individuals. By referring to their knowledge of occupations (that is, the cognitive map), individuals select occupational preferences which are judged to be compatible with the self (gender, social class, intelligence, interests and values), referred to as 'job-self compatibility'. These resulting preferences are the "wish" rather than the "reality" component of aspirations. Next, 'accessibility', the individual's perception of "the obstacles or opportunities in the social or economic environment that affect one's chances of getting into a particular occupation" (Gottfredson, 1981, p.548), is determined. Judgements of accessibility can be based on many factors such as availability of work in the

surrounding area, perceptions of discrimination or favoritism, ease of obtaining training for the job or lack of knowledge on how to enter the job. Occupational alternatives are selected based on job-self compatibility and accessibility, a subjective determination of the realism of personal choices. If the former is given too much weight, the resulting alternatives are fantasy or idealistic aspirations whereas if the latter is focused on, the resulting alternatives represent realistic aspirations, expectations or plans.

Models of Aspiration Formation and Change

Gottfredson's theory contains two interrelated models: the circumscription model which deals with the process by which aspirations develop and the compromise model which deals with how aspirations are sacrificed and changed when they cannot be realized (Hesketh et al, 1989).

Circumscription Model

"Gottfredson (1981) used the term circumscription in her developmental theory of career aspirations to describe career exploration as a process of eliminating and retaining alternatives" (Leung & Harmon, 1990, p.153). The selection of acceptable alternatives is based on a process of circumscription related to a developmental scheme. People circumscribe or eliminate potential occupational aspirations in a developmental fashion beginning with those unacceptable on the basis of sex type, prestige and then interest. Leung

& Harmon (1990) provide a brief overview of the four stages Gottfredson's (1981) developmental scheme:

> The first stage (ages 3-5) is characterized by an orientation to size and power, and occupations are perceived as adult roles. The second stage (ages 6-8) is characterized by orientations to sex roles, and occupations that are not consistent with one's sex role preference are eliminated. The third stage (ages 9-13) is characterized by an orientation to social valuation, and an awareness of social class results in the elimination of occupations that are lower than one's tolerable-level prestige boundary or higher than one's tolerable-effort prestige boundary. The fourth stage (ages 14 and beyond) is characterized by an orientation to the internal unique self. One develops a unique sense of self and eliminates occupations that are not compatible with one's interests and abilities (p.153).

At each stage of cognitive development outlined above, a new element is incorporated into the vocational self-concept (Henderson et al, 1988) and consequently a new criterion for judging the compatibility of occupations with the self is applied (Gottfredson, 1981). Judgements of job-self compatibility and the circumscription process result in the creation of a range of occupations which the individual has judged to be personally suitable called the 'zone of acceptable alternatives' (Gottfredson, 1981). "A zone of acceptable career alternatives can be traced against all possible fields of work according to three criteria: the compatibility of the perceived sex-type of each job with one's developing sense of gender identity, the compatibility of the perceived prestige level of each job with one's self-

understanding of acceptable status levels and the willingness to exert the effort necessary to obtain each job" (Lapan & Jingeleski, 1992, p.82). The individual will only consider occupations found within this zone when selecting an aspiration (Gottfredson, 1981; Leung & Harmon, 1990). Youth progressively become less flexible in their selection of occupational aspirations and thus the zone of acceptable alternatives narrows as occupations are gradually eliminated.

Compromise Model

The compromise process occurs as individuals attempt to implement their most favored choices within their zone of acceptable alternatives (Pryor, 1985). It is at this point that job accessibility factors come into play as jobs which people desire may be quite different from those actually available to them (Gottfredson, 1981). As individuals try to implement their occupational aspirations, for example through job or education search activities, they generate and gather information on accessibility. "Perceptions of opportunities and barriers to jobs and training (ie perceptions of job accessibility) would be expected to influence vocational aspirations through their impact on one's expectations for obtaining those jobs" (Gottfredson, 1981, p.570). Individuals may be unable to find a job which fulfills their preferences for sex-type, prestige and field of work at the same time. Consequently, preferences are balanced with what is possible

to attain and a compromise must be made. When compromise is needed, those elements of the self-concept which are least central, that is which were incorporated into the self-concept at a late stage of development, are sacrificed first. Thus compromise occurs in the reverse order of circumscription with interests being sacrificed first, followed by prestige, and then by sex-type, which is rarely compromised (Gottfredson, 1981; Hesketh et al, 1989).

Empirical Research

A few researchers have studied various aspects of Gottfredson's theory of occupational aspirations. Henderson et al (1988) examined the circumscription process by investigating whether children's occupational preferences were influenced first by sex-type and next by socioeconomic status. Overall, results did support such a developmental sequence however, sex-typing was evident prior to the age of 6, the age proposed by Gottfredson (1981). Leung & Harmon (1990) studied the construct of the zone of acceptable alternatives and found that parallel to the process of circumscription was an expansion of one's occupational alternatives. Although preferences for sex-type and prestige had their roots in early years, such preferences did not remain stable as suggested by Gottfredson (1981). In fact, subjects at ages 14-17 were considering the widest range of occupations as related to sex-type and prestige. Hesketh et al (1989) tested Gottfredson's

compromise model by comparing the relative importance of sex-type, prestige and interests under compromise situations. No support was found for the model as sex-type was not most resistant to change nor were interests most easily compromised. In a study by Lapan & Jingeleski (1992), Gottfredson's construct of the cognitive map of occupations was replicated. Respondents shared common understandings of the sex-type and prestige levels of a variety of occupations, as proposed by Gottfredson (1981).

Summary of Gottfredson's Theory

According to Gottfredson's theory, aspirations are formed through a process of circumscription. Individuals attempt to match self-conceptions with their knowledge of occupations or cognitive maps. Judgements of job-self compatibility result in the formation of a zone of acceptable alternatives which consists of occupations suitable to the self in terms of sex type, prestige and interests. Aspirations change as a result of the compromise process. Individuals generate and gather information regarding the accessibility of occupational aspirations within their zone of acceptable alternatives. Accessibility relates to the perception of opportunities or obstacles in the social and economic environment which may affect chances of obtaining work in a particular job. As individuals make judgements of accessibility for specific aspirations, most favored choices may need to be compromised.

This process of integrating internal and external factors in the selection of occupational aspirations and making necessary compromises, as proposed by Gottfredson, is also central to Ginzberg's (1988) theory of occupational choice. As will be evident in the next section, Gottfredson's concepts of job-self compatibility and accessibility are closely related to Ginzberg's subjective factors and reality factors and his theory's notion of increasing realism of choice.

Ginzberg's Developmental Theory of Occupational Choice

Overview

In the late 1930s, a team consisting of an economist, psychiatrist, sociologist, and psychologist began to investigate the factors influencing the vocational decision-making of individuals during successive stages of development (Ginzberg, 1988). Ginzberg and his colleagues (Ginsburg, Axelrad and Herma) proposed a developmental theory of occupational choice containing three basic assumptions: (1) occupational choice is a process; (2) the process is largely irreversible; and (3) compromise is an essential aspect of every choice (Ginzberg, 1988, p. 36). The theory suggests that the process of occupational decision-making, which begins at birth and continues on throughout the lifespan, is broken down into three phases: fantasy choices (before 11), tentative choices (between 11 and 17) and realistic choices (between 17 and young adulthood when a person finally makes a choice).

During the fantasy period, children believe that they can become whatever they want and thus an "arbitrary translation of impulses and needs into an occupational choice" (Ginzberg, 1988, p. 36) is made. Occupational choices during the second period are termed tentative because adolescents make choices considering only subjective factors such as interests, capacities and values without incorporating "reality factors". A compromise is made between opportunities and limitations of the environment (reality factors) and the subjective factors (personal preferences) when choices are made during the realistic stage. The tentative and realistic periods are divided into four and three stages respectively (Ginzberg, 1988; Herr & Cramer, 1992). The first three stages in the tentative period are based on subjective factors in the order in which they are considered by the individual in making choices (interest, capacities and values). The fourth stage, labeled the transition stage, occurs when the adolescent is making the transition to further education, employment or a combination of both. The realistic period consists of the exploration stage during which individuals further explore their alternatives, and the crystallization stage in which alternatives are delimited and specificated.

The second assumption of Ginzberg's developmental theory suggested that the process of occupational choice was irreversible. A reformulation of the theory by Ginzberg in

1972 (Herr & Cramer, 1992), reduced the emphasis on the irreversibility of occupational choice. The reformulated view proposed that although decisions made prior and during adolescence will shape an individual's career, later changes in work and life will also influence career. The third assumption underlying Ginzberg's theory is that compromise is an essential component of every choice. According to Ginzberg and his associates, every occupational choice involves a compromise at which time an individual attempts to choose a career which will allow the best use of personal interests, values, and abilities. However, in making this choice, the realities of the occupational world must be considered. "In seeking an appropriate choice, he must weigh his opportunities and the limitations of the environment, and assess the degree to which they will contribute or detract from his securing a maximum degree of satisfaction in work and life" (Ginzberg, 1988, p.362). Ginzberg proposes that individuals constantly try to improve or optimize the fit between the needs and desires of the self and work opportunities or constraints that occur (process of optimization) (Herr & Cramer, 1992).

Increasing Realism of Choice

Several researchers have analyzed Ginzberg's theory of occupational choice and in particular the concept of "increasing realism of choice" which accounts for aspiration change (Cosby, 1974; Howell et al, 1977; Jenkins, 1983). The

central assumption of this concept is that "young people enter the labour market with initially unrealistic occupational goals which are eventually modified by their subsequent experience of the labour market, changing from less to more realistic" (Jenkins, 1983, p.186). As adolescents become more aware of the world of work, work roles and perceived "reality factors" (goal-blockages), the choice process is characterized by increased rationality, and fantasy or idealistic aspirations are diverted into more realistic choices (Howell et al, 1977). Moving from one developmental stage to the next, youth's knowledge of the labour market and labour force increases, their choices (which have narrowed considerably) become more realistic and focused and are accompanied by increased personal commitment (Cosby, 1974). This increased knowledge, resulting from experience, influences youth's perceptions of "reality factors". "The level of these perceived 'reality factors' or 'goal-blockages' is the individual's realization of the social contingencies involved in the maintenance of the present level of aspiration" (Howell et al, 1977, p.335) and thus the level of perceived goal blockage is an intervening variable between idealistic and realistic occupational aspirations. Goal-blockages commonly investigated by researchers include such factors as lack of parental interest, schools previously attended, not enough money to attend technical school or college, race, not wanting

to move, national and local scarcity of 'good jobs', no technical school or college nearby, lack of information about existing opportunities and personal intelligence (Howell et al, 1977; Howell et al, 1984; Cosby, 1974).

Empirical research is mixed in its support of Ginzberg's concept of increasing realism of choice. Cosby (1974) examined adolescents' level of occupational expectation within the framework of increasing realism of choice. He hypothesized that by senior year in high school, students will have gained awareness of internal and external goal-blockages to attainment of occupational goals and that these perceptions would be reflected in an appropriate change in their expectations. However, the findings did not generally support the notion of increasing realism of choice. The author suggested that given the emphasis on higher education, students are not forced to make realistic choices in high school and thus the process has not yet begun by senior high school. Howell et al (1977) applied a causal model depicting the process of increasing realism of choice (developed from Ginzberg's theory) to a sample of high school males. Their results suggested that "realistic choices demonstrate an increasing dissociation from earlier fantasy choices primarily through the formation of perceived reality factors" (Howell et al, 1977). In a study by Jenkin's (1983), the concept of increasing realism of choice was examined through detailed

interviews with a sample of early school leavers. Findings indicated that "there is tentative evidence that those school leavers who fail to get the kinds of jobs that they want may adjust the horizons of their occupational goals downward" (Jenkins, 1983, p.184).

Summary of Ginzberg's Theory

Ginzberg's developmental theory of occupational choice proposes that individuals go through three phases of occupational decision-making. The first phase is fantasy when children believe that they can achieve anything they desire. During the tentative phase, adolescents consider subjective factors or aspects of the self when forming aspirations. It is not until the third phase, realistic, that individuals incorporate reality factors into their occupational decision making. Reality factors represent opportunities and limitations of the environment. At this stage, a compromise may be required between reality factors and subjective factors or personal preferences. The three phases are characterized by an increasing realism of choice. That is, as youth experience the labour market and become more aware of the world of work, their knowledge of reality factors increases. If individuals use this knowledge of reality factors when making career decisions, occupational aspirations will be more realistic and attainable.

Employment and Education Experience

The relationship between labour market experience and the formation and change of occupational aspirations is central to the developmental theories of both Ginzberg and Gottfredson. Ginzberg's (1988) theory suggests that youth enter the labour market with unrealistic aspirations which are modified as they experience the realities of the world of work. Gottfredson's (1981) theory asserts that as individuals experience the labour market, they make subjective judgements of accessibility. These accessibility judgments often result in a change from idealistic to realistic aspirations. Both of these theories focus on employment experience and its relation to changes in occupational aspirations.

Research on the relationship between education and aspirations has focused on the variable of academic ability, achievement and attainment (see for example Bogie, 1976; Danziger, 1983; Farmer, 1985; Hesse-Biber, 1982; Isaac et al, 1992; Kenkel & Gage, 1983; Looker & McNutt, 1989; Marini & Greenberger, 1978; Marjoribanks, 1992b; Odell, 1988; Saha, 1982; Sewell et al, 1969) as opposed to the education experience itself. Dawkins & Braddock (1982) studied factors prior to and during college attendance and their prediction of college outcomes. They found that college experience variables (college activities and college satisfaction) were more important than college grades in predicting long range

occupational aspirations. These results suggest that the experience itself as opposed to the academic achievement of the individual is more important. The authors note that experience variables have received little attention in studies of aspiration formation and change.

Klaczynski & Reese (1991) agree with the assertion by Dawkins & Braddock (1982) that more focus must be placed on the educational experience. They suggest that "in part, this problem has arisen because the major theories of adolescent development focus on universal age-graded changes, and place less emphasis on contextual variations that might result in developmental diversity" (p.442). In an examination of individuals in vocational training or college preparatory trajectory in high school, Klaczynski & Reese (1991) discovered differences in goals and decision making styles. College preparatory students had more of a career preparation orientation (emphasized educational, intellectual and achievement values, set goals related to professional and career success and based decisions on career/educational factors) whereas the vocational training students demonstrated an adult preparation orientation (goals, values and decisions related to preparation for adulthood and attainment of adult status).

As is evident through this review of the literature, few researchers have examined the relationship between either

employment or education experience and aspiration formation and change. However, support is provided to the hypothesis that a relationship does exist through literature on the self-system which explores the association between change in self-schema and experience in general. Russell et al (1992) assert that "experience is the key to change" in the self-system (p.8). As individuals experience different situations such as an employment or education initiative, they may encounter information which is incongruent with pre-existing self-knowledge. If the degree of these incongruencies is slight and insignificant, the information is assimilated and the individual will respond with established behaviors. If the information differs radically from current views of self, then there will be a tendency to ignore the information. Change occurs when the incongruencies are moderate, too large to assimilate but too small to dismiss as irrelevant. The result is the emergence of a possible self (aspiration) which accommodates the inconsistent information thus reducing the cognitive dissonance between existing self-schemas and knowledge gained from the particular social context.

Up to this point, theories of aspiration formation and change have been discussed. The next section will explore the vast amount of sociological literature which investigates the differences between aspirations and expectations and the various factors which may account for individual and group

differences in aspirations. Some of these factors, sell, family and environment, have been referred to in the previous section.

Sociological Perspective

Earlier Research

The conceptualization of the terms, aspiration and expectation, has been credited to Kuvlesky & Bealer (1966). These researchers proposed that "the concept 'aspiration' can be broken down into three analytical elements: (1) a person or persons, (2) wanting (having an orientation toward or about), (3) a social object (i.e., a goal)" (Kuvlesky & Bealer, 1966, p.270). According to this view, each person possesses a variety of goal areas such as education, income, residence and occupation. Aspirations can therefore be classified in terms of goal areas and can also be differentiated qualitatively and quantitatively within goal areas. Within goal areas, the relative level of a given aspiration is determined based on the range of potential achievement and resulting arbitrary limits. Depending on where the individual's choice falls within this range, aspirations are considered high or low. With respect to occupational aspirations, the range of potential achievement is a function of the prestige level of the chosen occupation. For example, an aspiration of becoming a doctor would be judged as high and babysitter as low, in terms of prestige. The orientation element of Kuvlesky &

Bealer's (1966) definition suggests that individuals will have variable degrees of desire to attain the alternatives within each goal-area. Aspirations can be referred to as strong or weak depending on the intensity of the individual's desire or motivation to achieve the goal. It is assumed that the individual will prioritize specific aspirations within goal-areas (such as jobs within the goal-area of occupation) depending on the personal value placed on each. Kuvlesky & Bealer (1966) suggest that an individual may be oriented toward a number of goal-areas at the same time such as occupation, education, residence and income. However, the individual may or may not perceive goal areas as interrelated and this may account for lack of realism in youth's aspirations.

Kuvlesky & Bealer (1966) also differentiate the concepts of aspiration and expectation. Whereas an aspiration reflects what a person wants, an expectation represents what the person expects to get. An expectation is defined as "the individual's estimation of his probable attainment in reference to a particular goal-area, ie, what occupational position he expects to reach" (p.273). The end state of an aspiration also differs from that of an expectation. The aspiration is desired and thus the outcome is positive. An expectation is not necessarily desired and is therefore not considered a goal and the outcome may be favourable or

unfavourable. The authors view expectations as the individual's more or less accurate assessment of a combination of the limits of the external environment in addition to personal values and abilities. They therefore place expectations between aspirations or the psychological preferences or desires that an individual has regarding work statuses and that "residual all other non-preferential factors" such as labour market boundaries, inherited disabilities, age, and gender. Thus, expectations consider not only personal desires (aspirations) but also potential personal and external boundaries.

Miller & Haller (1964) and Haller et al (1974) make a similar distinction between what one desires and what one expects to attain but employ the term, level of occupational aspiration (LOA), to represent both concepts. An individual's LOA is defined as "a limited range of points on the occupational prestige hierarchy which he views desirable or possible for himself; that is, it consists of his conception of a set of occupations within a limited occupational prestige range which on its lower level, is acceptable to him, and on its higher level, is within the range of feasibility" (p.114). The upper and lower level bounds of an individual's LOA (idealistic and realistic limits) form the goal-region of the variable. Goals are also differentiated temporally and thus there is a short-range and long-range LOA. LOA is referred to

as a psychological variable which forms part of an individual's cognitive structure. Similar to Kuvlesky & Bealer's definition (1966), these authors also view the structure as social psychological because it takes its hierarchical structure from the occupational prestige hierarchy, a social structural phenomenon. From a developmental perspective, as students get older, their idealistic LOAs would become less prominent and their realistic ones more prominent. Kuvlesky & Bealer (1966) agree with Miller & Haller's (1964) assumption that the goal-specification of an individual may include a range of particular alternatives as opposed to just one but question the boundaries of this range, arguing that both idealistic and realistic aspirations undoubtedly have ranges of their own.

Current Research

More recent empirical studies have maintained the earlier sociological view of aspirations and expectations. Cobb & MacBrayne (1990), in a review of the literature on adolescents' aspirations, comment on the abundance of research in the 1960s and early 1970s and the lack of research in the later 1970s and 1980s. They report that research on this subject typically differentiates between aspirations and expectations, as originally proposed by Kuvlesky & Bealer (1966). Aspirations are generally defined as "an individual's desire to obtain a status object or goal such as

a particular occupation or level of education" (Cobb & MacBrayne, 1990, p.24). Expectations represent "the individual's estimation of the likelihood of attaining these goals, plans, ambitions or dreams" (Cobb & MacBrayne, 1990, p.24; Hansen & McIntire, 1989, p.39). Other researchers make a similar distinction between aspirations and expectations but use the term aspirations to refer to both the desires and the expectations of individuals. The two forms of goals are differentiated by referring to the former as idealistic aspirations and the latter as realistic aspirations (Haller et al, 1974; Howell et al, 1984; Marjoribanks, 1992a; McCracken & Barcinas, 1991; Miller & Haller, 1964). Other research investigates the relationship between aspirations and expectations, and attainment, the behavioral realization of these goals. Such research is based on the assumption that aspirations and expectations are in some way predictive of actual attainment.

General Findings

Cobb & MacBrayne (1990) and Hansen & McIntire (1989) report three consistent findings in the aspiration literature: the aspirations of youth are usually higher than their expectations, expectations generally decline with age while aspirations remain high and both aspirations and expectations are higher than actual attainment. Why do these differences emerge among these three variables? Aspirations, typically

measured according to prestige level, undoubtedly represent what people have socially learned to be the occupations which offer the highest statuses and thus the best lifestyles (values and expectations) (Hansen & McIntire, 1989). Youth are faced with such images of prestigious occupations and associated lifestyles in their immediate social environment at home, in school, among their peers, in the community and through the media (Cobb et al, 1989; McCracken & Barcinas, 1991; Odell, 1988). These expressed aspirations may not be real and genuine but superficial and a reflection of what youth think would be ideal jobs to have (Cobb et al, 1989). However, little time and effort has been given to assessing the self and the labour market when expressing such aspirations. Choices are based on what the individual would like to have in an ideal world but of course there are personal and environmental limitations to what a person can attain. Expectations, on the other hand, represent individuals' estimation of the likelihood of attaining goals (Hansen & McIntire, 1989). Consequently, in developing expectations, individuals give careful consideration to internal and external factors that potentially influence the attainment of goals. They are a result of the assessment of one's resources; that is, one's personal abilities, skills, attributes, values and attitudes, financial resources, opportunities; as well as the limitations of the labour

market. Attainments are perhaps even lower than the aspirations and expectations because of the limited control which people have over economic conditions. For example, an individual can take a course on job search skills and write an effective resume and prepare and attend a good interview but the final decision of who to hire is up to the employer.

Summary of Sociological Perspective

Literature on occupational aspirations is largely concentrated in the sociology discipline. Sociological researchers have done extensive work on defining aspirations and have conducted numerous studies on factors associated with aspiration formation and differences in level of aspirations among various groups. Such research generally differentiates between the concepts of aspiration, or what a person would like to achieve, and expectations, or what a person expects to achieve. The former, based solely on an individual's hopes and dreams, is considered an idealistic goal which offers a desirable and favourable end-state. The latter is labelled realistic as it takes into account both subjective or personal factors and limits of the external environment. An expectation is therefore a function of the individual's assessment of the probability of reaching an occupational goal given internal and external factors. The end-state may be desired or not desired, favourable or unfavourable. Recent empirical studies have maintained this earlier sociological

view of aspirations and expectations although some authors have preferred to use the terms idealistic and realistic aspirations. General findings are that aspirations are higher than expectations and that, given one's limited control over economic conditions, both are higher than actual attainment. Next follows a discussion of the factors associated with aspiration formation as investigated by sociological researchers.

Factors Influencing Aspiration Formation

Gender

Perhaps the most signficant change in the Canadian labour force over the past decade was the substantial increase in the participation rate of women. In 1975, women constituted 36.9% of the labour force, a figure which steadily increased and reached 44.3% in 1989 (Labour Canada, 1990). Despite efforts by the Women's Movement to open the occupational opportunity structure for women, female workers continued to be concentrated in the clerical, services, medical and health, teaching and social sciences fields. Data from Statistics Canada reveal that women were clearly underrepresented in the nation's top 10 highest paid occupations, jobs often classified as traditionally male such as physician, judge, dentist, pilot and engineer (Labour Canada, 1990). Although legal and economic advances have broadened the roles permissible for each gender, the sex stereotyping of

occupations, which results in judgements that men and women are best suited for different roles, was still evident (Clemson, 1981). "In American society, there is a pronounced gender-typing of occupations with the result that most people 'know' which jobs are feminine, which are masculine, and which may be filled by either men or women" (Kenkel & Gage, 1983, p.129-130). There has been evidence that this gender segregation in the occupational structure is reflected in the aspirations of adolescents (Clemson, 1981; Kenkel & Gage, 1983; Marini & Greenberger, 1978; Shapiro & Crowley, 1982). Girls generally aspire to a narrow range of female-dominated white-collar occupations in the middle of the prestige hierarchy while boys aspire to a much wider range of professional, scientific and either skilled and unskilled occupations ranging from quite high to low on the prestige scale. Even the rise in the educational aspirations of female students has been attributed, not necessarily to a rise in female ambition and aspirations to enter male-dominated high prestige and high paid jobs, but to changing educational requirements for traditionally female occupations such as social worker, nurse, librarian, secretary and teacher (Dunne et al, 1981; Looker & McNutt, 1989).

There are, however, conflicting findings regarding gender differences in occupational aspirations. Some studies have revealed significant differences and yet others have actually

found that females had higher aspirations than males. Apostal & Bilden (1991) studied gender differences in the educational and occupational aspirations of a sample of 192 students from three rural North Dakota schools. Their data revealed that both sexes had high aspirations. No gender difference was found in educational aspirations but the female students expressed significantly higher occupational aspirations than the males. Dunne et al (1981) analyzed sex differences in the educational and occupational aspirations of rural youth (926 girls and 861 boys) in grades 10, 11 and 12. Female students had significantly higher educational aspirations, same or higher occupational aspirations and equal ranges of job choice in comparison to the male students. The data revealed that the shift away from highly stereotyped job choices was in the direction of neutrally perceived occupations as opposed to toward jobs stereotyped for the opposite sex. Bogie (1976) analyzed the extent of aspiration-expectation discrepancies among 1835 Kentucky high school seniors with respect to several career choice variables including gender. Forty percent of the students who aspired for professional occupations expected to enter occupations lower in status and discrepancies between an individual's aspirations and expectations occurred more often for females than males.

Socialization

The perpetuation of the gender segregation of the labour

force by the aspirations of youth has prompted the examination of gender differences in the occupational aspirations of youth. Many researchers have attributed sex-related differences in career aspirations to the socialization process (Auster & Auster, 1981; Danziger, 1983; Fiorentine & Cole, 1992; Franken, 1983; Jacobs, 1987; Kenkel & Gage, 1983; Looker & McNutt, 1989; Marini & Greenberger, 1978). "Early life socialization is often accorded an important if not decisive role in shaping the labor force experiences of women" (Jacobs, 1987, p.122). Traditional sex-role expectations view the man as economically independent, the principal breadwinner and main achiever with women being assigned homemaking and childrearing as priority and a career as optional (Danziger, 1983; Marini & Greenberger, 1978). This form of gender socialization results in young women perceiving the pursuit of a successful career as a transgression of norms. As a result, often "young women place limits on their ambition, emphasize the primacy of their domestic role, and select normatively appropriate, 'feminine' occupations" (Fiorentine & Cole, 1992, p.470). In a study by Hesse-Biber & Gosselin (1982) which examined the lifestyle and career plans of Boston college undergraduates, occupational expectations of males and females differed in that women expected to enter more traditional types of work and were much less confident. They aspired to less occupational success than males, expected lower salaries

and were more likely to expect parttime work. The authors attributed these differences to conflicting priorities in choosing an occupation among men and women, undoubtedly a result of the socialization process. The women in the study valued career advancement and high salary less than males and instead looked for work that was flexible enough to allow for the combining of childrearing and social benefits to others. Interestingly, those women coming from a Catholic background were more likely to hold the belief that women with children should curtail their labour force participation and care for their husband and children. This belief was reflected in their future occupational plans.

It appears that sex-typing of occupations begins in early childhood and thus children should be taught at an early age to view occupations as open to both men and women and be helped to develop nonstereotypic attitudes so that personal aspirations will be less gender-typed (Auster & Auster, 1981; Franken, 1983). Franken (1983) studied sex role expectations, vocational aspirations and perceptions of occupations of 120 boys and girls from three age groups (preschool, second and fifth grade) and different SES levels. Aspirations expressed by the children conformed to traditional sex roles with a significant relationship between sex typing of aspirations and the sex of the respondents. In a study by Henderson et al (1988) of sex-typing in occupational preferences, it was

revealed that sex-typing in children's aspirations is evident prior to age six.

Certain studies have suggested that the socialization process may have a greater effect on boys in terms of the formation of stereotypic aspirations. Clemson (1981) examined the sex role stereotyping of a sample of 815 senior youth deemed disadvantaged in 25 US sites in an effort to determine whether sex role flexibility is related to personal vocational aspirations. When vocational sex stereotyping was measured, it was revealed that females are more flexible than males and that females rated occupations more neutrally than males. The youth who were more flexible in their sex stereotyping of jobs expressed higher vocational aspirations. In Franken's study (1983) of the sex role expectations and vocational aspirations of children, she found that boys demonstrated significantly greater sex-typing than girls in their aspirations. In a Canadian study by Looker & McNutt (1989) of the occupational and educational plans of youth, males were more stereotyped in their occupational plans with 90% planning to enter occupations which were predominantly male whereas one-third of the females chose traditionally male jobs. The authors report that "Our respondents' explanations of their choices indicate that economics or other objective characteristics of the work world are not the only considerations. Rather, their jobs appear to be part of the ongoing process whereby many young

people, particularly males, reaffirm their gender identity" (Looker & McNutt, 1989, p.364). Hesse-Biber & Gosselin (1982) reported that among the college undergraduates studied, women were more likely than men to choose a nontraditional occupation. Henderson et al (1988) found that although sex-typing in occupational preferences existed among both boys and girls, girls were much more flexible and demonstrated a better capability to "break away from traditional sex-role stereotypes" (p.45). Leung & Harmon (1990) explored Gottfredson's construct, zone of acceptable alternatives, and its relationship to gender and sex role orientation. They found that men were less likely than women to cross gender boundaries in occupational aspirations. As in Clemson's analysis (1981), a flexible sex role attitude was associated with having more flexible ranges of occupational aspirations on the basis of both prestige and sex-type. Sex-role traditionality was associated with lower occupational aspirations for both genders in Shapiro & Crowley's (1982) analysis of the employment aspirations of youth aged 14-21.

Fiorentine & Cole (1992) proposed an alternative theory to explain why women may change and lower their aspirations more so than men. They conducted a study of the "pre-med persistence gap" where women are less likely than men to complete undergraduate premed programs and apply to medical school. They tested four plausible explanations consistent

with theories of gender inequality, and suggested that socialization results in women having two socially acceptable routes to claiming legitimate adult status. The normative alternatives approach suggests that it is normatively appropriate for women to pursue either a career and work fulltime or be a fulltime wife and mother. Consequently, if faced with doubts, failure or dissatisfaction in their careers, there are fewer disincentives for women to change or lower their aspirations. Men, however, have only one socially appropriate avenue to status and that is through a successful career.

Structural barriers

A second theoretical approach which attempts to explain gender differences in aspirations is the structural barriers approach which examines perceived differences in job opportunities and market structure (Danziger, 1983; Fiorentine & Cole, 1992). "In other words, to the degree that women regard their opportunities as more restricted than those available to men, girls tend to persuade themselves that high career aspirations are unrealistic" (Danziger, 1983, p.684). Berman & Haug (1979) explored this approach from the perspective of "mobility discrepancy", or the perceived mobility between aspirations and expectations. The researchers had hypothesized that females would express greater discrepancies or differences between what they hoped

to achieve and what they expected because they generally encounter more obstacles to achievement and have limited access to resources and opportunities than males. It was found that measures of mobility discrepancy were not associated with the gender variable. However, when level of aspiration was controlled, differences did exist among high aspirerers. Females aspiring to high status occupations showed more mobility discrepancy than males; that is, the occupations they expected to enter were much lower than the occupations they aspired to attain. A study by Marini & Greenberger (1978) on the aspirations and expectations of 11th grade students reported similar findings. They found that the discrepancy between aspirations and expectations was greater for girls than boys at higher levels of aspirations and that girls aspiring to male dominated occupations generally did not expect to enter such occupations.

Self-perception

Earlier researchers investigated the association between self-esteem and sex-related differences in aspirations, proposing that women's low self-esteem often results in the choice of a traditional role and career. More recent findings, however, report that men and women have similar scores of global self-esteem and that career goals and life priorities are actually associated with differences in self-confidence related to specific self-concepts (Zuckerman,

1985). Zuckerman's (1985) analysis revealed that women who expressed greater self-confidence in "masculine" spheres of math and science tended to express higher educational goals in male-dominated fields. Women's self-concept in achievement orientation, considered to be another masculine trait, was associated with their ranking of a career as an important priority in their lives. Hollinger (1983) agrees with Zuckerman (1985) and suggests that "While global measures of self-concept or self-esteem may have limited discriminating value, self-estimates of career-relevant skills and abilities, which constitute a more circumscribed and career-related component of an individual's self-esteem, should have substantially greater discriminating power" (p. 50). She studied the role of self-perception of ability and the career aspirations of mathematically talented females and found that the greater the self-estimate of science ability, the greater the likelihood that the individual would aspire to a nontraditional career in math or science. Those girls who rated themselves highly in stereotypically female traits such as artistic and office skills, tended to aspire to either gender neutral or traditionally female occupations.

Other researchers have studied the association between self-concept and aspirations in terms of self-efficacy expectations or "beliefs about one's ability to successfully perform a given task or behavior" (Lent et al, 1986, p.265).

The assumption is that self-efficacy beliefs are related to expressed interests, in particular occupations, range of perceived career options and persistence and success in chosen fields. Results from a study by Lent et al (1986) of students considering science and engineering careers revealed that self-efficacy beliefs significantly predicted technical grades, retention and perceived career options independently of interests, math ability and past achievement. Post-Kammer & Smith (1985) examined the relationship between gender differences in self-efficacy of eighth and ninth graders and consideration of traditionally male and female occupations. Sex differences emerged, but only for a select group of occupations. For example, with regard to traditionally male occupations, boys indicated greater self-efficacy than girls for drafter and engineer. With regard to traditionally female occupations, girls expressed greater self-efficacy than boys for the occupations of dental hygienist, secretary, social worker and home economist. Overall, boys tended to have similar self-confidence in meeting the educational and job requirements for both traditionally male and female occupations; however, girls expressed greater self-confidence for traditionally female occupations. In a study conducted by Lapan & Jingeleski (1992) of eighth graders, boys expected to attain and had greater beliefs in their ability to be successful in occupations which both boys and girls agreed are

masculine jobs. The same was true for girls in terms of occupations considered feminine by both genders.

Summary of Gender Influences

Research on gender differences in occupational aspirations demonstrates that gender segregation in the occupational structure of the labour market is reflected in the aspirations of adolescents. Young women often aspire to a narrow range of female dominated white collar occupations in the middle of the prestige hierarchy. Young men tend to aspire to a wider range of professional, scientific, semiskilled and unskilled occupations ranging from high to low on the prestige scale. In general, the occupational aspirations expressed by males are higher than those expressed by women. Women also tend to have greater discrepancies between their aspirations, or what they hope to achieve, and their expectations, or what they expect to achieve.

Gender differences in occupational aspirations have been attributed to several factors. One is the socialization process which teaches traditional sex-role expectations for males and females. Another is the sex-typing of occupations, evident at an early age, which often results in the formation of stereotypic aspirations. Structural barriers or perceived differences in job opportunity and market structure may cause young women to view their opportunities as more restricted. Finally, self-perception, such as specific self-conceptions,

self-estimates of ability and self-efficacy beliefs, are believed to play a signficant role. Next follows an examination of the effects of region of residence on the occupational aspirations of youth.

Region of Residence

Size of community or rural/urban residence is a variable which many researchers have focused on in their studies of the educational and occupational aspirations of youth. This focus in the literature is based on the premise that:

> The uniquely patterned opportunity structure and the balance between educational and work opportunities in an area undoubtedly structure the nature and range of career options. In other words, a rural or urban context can be seen as a set of parameters through which and by which career plans are shaped, molded and eventually crystallized (Lyson, 1986, p.340).

Earlier studies generally revealed that rural students have much lower aspirations than their urban counterparts, often resulting in lower occupational attainment (Apostal & Bilden, 1991; Cobb & MacBrayne, 1990; MacBrayne, 1987). The considerable difference between the aspirations of rural and urban youth is often attributed to the major limitations imposed upon the career development of students as a result of geographic location. "Rural students, in comparison to their urban counterparts, have had unique circumstances to contend with when making decisions about education and careers" (Apostal & Bilden, 1991, p.153). These "unique circumstances"

include such factors as reduced accessibility to higher education (Apostal & Bilden, 1991), lack of diversity in the education programs offered by rural schools (Odell, 1988), lack of access to career information resources and restricted career counselling services, limited exposure to and awareness of the diverse world of careers, limited access to opportunities which allow students to experience or sample alternatives for career expression (such as parttime work, job shadowing and volunteer sites), lack of non-traditional role models for both genders and exposure to more traditional lifestyles and roles.

More recent studies report conflicting findings concerning the association between region of residence and the formation of aspirations. Certain authors suggest that the gap between the aspirations of rural and urban youth has been closing (Apostal & Bilden, 1991, Cobb & MacBrayne, 1990, MacBrayne, 1987). Apostal & Bilden (1991) studied gender differences in the educational and occupational aspirations of a sample of 192 students from three rural North Dakota schools. Their data revealed that both sexes had high aspirations. For example, 77.4% of the females and 67.8% of the males planned to attend a four year institution of higher education and 15.5% of the females and 21.1% of the males listed a two year post-secondary program.

Yet others assert that the difference still exists and

should be of major concern to researchers and practitioners. According to Cobb et al (1989), "there is a growing body of evidence that rural youth in general have lower levels of academic and vocational aspirations than their counterparts in suburban and urban areas" (p.11). They analyzed aspiration related data collected from a longitudinal study (High School and Beyond - HSB) which involved a sample of 10,416 students to determine if rural youth differ from urban youth in terms of vocational and educational aspirations. Results indicated that rural students, in comparison to urban, aspire less often to continuing education. When they do aspire to post-secondary education their expectations for educational attainment are lower, their levels of self-confidence in completing degree requirements are lower, they have a greater tendency to expect to enter the workforce immediately following high school, and they aspire to lower level careers and professions. Shapiro & Crowley (1982) used data from the 1979 National Longitudinal Study (NLS) to analyze the employment aspirations of youth aged 14-21 and found that those youth raised in a rural setting had lower occupational aspirations than their urban counterparts. In a study by Hansen & McIntire (1989), rural students reported that they would be satisfied with lower levels of education and aspired most often to lower level positions than their urban peers. For example, 37.3% of rural students compared to 24.1% of

urban students indicated that a high school diploma would be the lowest education that they would be satisfied with and 15.2% of urban compared to 9.0% of rural students aspired to higher professional occupations.

McCracken & Barcinas (1991) examined differences between rural and urban schools, student characteristics and students' educational and occupational aspirations. Rural/urban differences anticipated by the authors were found. Students living in rural areas tended to be from families of lower socioeconomic status (SES), families were larger, and the education of parents was lower. Each of these variables has been shown to be significantly related to aspiration formation and will be discussed further in a following section on family structure variables. There was a significant but small difference in the SES index scores of students' occupational aspirations with urban students expressing slightly higher aspirations. Urban students expected higher incomes. The two groups did not differ in terms of their confidence that they would achieve their aspirations. In terms of educational aspirations, students differed in the areas they planned to study. Rural students chose areas which were easily identifiable and observable to them such as agriculture, education, and health sciences whereas urban students aspired to study arts, sciences, social sciences and business. Rural students were more likely to say they wanted to attend a

technical institute with a higher percentage of urban students planning to enter a four year college program.

Differences in the aspirations of rural and urban students have also been studied in terms of differences in the expectations which rural and urban parents hold for their children. "Aspirations are influenced considerably by the communicated expectations of signficant people who interact with the individual. If those expectations are high and consistent over time, then there would appear to be a greater likelihood that the individual's aspirations will be similarly high. Conversely low aspirations will result in low aspirations" (Cobb et al, 1989, p.12). In their study of the High School and Beyond data, Cobb et al (1989) found that the parents, teachers and counsellors of rural students hold lower career and education aspirations for them than do the significant others of urban students. Other authors report similar findings. Odell (1988) examined the relationships between parental expectations of 491 rural Ohio high school students and their educational and occupational expectations. The author reports that "expectations parents held for their children for education beyond high school had a profound influence upon plans for advanced education and area of advanced study" (Odell, 1988, p.20). Hansen & McIntire (1989), in an examination of the educational and vocational aspirations of high school students, discovered that when

rural and urban students' perceptions of their parents' vocational aspirations for them were analyzed, urban students reported higher parental expectations. The McCracken & Barcinas (1991) analysis of rural urban differences also revealed that parents living in rural areas are less likely to expect their children to pursue further education.

Summary of Region of Residence Influences

Research on differences in occupational aspirations related to an individual's region of residence has found that in general, rural youth tend to have lower occupational aspirations than their urban peers. These differences have been hypothetically attributed to the unique circumstances encountered by youth residing in rural areas. As a function of their rural environment, such youth often have reduced access to higher education, limited educational programs to choose from, limited access to career support services to assist in career decision making, limited exposure to the diverse world of careers, limited work experience opportunities, lack of nontraditional role models, and greater exposure to traditional lifestyles and roles. Region of residence differences in aspirations are also related to family structure variables. Rural youth often come from low SES backgrounds, their families are larger, the education level of their parents tends to be lower and parental expectations for their children's success are often lower. As

will be discussed in the next section, such family structure variables are closely associated with lower aspirations.

Family Structure Variables

Socioeconomic status

Several factors are assumed to account for the positive correlation between socioeconomic status (SES) and the occupational and educational aspirations of youth. For example, SES is believed to be related to the occupational aspirations of youth because it affects the economic resources available for higher education and other career-related pursuits, degree of opportunity for role models in the nuclear family, degree of opportunity for personal contact with people in various occupations through friends, family, and travel (Burlin, 1976), level of occupational awareness and knowledge (Bogie, 1976), and specific educational and occupational values which in turn influence level of achievement motivation (Sewell et al, 1957).

The relationship between SES and aspirations has been investigated in many empirical studies and the findings are fairly consistent. Hansen & McIntire (1989) examined the educational and vocational aspirations of high school students in terms of family structure variables. Respondents were divided into four SES quartiles (labelled lowest, second, third and highest). The higher the SES quartile, the higher the education level to which the student aspired. For

example, 55.7% of those students from the lowest SES quartile aspired to less than high school compared to 4.9% of the students from the highest SES quartile. Students from low SES quartiles also tended to aspire to lower occupations in comparison to their peers. Forty seven percent of lowest SES quartile respondents aspired to labourer positions compared to 7% of the highest SES quartile respondents. Harvey & Kerin (1978) examined the relative influence of children's age and SES (as measured by family income) upon the occupational aspirations of 3rd and 8th graders randomly selected to represent an upper and lower income group at both grade levels. Children from the lower SES groups were much more pessimistic in their outlooks on personal opportunity. In the high SES group, as children aged, their educational aspirations increased whereas an opposite trend was observed for the lower SES sample. Higher income children in the eighth grade were more likely to identify higher education as a means to get a job than lower SES children. In a study by Sewell et al (1957), data gathered on 4617 high school students was analyzed to determine the effects of family social status on levels of educational and occupational aspiration when intelligence is controlled. Social status was measured by prestige of parental occupation. A positive relationship was found for both sexes for both educational and occupational aspirations suggesting that social status makes

an independent contribution to aspiration formation.

Farmer (1985), in developing a model of career and achievement motivation for men and women, investigated the relationship between aspirations and a number of background factors including social status. Results indicated that SES had a direct and signficant positive relationship to the level of career aspiration for a sample of young men and women. SES was also found to be significantly related to the realistic aspirations of a sample of female high school students in a study by Burlin (1976). Bogie (1976) analyzed the extent of aspiration-expectation discrepancies among high school seniors and found that other than sex, social class was the strongest overall predictor of aspiration-expectation discrepancy. Aspiration-expectation discrepancies for both males and females varied inversely with family SES. Discrepancies were observed most often in females and males from high SES backgrounds. In a study by Odell (1988), SES was correlated positively with the educational and occupational expectations of a sample of rural youth. Franken's (1983) analysis of the relationship between sex-role expectations and SES revealed that children from lower and lower middle classes showed greater sex-typing then the middle and upper class children. Marjoribanks (1992a) reports that perception of family opportunity structures (a function of SES), which vary considerably between families, account for a large amount of

variance in the occupational and educational aspirations of youth. Both Shapiro & Crowley (1982) and Marini & Greenberger (1978) report that SES has a greater effect on the occupational aspirations of boys than girls.

Parents' Education Level and Employment Status

Some researchers have found a positive relationship between the education level and employment status of parents and the aspirations of youth. In a study by Hesse-Biber & Gosselin (1982), the lifestyle and career plans of Boston college undergraduates were examined in terms of the influences of family background. Parents were a major influence on the aspirations of the sample with the same-sex parent being the most influential. Female students with fulltime working mothers were more likely to plan fulltime employment, expect to continue their education beyond college, aspire to more prestigious careers and expect success. Isaac et al (1992) investigated the relationship between gender, parental education and undergraduates' decision to pursue advanced education. A strong and statistically signficant relationship was observed between the educational level of the same-sex parent and the child's aspirations. McBroom (1985) examined the role of objective and subjective status characteristics of parents in determining the status aspirations of youth. Objective status characteristics such as parents' education or occupation were not as statistically

signficant as the respondents' subjective definition of parental status. For both genders, both subjective definition and mothers' employment status were significantly signficant, contrary to the same-sex modelling effect hypothesis. In a study by Shapiro & Crowley (1982), parents' educational attainment had a signficant positive relationship with the occupational status aspirations of youth. McCartin & Meyer (1988) examined the influence of family variables on the postgraduate plans of adolescents (fulltime work or further education). In comparison to the students who intended to pursue further education, students planning to work fulltime tended to be from families in which parents were in lower status/lower paying jobs and had lower education. Odell (1988) analyzed the relationships between the personal, educational and family characteristics of rural high school students and their educational and occupational expectations. Both parents' occupation and educational attainment were positively related to children's aspirations.

Other researchers have focused their analysis of family structure variables and aspirations on female adolescents. Burlin (1976) reports that "the literature supplies evidence that the educational level and occupational status of a female's parents exert a strong influence on her occupational choice" (p.99). This conclusion was supported in the Burlin's (1976) own examination of the relationship of parental

education and maternal work status to the occupational aspirations of female 11th grade students. The students' ideal and real aspirations were categorized as innovative (occupations with fewer than 30% women), moderate (30%-50% women) and traditional (more than 50% women). The data revealed a signficant relationship between the girl's real occupational aspirations and father's education level. A mother's occupational status (that is, whether she was employed in a traditional or nontraditional occupation) was shown to be a signficant influencer of her daughter's real occupational aspirations. Girls aspiring to traditional or nontraditional occupations were more likely to have mothers working in these same categories. A literature review by Auster & Auster (1981) reported that women choosing nontraditional occupations were likely to have a mother who works in a high profile nontraditional occupation and a father who acts as an achievement model and a source of occupational identity.

The association between education level and employment status of parents and their children's aspirations has been attributed to several factors. The first is the role modelling effect (Isaac et al, 1992; McBroom, 1985; Shapiro & Crowley, 1982). For example, Isaac et al (1992) report that although many factors, such as finances and field of specification, may influence an individual's pursuit of

further education, "It is signficant, however, that role modelling is reflected in the child's educational aspirations: The educational level of the same-sex parent is related to the child's level of educational aspiration" (p.604). Other authors suggest that these variables are indicators of socioeconomic status (Burlin, 1976; Shapiro & Crowley, 1982) and that family resources facilitate acquisition of education and training for higher status occupations.

Family size

The number of siblings is expected to have a negative impact upon aspirations as there is more competition for available resources in large families. Hansen & McIntire's (1989) analysis of the High School and Beyond data revealed that the greater the number of siblings which high school students have, the lower were the educational and vocational aspirations. Children from smaller families more often expected to hold managerial and upper and lower professional jobs whereas their larger family peers expected to hold clerical, craftsperson, homemaker, labourer, military, operative , service or "not working" positions. In a study by McCartin & Meyer (1988), students who planned to work fulltime upon graduation from high school as opposed to pursuing further education were most often from families with a greater number of siblings. McCracken & Barcinas (1991) considered lower educational and occupational aspirations among rural

students in comparison to urban to be a function of family structure variables. For example, students living in rural areas tended to be from larger families than their urban counterparts. In Shapiro & Crowley's (1982) analysis of the employment aspirations of youth aged 14-21, the number of siblings had a signficant negative relationship with aspirations for males only. Auster & Auster's (1981) profile of women choosing nontraditional careers based on a review of the literature suggests that such women are generally from small families.

Summary of Family Structure Variables

Several family structure variables are believed to be associated with the formation of occupational aspirations. SES has been shown to be positively related to aspirations as persons from high SES backgrounds tend to have high aspirations and those from low generally have low aspirations. The nature of this relationship has been attributed to the various ways in which SES affects one's career development. For example, SES is believed to influence the economic resources available for higher education and other career related pursuits, the type of role models in the immediate family, degree of opportunity for contact with people in various occupations (through family, friends, travel, leisure activities), level of occupational awareness and knowledge, and educational and occupational values which influence level

of achievement motivation.

As is the case with SES, parents' education level and employment status is also positively related to children's educational and occupational aspirations. Researchers have shown that persons with parents who have low education levels and work in lower-end jobs in the labour market also tend to possess low aspirations. Youth with parents of low education and low levels of employment also tend to choose work as opposed to further education after completing high school. The relationship between parent education and employment level and children's aspirations is particularly strong with the same-sex parent. For example, females with mothers who work fulltime are more likely to plan for fulltime employment and postsecondary training. Young women aspiring to traditional and nontraditional occupations are more likely to have mothers working in the same category. It is hypothesized that differences in occupational aspirations related to parents' education level and employment status are due to the role modelling effect and also that these variables are indicators of SES and availability of family resources to facilitate acquisition of education for higher status jobs.

The third family structure variable examined was family size. The larger the family, the greater competition for available family resources. Consequently, persons from large families tend to have lower aspirations than those from small

families. Youth from larger families also tend to commence work after completing high school as opposed to availing of any type of post secondary training.

The literature review to this point has focused on definitions of occupational aspiration, theories of aspiration formation and change, and the various factors which influence the development of aspirations. However, it is evident that many youth have yet to develop an occupational aspiration even at the point when they leave school prior to fulfilling high school graduation requirements. To conclude then, the following section will explore the notion of career indecision or undecidedness and career indesiciveness and examine possible explanations to account for an individual lacking an occupational aspiration.

Career Decision Making

Estimates of the percentage of youth and young adults who are undecided about a career reveals that career indecision is a natural occurrence and a common concern for this group (Salomone, 1982; Slaney, 1988). Research in this area has focused on determining if and how career decided and career undecided differ but such research has produced inconsistent results. One group of studies suggests that there are no clear or important differences and that being undecided is a normal developmental state which can be easily resolved (Slaney, 1988). The second group of studies reports that

differences do exist, especially in terms of personality characteristics (Slaney, 1988). In support of the view that differences do exist between decided and undecided students, Holland & Holland's (1977) study revealed that decided and undecided high school and college students differed in terms of their sense of identity and vocational maturity. Kinnier et al (1990) suggested that undecided and decided students differ in terms of family-of-origin enmeshment. High degrees of enmeshment in families often results in a loss of independence, autonomy and experimentation among children (Becvar & Becvar, 1993). In Kinnier et al's (1991) study of undergraduate and graduate students, decided students were more individuated, that is, not from families characterized by enmeshed relationships.

In an effort to account for these conflicting findings, many researchers have adopted the perspective that career indecision encompasses two types of clients: the undecided and the indecisive (Butcher, 1982; Hartman et al, 1985; Hartman et al, 1986; Holland & Holland, 1977; Salomone, 1982; Slaney, 1988). Undecided individuals, encountering a normal stage of development, would not differ from their peers who have reached a career decision. Such a form of developmental indecision is a minor concern which can be dealt with using traditional career decision-making intervention strategies (Hartman et al, 1985). The indecisive individual, however, is

perceived to have personal problems and internal conflicts of a pervasive nature which are more difficult to treat. Indecisive persons, certainly representing a minority of those experiencing career indecision, would account for the differences reported by some researchers between decided and undecided youth. Indecisive clients, facing a more chronic form of career indecision, would require extensive counselling of a complex nature before the actual problem of career indecision can be addressed (Hartman et al, 1985).

Butcher (1982) suggests that the underlying issue concerning career decidedness is the client's degree of "readiness" to participate in the career decision-making process. The term readiness is defined as the individual's willingness to take charge of choosing directions and accept responsibility for potential consequences of personal decisions. It is generally equated with "career maturity", explained by Herr & Cramer (1992):

> It involves affective variables such as career planning, or planfulness, and career explorations, or curiosity. It also involves, among others, such cognitive characteristics as knowledge of the principles of career decision making and ability to apply them to actual choices; knowledge of the nature of careers, occupations, and the world of work; and knowledge of the field of work in which one's occupational preference falls. (p.212)

Butcher (1982) recommends a differential diagnosis of the client's level of readiness as different interventions are needed in response to the readiness factor. The undecided

student's degree of readiness requires counsellors to intervene at the point of choice, providing information and creating structure in an effort to facilitate the career decision making process. The indecisive student's degree of readiness would require an initial removal of psychological and informational blocks to self-awareness before commencing the career decision-making process.

Some researchers, instead of differentiating between the undecided and the indecisive, propose a typology of undecided persons based on personality types (Holland & Holland, 1977; Lucas & Epperson, 1988, 1990). Results of a study by Lucas & Epperson (1988) suggest that undecided students can be viewed as making up multiple subtypes, differing in terms of anxiety, self-esteem, interest in relationships, work and leisure activities, locus of control, perception of barriers , need for vocational information and vocational identity. Their examination of undecided students resulted in the emergence of five undecided clusters and these findings were replicated in a later study by the same authors (Lucas & Epperson, 1990). Martin et al (1991) also suggest that career indecision may be a "complex, multidimensional construct" (p. 187) whose components have distinct antecedents and consequences. Various components are also differentially related to core psychological processes (for example, anxiety, depression, coping efforts, identity status and information processing

styles (Martin et al, 1991, p.188)).

Career Undecidedness

There are many sound reasons why an individual may be undecided regarding a career choice. Indecision may result from a lack of information or knowledge needed in the sorting through of alternatives such as labour market demands, occupational descriptions and requirements, educational opportunities and job search strategies. Not enough information has been gathered to allow for a sound and confident decision (Salomone, 1982). Other individuals may be unable to focus on a specific occupational aspiration because they have many abilities and skills and varied interests (Salomone, 1982). Certain people may not have developed decision-making skills and are consequently unable to implement their self-concept through the use of a career decision-making process (Butcher, 1982). Holland & Holland (1977) suggest that a majority of students are undecided because they don't view a decision as necessary in their lives at present. Thus, being undecided is not necessarily a stupid, uninformed or immature strategy: "In short, a large proportion of undecided students are doing what intelligent adults do - delaying some decisions until reality arrives" (Holland & Holland, 1977, p.412).

Career Indecisiveness

Indecisive clients have difficulty making career

decisions because they possess personal qualities which will make them psychologically incapable of reaching a decisional state of mind and taking a course of action (Salomone, 1982). In a study by Holland & Holland (1977), an attempt was made to characterize decided and undecided high school and college students. Indecisiveness, classified by the authors as a form of indecision represented those individuals who had moderate to severe cases of immaturity, incompetency, anxiety and alienation. Holland & Holland (1977) provide the following comprehensive view of students with indecisive dispositions:

> The indecisive disposition ... is seen as the outcome of a life history in which a person has failed to acquire the necessary cultural involvement, self-confidence, tolerance for ambiguity, sense of identity, self- and environmental knowledge to cope with vocational decision-making as well as with other common problems. Such people should be especially difficult to help because they suffer from a complex cluster of maladaptive attitudes and coping behaviors. (p. 413)

Other researchers have studied the attributes identified by Holland & Holland (1977) as characterizing career indecisiveness. The development of a self and vocational identity during adolescence may result in internal confusion, anxiety and self-doubt. Such individuals who lack a clear sense of identity often are unable to make a vocational decision because they are unclear where they fit in society (Salomone, 1982). Trait-anxiety, hypothesized to be related to a poor self-identity and external locus of control, may

result in a failure to use available resources to make a career decision (Hartman et al, 1985). Thus, the presence of substantial and persistent anxiety may immobilize and prevent individuals from making career choices even though they may have acquired the self and environmental information necessary to make such a choice (Salomone, 1982). Herr & Cramer (1992) propose that "in indecisiveness, a generally dysfunctional personality orientation may cause such choice anxiety that an individual is rendered incapable of making a decision" (p.610). Butcher (1982) suggests that the indecisive client may have a poor self-concept, is externally controlled by others and/or is incapable of separating personal interests from those of signficant others. Brown & Brook (1991) refer to the indecisive client as one lacking "cognitive clarity" defined as "the ability to objectively assess one's strengths and weaknesses and relate the assessment to environmental situations" (p.5). Clients experiencing indecisiveness, unlike those experiencing indecision, are incapable of taking information about themselves, assimilating it into their self-concepts and applying the resulting self knowledge to their environment as they make choices. The authors provide a list of indicators found in the verbalizations of clients that suggest cognitive clarity may be deficient. For example, misinformation: "Only rich kids can go to that university"; injunctions: "I've got to be a lawyer. My Dad's a lawyer, my

grandfather is a lawyer, and my brothers and sisters are lawyers. It's definitely expected"; stereotyping: "Some people have suggested that I consider nursing but I just cannot see myself working with all those women"; and low self-esteem resulting in high unachievable standards: "I do well, but I always feel bad because it just never seems to be enough" (Brown & Brook, 1991, p.41-49). Salomone (1982) asserts that labelling young adults under the age of 25 as indecisive is potentially a serious mistake as youth develop vocationally and otherwise at very different rates.

Summary of Career Decision Making

It is not uncommon for youth to be undecided with respect to their careers and in fact, a state of indecision represents a normal stage of development which can be easily resolved. Several studies have investigated possible differences between youth who are decided and those who are undecided and have been unsuccessful in finding consistent results. The few differences discovered have been attributed to the assumption that there are actually two types of undecided clients: the undecided, a developmental stage of indecision, and the indecisive, a more chronic form of career indecision. Career undecidedness or indecision may be caused by a lack of information or knowledge in the sorting through of alternatives, poor decision making skills, inability to focus on a specific occupational aspiration because of many

abilities, skills and interests, and/or the perception that a career decision is not necessary at present. Career indecisiveness, on the other hand, is related to personal problems and internal conflicts such as anxiety in making decisions, low self-esteem, external locus of control, immaturity, feelings of alienation and failure to develop a self-identity. Career indecisiveness is a condition most common among adults as opposed to youth.

CHAPTER 3 - THEORETICAL FRAMEWORK AND METHODOLOGY

Youth Transition into the Labour Market (YTLM) Study

The data used to address the research questions of this thesis were obtained from a longitudinal study entitled "Youth Transition into the Labour Market" (YTLM) (Spain et al, 1987) aimed at investigating the transition of youth into the Newfoundland and Labrador labour market. The YTLM project commenced in the spring of 1987 under the direction of Dr. William H. Spain and Dr. Dennis B. Sharpe, Faculty of Education, Memorial University of Newfoundland in consultation with the province's Department of Career Development and Advanced Studies. The project consisted of two parallel but interrelated studies which explored the nature of the transition of two groups of youth. One study focused on early school leavers who dropped out of school between Easter 1987 and Easter 1988. The other followed high school graduates who were enrolled in Level 3 (senior high school year) at the end of the 1988-89 academic year. The former cohort, which is the focus of this thesis, was surveyed on three occasions in 1988, 1990 and 1992.

The YTLM study was designed to collect information about three general questions:

> (1) What is the nature of the transition of Newfoundland youth into the labour market, and what are the patterns of transition which relate to success and failure in transition?

(2) What is the status of the individual with respect to (i) aspirations and work values; (ii) search skills; (iii) decision characteristics; (iv) job-holding skills; (v) context factors; and (vi) job-related skills?

(3) What changes take place through a transition stage in terms of: (i) aspirations and work values; (ii) search skills; (iii) decision characteristics; (iv) job-holding skills; (v) context factors; and (vi) job-related skills? (Spain & Sharpe, 1990, p.v).

Data Collection Summary

This thesis is a secondary analysis of the YTLM project's longitudinal study of early school leavers. A detailed data collection summary can be found in Appendix A (reproduced with the authors' permission - Spain et al, 1987). The original group of early school leavers who were surveyed in 1988 were identified with the assistance of schools across the province of Newfoundland and the Department of Education. Youth who left school between Easter 1987 and Easter 1988 were targeted. Information obtained from principals' reports and student withdrawal forms from the Department of Education resulted in the identification of 2109 early school leavers. An interview process was selected as the means for data collection and an interview protocol was developed by the YTLM project team in consultation with the Department of Education's Project Advisory Committee. In its later stages of development, the questionnaire was administered to a small sample of early school leavers as a field test of the instrument. The finished product was highly structured with a few open-ended

questions. Field interviewers, residing in the same areas as participating schools, administered the survey. Of the originally identified group, 1274 (60.4%) were interviewed during the first survey.

The first follow-up survey was conducted in 1990, just over two years after the first set of interviews. This survey was directed at the sample interviewed in 1988 and produced 1012 usable interviews representing 79.4% of the sample obtained for Survey One. The second follow-up survey was conducted in 1992 and resulted in 829 usable interviews. A total of 743 early school leavers, representing 58.3% of the first survey, were interviewed on all three occasions.

Distribution Characteristics of Sample for Current Study

The current study draws on data collected in each of the three YTLM surveys of early school leavers (1988, 1990, 1992). Consequently, the sample consisted of only those early school leavers who were interviewed on all three occasions, resulting in a total of 743 subjects. The breakdown of the sample by gender and region of residence can be seen in Table 1.

Gender

Female early school leavers comprised 38.0% of the sample with 282 respondents. Four hundred and sixty one persons, 62.0%, were male.

Region of Residence

The region of residence distribution of the 743 early school leavers was 75.5% rural (561 respondents) and 24.5% urban (182 subjects). Within the rural group of early school leavers, 339 were male (60.4%) and 222 were female (39.6%). Sixty-seven percent of the early school leavers residing in urban areas were male (122) and 33% were female (60).

The Dependent Variable: Change in Occupational Aspiration Status (CA)

Occupational aspiration in 1988

In the first survey, which was conducted in 1988, respondents were asked to identify their five to ten year occupational aspirations. Responses were assigned occupational codes taken from the Canadian Classification and Dictionary of Occupations (CCDO) (Spain & Sharpe, 1990). The question in the 1988 survey read as follows:

> "We have just been talking about what you think your life will be like in 2 or 3 years time, have you any idea what things will be like in 5 to 10 years?
>
> 29. a) What kind of work will you be doing?" (IERD, 1988, p.12).

Occupational aspiration in 1992

In 1992, as part of the third survey, the early school leavers were asked to identify their three year occupational aspirations. Responses were once again assigned CCDO occupational codes. The question in the 1992 survey read as

follows:

> "F3. What job do you think you will be doing in three years?" (CERD, 1992, p.16).

Change in occupational aspiration status (CA)

In an effort to examine the nature of the change in the occupational aspiration status of respondents in 1988 in relation to 1992, a new variable was created. This variable served as the dependent variable for this study. When surveyed in 1988 and 1992, respondents either identified an occupational aspiration (career decided) or they failed to express an occupational aspiration (career undecided). The variable, Change in Occupational Aspiration Status (CA), was calculated based on the presence or absence of an occupational aspiration at each survey time. An analysis of the 5-10 year aspirations expressed by early school leavers in 1988 and the 3 year aspirations identified by the same respondents in 1992 created four subgroups belonging to the dependent variable of CA (see Table 2). Group NA (110 subjects) consisted of individuals who failed to indicate an occupational aspiration in both Survey 1 (1988) and Survey 3 (1992). This group, which never had a career goal orientation, is referred to as having no aspirations (NA). Group LA (113 subjects) did express an aspiration in Survey 1 but did not in Survey 3, and were considered to have lost aspirations (LA). Those in Group GA (182 subjects) did not have an aspiration in Survey 1 but

did in Survey 3 and consequently gained aspirations (GA). Group MA (338 subjects) expressed an aspiration in both surveys. Therefore, the early school leavers in Group 4 maintained aspirations (MA) from 1988 to 1992.

Independent Variables

Gender

The gender of each subject was taken from the 1988 survey, Part I, Question 4, which asked for the sex of the interviewee (IERD, 1988, p.6).

Region of Residence

Subjects were classified as rural or urban based on the location of the school in which they were registered at the time of school leaving. The Newfoundland Department of Education's definition of rural and urban areas was employed. By this definition, urban areas included census metropolitan and agglomeration areas and communities with a population of 5000 or over with all remaining areas classified as rural (Spain & Sharpe, 1990).

Employment Experience

Two measures of the early school leavers' employment experience were collected: total months worked in 1989 and total months worked in 1991. These variables were created by the authors of the YTLM studies.

Employment experience 1989 (EMP89). The total time worked in 1989 was computed from information provided by

question 37b of the second YTLM early school leaver survey in 1990 (IERD, 1990, p.13). Subjects were asked to indicate if they had worked each month of 1989, and to estimate the number of weeks worked. If a person checked three-four weeks, this was considered full employment for one month. A check of two-three weeks was counted as one-half months of employment. The sum for each month gave the total number of months worked in 1989. It was possible to have worked from 0 to 12 months (Spain et al, 1991).

Employment experience 1991 (EMP91). Respondents' work experience in 1991 was measured in Survey 3 in 1992. Question A1 of the third survey asked subjects to indicate their employment for each month of 1991 (CERD, 1992, p.1). If they worked thirty or more hours per week, they indicated fulltime employment. If they worked less than thirty hours per week, they indicated parttime employment for that month. Fulltime counted as one month worked and parttime counted as on-half month worked. The sum gave the fulltime equivalent, or total employment during 1991. It was possible to have worked 0 to 12 months (Spain, 1993).

Education Experience

Two measures of the early school leavers' education experience were gathered: participation in education/training in 1989 and participation in education/training in 1991.

Education experience 1989 (ED89). The education experience of the early school leavers in 1989 was measured in Survey 2 (1990). Respondents who attended any form of upgrading or skills training, as measured by the following questions, were considered to have participated in education in 1988/89.

> 13. After you leave high school you can take further school work to "upgrade". You can go back to high school, take Adult Basic Education courses, G.E.D., or B.T.S.D. I am going to ask you some questions about each of these courses.
>
> (i) Have you gone back to high school?
> (ii) Have you done A.B.E. (Adult Basic Education) program?
> (iii) Have you done G.E.D. (High school graduation equivalency)?
> (iv) Have you done B.T.S.D.? (IERD, 1990, p.5-6).
>
> 14. I want you to think back over any other courses/programmes you may have taken since you left school.
>
> (i) From July 1988 - December 1989, have you done any courses/programmes? (IERD, 1990, p.6).

Education experience 1991 (ED91). Survey 3 (1992) measured respondents' participation in an educational program in 1991. Question A1 of Survey 3 asked respondents to indicate if they were "at school/taking a course/training" during each month of 1991 (CERD, 1992, p.1).

Perception of Goal-Blockages

Early school leavers' perceptions of eight specific goal-blockages were selected as the other independent variables in this study. Perceptions of employment barriers were measured

in Survey 2 in 1990 (IERD, 1990, p.2). Respondents were presented with a number of problems which youth might confront in securing employment and asked to indicate whether each item was a problem for them. The following provides an overview of the actual question posed by interviewers to respondents from the 1990 survey in addition to the original variable names assigned by the current author to represent each employment barrier or goal-blockage.

> 8. Most young people these days have some problems in finding jobs. I am going to ask you about some of these problems.
>
> (a) Is it a problem to find a job you like?

goal-blockage: "hard to find a job I like"

> (b) Is it a problem for you to know how to go about looking for a job?

goal-blockage: "lack of job search skills"

> (c) Do you have a disability which would cause problems in looking for a job?

goal-blockage: "disability employment barrier"

> (d) Is your age (being too young) a problem in finding a job?

goal-blockage: "age employment barrier"

> (e) Is it a problem for you to find money to travel/to look for work?

goal-blockage: "money employment barrier"

> (f) Is not having enough experience a problem for you in finding a job you would take?

goal-blockage: "lack of experience"

(g) Has the fact that you have not finished high school been a problem in finding a job you would take?

goal-blockage: "no high school diploma"

(h) Has "jobs being scarce" been a problem for you in getting work?

goal-blockage: "lack of jobs"

Statistical Analysis

Hypothesis 1: A three-way crosstabulation of CA, gender and region of residence was constructed and was the basis for log-linear analysis to investigate the significance of the relationship of these three variables.

Hypotheses 2 and 3: The variables EMP89 and EMP91 were continuous and were the dependent variables in a three-way ANOVA with CA, gender and region of residence as independent variables.

Hypotheses 4, 5 and 6: Four-way crosstabulations of ED89, ED91 and perceptions of goal-blockages with CA, gender and region of residence were constructed as the basis for log-linear analysis. In this procedure, the interactions of education experience and perceptions of goal-blockages were of most interest, so attention focuses on these in the reports and in some of the tabulated results.

CHAPTER 4 - RESULTS AND DISCUSSION

Introduction

This chapter consists of an examination of the six hypotheses analyzed in the current study. For each hypothesis, results of the statistical analysis procedures, as outlined in chapter three, will be presented. Tables containing actual results can be found in the appendix and are referenced throughout the chapter.

Hypothesis #1

There is no relationship between change in occupational aspiration status and either gender or region of residence of early school leavers.

There were two reasons for investigating this hypothesis. The first was to obtain an understanding of the sample's career decidedness, indicated by the expression of an occupational aspiration, at the beginning and end of the period. The second was to get a sense of the way the sample's occupational aspirations changed over the five year span. In Table 3, it can be seen that while the majority of persons (60.7%) did express occupational aspirations right after school leaving in Survey One, large numbers did not. At that time, career undecidedness was most prevalent amongst early school leavers residing in rural areas and amongst females. Although there was a general increase in career decidedness

from the initial survey, 30.0% failed to express an occupational aspiration in Survey Three and were thus undecided five years after leaving school. As was evident in 1988, fewer rural, and especially rural women, than urban persons expressed occupational aspirations. Females in general were less likely to be career decided than males.

An examination of the change in occupational aspiration status (CA), based on levels of career decidedness in 1988 and 1992, revealed signficant region of residence and gender differences (see Table 4). The first change status group contained those respondents who had no aspirations at either survey (NA). In general, significantly more rural persons (16.2%) then urban (10.4%) and significantly more females (23.0%) than males (9.8%) had not developed aspirations.

Persons who lost their aspirations (LA) were represented in the second change status group. Losses in aspirations were more evident among rural early school leavers (17.6%) than urban (7.7%). In considering both gender and region of residence, 17.6% of rural females compared to 5.0% of urban females lost aspirations while 17.7% of rural males compared to 9.0% of urban males lost aspirations.

The third change status group were those individuals who gained aspiration (GA). Gains in aspiration were most apparent amongst women, with 28.7% of females gaining aspirations contrasted to 21.9% of males. Thirty percent of

urban females gained aspiration, compared to 18.0% of their male peers. A larger percent of rural females (28.4%) gained aspirations than rural males (23.3%).

Those early school leavers who maintained aspirations (MA) from 1988 to 1992, were included in the final change status group. Males (52.9%) were more likely to maintain aspirations than females (33.3%). Respondents living in urban areas were more likely to maintain aspirations (59.9%) than rural residents (40.8%).

Hypothesis #2

There is no relationship between change in occupational aspiration status, the 1989 employment experience of early school leavers and either gender or region of residence of early school leavers.

A statistically significant relationship was found between the early school leavers' employment experience in 1989 and CA (see Table 5). Those respondents with no aspirations (NA) both in 1988 or 1992 worked significantly fewer months (mean=3.76) than those who lost aspirations (LA) (mean=4.85), or gained aspirations (GA) (mean=5.04). All three groups (NA, LA, GA) worked significantly less than those who maintained aspirations (MA) (mean=6.28).

An examination of gender and region of residence differences in 1989 work experience revealed that men worked significantly longer during this period than women and rural

residents worked significantly less than urban. However, as indicated by an ANOVA, there were no significant interactions of CA, gender and region of residence in relation to work experience in 1989.

Hypothesis #3

There is no relationship between change in occupational aspiration status, the 1991 employment experience and either gender or region of residence of early school leavers.

An ANOVA showed that the three-way interaction of CA, gender and region of residence was significant with respect to the total months worked in 1991. These findings are in Table 6. When considering the subgroup consisting of rural males, differences existed between those who did not express an aspiration at either survey and each of the three other groups. Rural males with no aspirations worked significantly fewer months in 1991 (mean=3.30) than the LA (mean=5.56), GA (mean=6.24) or MA (mean=6.25) status groups. Like rural males, females residing in rural regions who maintained aspirations worked significantly more months in 1991 (mean=5.42) than their peers who lacked aspirations (mean=2.66). The former group also worked significantly more months in 1991 than those who gained an aspiration (mean=3.49).

Urban males who lost aspirations worked fewer months in 1991 (6.0) than all the other status groups (about 7.0

months). There were also differences within the urban females subgroup. Female early school leavers living in urban areas with no aspirations had significantly less work experience in 1991 (mean=0.57 months) compared to those who either maintained aspirations (mean=5.34 months) or gained aspiration (mean=5.72 months).

Hypotheses #2 and #3

The second and third hypotheses examined the relationship between the early school leavers' length of employment experience and their occupational aspiration status. The analysis of this relationship indicated that CA depended significantly on work experience. In general, persons with the longest work experience maintained aspirations. Persons with the shortest experience did not develop aspirations. Individuals with varying levels of experience in between either gained or lost aspirations. The pattern suggested that the initial aspiration is important in setting a cycle of success. Individuals with no initial aspiration followed by little work experience remained career undecided. However, those early school leavers with no early aspirations who enjoyed employment success tended to develop aspirations. Individuals who initially had aspirations but experienced less success in the labour market than their peers, lost aspirations, even though their success was considerable in comparison to those who never developed aspirations at all.

Those individuals who expressed an early aspiration and who secured longer periods of labour force attachment tended to experience greater levels of career decidedness in the form of maintaining an aspiration.

Hypothesis #4

There is no relationship between change in occupational aspiration status, the 1989 education experience of early school leavers and either gender or region of residence of early school leavers.

A loglinear analysis generated a model comprised of the five possible two-way effects between CA, participation in education in 1989, gender and region of residence. None of the three or four way interactive effects were significant. There was a significant relationship between CA and participation in education immediately following school leaving; however, this effect was independent of any influence of gender or region of residence. In general, persons who maintained their aspirations (46.7%) were much more likely to have attended some form of education/training than persons in any of the three other categories (26.4% to 30.6%).

It is to be noted that in 1989, gender and region of residence were independently related to participation in education as reported elsewhere (Spain, 1994). Females (40.8%) participated more frequently than males (34.3%). Urban residents (50.0%) participated more frequently than

rural (32.4%).

Hypothesis #5

There is no relationship between change in occupational aspiration status, 1991 education experience and either gender or region of residence of early school leavers.

As shown in Table 8, loglinear analysis failed to generate a model that included a signficant interaction of CA with participation in education in 1991. The sole independent determinants of 1991 educational experience appeared to be gender and region of residence.

Hypothesis #6

There is no relationship between change in occupational aspiration status, the perception of specific goal-blockages to obtaining employment including:

hard to find a job I like
lack of job search skills
disability employment barrier
age employment barrier
money employment barrier
lack of work experience
no high school diploma
lack of jobs

and either gender or region of residence of early school leavers.

It was discovered that CA was related to the perception

of goal-blockages or barriers to the attainment of occupational aspirations. Table 9 provides a breakdown of CA by perception of each individual goal-blockage. In general, fewer of those perceiving a goal-blockage maintained their aspirations. Among those perceiving goal-blockages, the tendency to have had no aspirations was greater than if no blockages were perceived. This pattern suggests that the perception of a barrier results in individuals either remaining undecided with respect to a career or losing focus and career direction. Some goal-blockages were perceived more frequently than others, even by those who gained and maintained aspirations, but not all were related to aspiration change.

Log-linear analysis of the relationship between change in occupational aspiration status, perception of goal-blockages, gender and region of residence failed to reveal significant three and four way effects. In some cases, it was found that the perception of blockages was independently associated with gender and region of residence. These effects, however, were unrelated to change in occupational aspiration status.

Hard to Find a Job I Like:

Of all school leavers, 64.3% perceived this as a problem. Significantly more early school leavers who indicated that it was hard to find a job they liked either had no aspirations or lost aspirations in comparison to those respondents who did

not perceive this problem. A greater proportion of those who did not believe that it was hard to find a job they liked tended to maintain aspirations. The relationship was not signficant when gender and region of residence were factored into the analysis either separately or in combination. However, there was a trend among male early school leavers and rural early school leavers who perceived this goal-blockage as a problem to either have no aspirations or be less likely to maintain aspirations.

Lack of Job Search Skills:

Early school leavers who perceived their lack of job search skills as a goal-blockage maintained aspirations less often than those who did not. Instead, there was a greater likelihood that they would have no aspirations at all, although some tended to gain aspirations. It is important to note that although this relationship was significant, a lack of job search skills was perceived by only 25.5% of the sample. No signficant effects related to gender or region of residence were observed, either independently or in conjunction with CA.

Disability Employment Barrier:

Respondents who believed that they had a disability which created a goal-blockage were more likely to have no aspirations and less likely to maintain aspirations in comparison to those who did not indicate that a personal

disability was an employment barrier. There were no signficant effects related to gender or region of residence. Only a small percentage of the sample (5.5%) perceived a personal disability as a goal-blockage.

Age Employment Barrier

The relationship between occupational aspiration status and age as an employment barrier was not significant, and was perceived by only 13.2% of the sample.

Money Employment Barrier

The relationship between the early school leavers' status of occupational aspiration and the perception of money as a barrier to employment (as indicated by 46.1% of the sample) was not signficant.

Lack of Experience Employment Barrier

The employment barrier of lack of experience did not prove to be significantly related to the occupational aspiration status of the sample of early school leavers. However, it was the most commonly perceived problem (69.5%) and its perception was significantly related to gender.

No High School Diploma Employment Barrier

Approximately one-half (49.3%) of the school leavers saw this as a problem for them. Of those perceiving it as a problem, there was a tendency to have had no aspirations and they were less likely to have maintained their aspirations. Some who perceived the goal-blockage tended to gain

aspirations. There were no signficant effects associated with gender or region of residence.

Lack of Jobs Employment Barrier

This problem was perceived very frequently, by 68.9% of the sample. Early school leavers who viewed poor economic conditions and the resulting lack of jobs as a problem were more likely to lose aspirations and less likely to maintain aspirations when compared to those respondents who did not. The tendency for them was to have lost their aspirations. When the variable of gender was examined in relation to these two variables, the relationship was signficant. Those males who viewed a lack of jobs as a barrier to employment were more likely to lose aspirations and less likely to maintain aspirations, in comparison to females. When exploring region of residence, as with the males, more rural respondents who indicated that the unavailability of jobs was a problem tended to lose aspirations and fewer tended to gain aspirations, although the effect was not significant.

CHAPTER 5 - SUMMARY AND RECOMMENDATIONS

Introduction

This chapter commences with a discussion of the study's findings. Profiles of the four CA groups are provided to show how changes in career decidedness are related to the variables of gender, region of residence, employment and education experience and the perception of goal-blockages. A comparison of the four groups in relation to these variables is presented. Program interventions aimed at facilitating the formation of occupational aspirations among youth and increasing their levels of career decidedness are explored. Finally, the chapter concludes with several recommendations for further research to build on the findings of the current study.

Profiles of Four CA Groups

An analysis of the occupational aspirations of early school leavers in 1988 and 1992 produced four groups (CA) which reflected changes in the career decidedness of the respondents. The first group consisted of those who had no aspirations (NA) either at the time of school leaving or in 1992. The second group did have occupational aspirations in 1988 but lost aspirations (LA) during the four year period after school leaving. Group three, although undecided at school leaving, expressed an occupational aspiration in 1992

and thus gained aspirations (GA). Early school leavers in group four were career decided at both survey times, having maintained aspirations (MA) over the four year span.

The CA groups differed significantly in terms of gender, region of residence, employment experience (1989 and 1991), education experience (1989) and perception of goal-blockages. The following profiles describe each group with respect to these independent variables.

Group 1 - No Aspirations (NA)

Respondents in this group tended to be female and to reside in rural areas of the province. They experienced the lowest amounts of employment (average of 3.76 months in 1989 and 3.43 months in 1991) and were the least likely to have attended some form of education or training during the year following school leaving (26.4%). These early school leavers perceived four goal-blockages: (1) hard to find a job I like; (2) lack of job search skills; (3) disability employment barrier; and (4) no high school diploma. In comparison to the other groups, they were less likely to perceive lack of jobs as a goal-blockage.

Group 2 - Lost Aspirations (LA)

Similar numbers of males and females were represented in this group, however, respondents were more likely to reside in rural regions. Their levels of employment experiences were moderate (4.85 months in 1989 and 5.04 in 1991), although

their participation in an educational program was low (30.1%). The group perceived two goal-blockages: (1) hard to find a job I like; and (2) lack of jobs.

Group 3 - Gained Aspirations (GA)

There was a concentration of females in this group, residing in both rural and urban areas. Employment experience was moderate with an average of 5.04 months worked in 1989 and 5.64 months worked in 1991. Attendance in some form of schooling in 1989 was low (28.6%). Individuals tended to perceive two goal-blockages: (1) lack of job search skills; and (2) no high school diploma.

Group 4 - Maintained Aspirations (MA)

Early school leavers in this group tended to be male and for the most part, they resided in urban centres. They experienced greater amounts of labour market success than any of the other groups (6.28 months in 1989 and 5.98 months in 1991). They were also most likely to have attended some form of schooling (46.7%). In general, these respondents perceived goal-blockages less frequently than any of the other groups.

Discussion of Research Findings

In order to propose interventions aimed at facilitating aspiration formation and increasing the career decidedness of youth, a greater understanding is needed of the differences between the four CA groups. Of the early school leavers who

were undecided in 1988, why did some remain undecided over the four year period whereas others formed occupational aspirations? Of those who expressed an occupational aspiration during the initial survey, why did some maintain a level of career decidedness whereas others lost focus and became undecided? An examination of each group individually and in relation to the others with respect to gender, region of residence, employment and education experience and perception of goal-blockages, provides some plausible explanations for these findings.

An examination of the relationship between career decidedness and employment experience yielded some interesting results. In general, those early school leavers in the MA group, who were career decided at both survey times, experienced the most labour market success. Youth in the NA group, who were undecided in both 1988 and 1992, experienced the lowest levels of work experience. The LA and GA groups had moderate levels of employment. The longer duration of employment experienced by the MA group may be due to the tendency of this group to reside in urban areas. It would be expected that the availability of work is greater in urban areas in comparison to rural, where the majority of the respondents with the least work experience, the NA group, resided.

There was little tendency, however, for the NA group to

have perceived a lack of jobs as a goal-blockage, suggesting that their little work experience may be attributable to other factors. It is possible that the actual number of jobs available were not the concern. Perhaps it was the nature of the particular job opportunities. The NA group expressed difficultly in finding work they liked, indicative of the often limited job opportunities in rural economies. In these areas, jobs are generally concentrated in traditional resource based industries and are seasonal in nature. Government subsidy programs aimed at creating employment opportunity in these areas are often classified as "makework" initiatives which provide little meaning and self-relevance for the individual.

The more diverse job opportunities are, the greater likelihood that youth will be able to secure employment associated with the scripts of their occupational aspirations. Securing self-relevant work may serve as a validation of one's occupational aspiration thus making the aspiration more resistant to change. The likelihood of maintaining that aspiration is therefore increased. For the MA group, their success in the more prosperous urban labour market, may have helped to set their aspirations in reality. The LA group, whose rural residence may have restricted opportunity, experienced significantly less labour market success. These early school leavers believed that there were few jobs

available and that it was difficult to find a job they liked. Consequently, these individuals may not have perceived themselves as moving toward achieving their personal goals. Because an aspiration is a future self, it is vulnerable to change. Lack of employment experience related to that aspiration may have resulted in an extreme change - an actual loss of aspiration. The NA group, due to their undecidedness, would be unlikely to perceive much self-relevance in their employment experiences. This may result in a lack of motivation to work, restricting job opportunity from a personal perspective.

Accessibility from a personal as opposed to economic perspective may also be an important factor when considering the low employment experience of these undecided early school leavers. Perhaps the job opportunities existed but due to personal reasons, the individual was not in a position to accept them. The significantly large number of females in the NA group makes family responsibilities such as childcare and eldercare one potential barrier to taking advantage of opportunities available locally. Their family responsibilities may also limit their mobility and restrict individuals from pursuing options outside their immediate area.

Personal values and those of significant others may also have an impact on the employment experience of the NA

respondents, who tend to be rural females. Perhaps these young women were residing in rural areas where the traditional role of women was reinforced. This belief that women should play a traditional role may result in a lack of support from significant others to pursue employment or education initiatives. It is also possible that the early school leaver had internalized such values and consequently did not perceive work as a career alternative. Instead, in response to the expectations of others, she would focus on caregiver, spousal and parental roles. This lifestyle may be reflected in the respondents' source of income which may indicate a dependency on another individual or government income support programs.

Differences in employment experience may also be attributed to the perception of goal-blockages. Those early school leavers who had the greatest amount of work experience (MA) perceived the fewest obstacles to the attainment of their occupational goals. Each of the other three CA groups perceived goal-blockages. Perceiving one's situation in a negative manner may result in decreased levels of motivation and subsequent changes in behavior such as reduced job search efforts. Respondents in both the GA and NA groups indicated a lack of confidence in job search skills which in addition to lowering motivation to engage in a job search, may have influenced the effectiveness of the job search conducted. Both factors may be related to low employment experience.

The type of goal-blockage perceived may also influence employment experience. The goal-blockages examined in this study can be categorized as internal and related to the self such as lack of job search skills, or external 'boundary conditions' (Russell et al (1992) such as lack of jobs. The GA group, although undecided in 1988, formed an occupational aspiration during the time period following school leaving. In comparison to their peers who remained undecided, these early school leavers tended to have more work experience in both 1989 and 1991. Perhaps the most evident difference was in the perception of goal-blockages. The GA group perceived two goal-blockages: lack of job search skills and no high school diploma. Both of these goal-blockages are related to the self and it is within the control of the individual to change or ameliorate the situation, for example, through participation in an appropriate training program.

This study also provided insight into the role of education in influencing career decidedness. Larger numbers in the MA group participated in some form of education or training. It is possible that their participation was motivated by their initial aspiration at the time of school leaving. However, not all of those who were decided when they left school returned for further education, and some of those who returned to school lost their aspiration despite attendance. The urban character of the MA group suggests that

this group may have had greater opportunity for education. In urban areas, there is generally more schools and a greater variety of programs from which to choose. Many of these urban youth can reside at home while attending school and avail of parttime work as a means of income support. Consequently, attending school is not as great a personal or financial challenge as it would be for their rural peers who may need to relocate, incur additional living expenses, and adjust to a new lifestyle.

Accessibility to a diverse offering of educational programs may have increased accessibility to an educational experience that was self-relevant in terms of the applicability of the training to work opportunity, which was not only limited in rural areas, but probably required less training. The LA group had less educational experience and tended to be rural. The impact of this affected male and female alike. Early school leavers tend to associate the relevance of education with work opportunity. If work opportunity is limited, and tends not to require education, then a key element might be the perception of the labour market. This group saw it to be more limiting from a personal interest perspective than other groups. This perception would have diminished the impact of educational experiences on the aspirations and career decidedness of the LA group. This group may have perceived difficulty in finding a job they

liked because of an inaccurate perception of the labour market or too narrow a focus due to restricted mobility. They may also lack self-awareness and an understanding of the career decision making process and the necessity for compromise among various factors.

An interesting problem lies within the NA and GA groups, who left school with no aspirations. Why did some of them go to school, and why did some of them gain aspiration? One explanation for their attendance was that education provided income support, especially where dependent care was involved. The research leaves unanswered the question of when the aspiration developed. It could be that the GA group developed aspiration at some point after school leaving for some other reason, and this is what influenced the decision to attend school. One possible explanation might be that females were more likely than males to acquire signficant family responsibilities (Spain et al, 1991). Perceiving oneself as responsible for the upbringing of a child could have resulted in a sense of urgency to form an aspiration as a means of caring for the child. This could have led to changes in decidedness.

Perception of goal-blockages may also play a role in education experience. Early school leavers with the most education experience, the GA group, were less likely to perceive barriers. This positive outlook quite possibly

increased motivation and influenced career related behavior such as exploring training programs. The GA group were people who perceived blockages in terms of the self. Both barriers which they perceived could have been surmounted through participation in an appropriate training program such as job search skills training or an upgrading program. The LA group were less likely to perceive lack of education to be a problem than did the GA group and thus perhaps they were also less likely to benefit in terms of changes in career decidedness. Again, the nature of the educational experience and the purpose for participating is important.

From this, it follows that when examining the relationship between CA and both employment and education experience, it is useful to consider the career decidedness of respondents when they left high school. Occupational aspirations are significant motivators of behavior as they provide individuals with a personally relevant goal to work toward. For those individuals who lacked aspiration, employment or educational initiatives would quite possibly have lacked self-relevancy. Working or attending school was perhaps viewed as serving some shortterm goal as opposed to a means of achieving a longterm goal. This may have affected the individual's motivation to engage in job or education search initiatives. For example consider two early school leavers attending an upgrading program, one has an

occupational aspiration whereas the other does not. For the person who is decided, attaining high school equivalency is an integral step in the script associated with her occupational aspiration. Successfully completing this upgrading program is a prerequisite for entering the post secondary training program of her choice. For the person who is undecided, attending an upgrading program has little self-relevancy. Motives for attending could be one of many such as providing the individual with something to do or a means of income support.

The MA group who experienced the highest levels of employment and education experience, were decided at school leaving and hence had a goal to work toward. This decidedness may have increased individuals' readiness to engage in career related behavior such as job or education searches. If these aspirations were well developed with an elaborate script, these individuals would also be more capable of attaining their goals. Because they tended to live in urban areas where there are more job opportunities, more educational programs and more career support services, the supports existed to facilitate the implementation of these scripts. As individuals commence the realization of the script associated with their occupational aspirations, the future self or goal becomes more set in reality and hence more resistant to change. Consequently, this group was more successful at

remaining career decided by maintaining aspirations.

Recommendations

Recommendations for Programming

Reaching the Potential Early School Leaver

Interventions aimed at increasing student retention in the secondary school system have generally focused on programs which attempt to show youth the advantages of staying in school and the disadvantages of dropping out. The overall purpose is to keep youth in school at all costs. The review of the literature and the results of this study suggest that there may be another approach to addressing this national concern. Without an occupational aspiration, youth are not likely to see the personal relevancy of attaining a high school diploma and consequently, motivation to achieve in this setting may be quite low. In fact, the YTLM (1990) results indicate that 41.1% of the early school leavers left school because "school was dull and uninteresting", they "could not see the use of the school program" or "school subjects" and generally viewed school as "a waste of time" (p.40). These findings suggest that in order to attract youth to education and training programs, such programs must be viewed as self-relevant, that is, an integral component of the scripts of their occupational aspirations. Young people need to see that obtaining an education is a necessary step in order to achieve their career goals. Encouraging young people to stay in

school is certainly the priority. One way to accomplish this would be to help youth develop self-relevant occupational aspirations which include a requirement for education (Spain, 1994).

As previously discussed, the early school leavers in this study were either career undecided (39.3%) or decided (60.7%) at the time of school leaving in 1988. Programs should be developed to assist these youth prior to the act of leaving school. The aim of such programming would not be to stop the person from leaving school, although this may indeed be the result, but to either facilitate the formation of aspirations for the undecided or check and further elaborate the aspirations for the decided. Assuming that people with aspirations are more likely to be productive and fulfilled than those without, it is important to nurture the aspirations of the decided and help the undecided develop aspirations. The potential early school leaver could be identified through a process developed and implemented by school administration, counsellor, teaching staff and/or students. Once these youth are identified, their level of career decidedness would be assessed and they would be referred to the appropriate program.

The undecided. For those who are undecided, the focus would be on helping these individuals form an occupational aspiration. This would require both an assessment of self and

the world of work so that the individual can make accurate judgments of personal suitability and accessibility, resulting in an aspiration with a relatively high degree of realism. In forming the script for the aspiration, it would be useful to explore possible goal-blockages to the attainment of the aspiration and means of addressing these barriers. The barriers perceived by the early school leavers in this study included: hard to find a job I like, lack of jobs, lack of job search skills, no high school diploma and personal disability. Programming would need to focus on these specific barriers. Issues to consider include checking the accuracy of one's perception of the labour market, encouraging mobility and the exploration of opportunities outside one's local labour market, career decision making skills such as researching economic trends, self-analysis and awareness, job search skills training programs and related resource material, different ways of attaining a high school diploma, and exploring realistic occupational alternatives given personal disabilities.

By exploring means of dealing with these potential obstacles, if and when youth are faced with them, they have the knowledge, skills and strategies to cope as opposed to just giving up. Certainly, supports would have to be in place to facilitate the implementation of the script such as accessibility to educational initiatives, employment

opportunities and financial assistance for students. While assisting youth explore and cope with potential barriers, programs should also focus on helping young people develop realistic occupational aspirations along with the knowledge required to achieve these aspirations. Youth need support in determining the degree of realism of their desired goals both from a personal suitability and accessibility perspective. Such judgements require a thorough knowledge of self and of the labour market. Not all barriers are within one's control and sometimes compromise is a necessity due to internal and external factors.

The decided. For those youth who have developed aspirations, programming should focus on examining the aspiration with the individual in terms of both descriptive and procedural knowledge. An assessment of self would reveal how personally suitable the aspiration is in addition to its degree of integration with other self-schemas. An analysis of the script would allow for a checking of its accuracy and an estimate of accessibility given labour market conditions. Understanding the process of compromise in the career decision making process could be addressed here. For example, individuals could be assisted to explore leisure activities as a means of fulfilling interests which cannot be fulfilled through paid work. As with the undecided group, potential goal-blockages need to be explored in addition to how the

individual can exert control over these barriers. Those who lost aspirations tended to view barriers as outside of their control. In particular, they viewed a lack of jobs and difficulty in finding jobs they liked as goal-blockages. In addressing these specific barriers, youth's knowledge of self and of the labour market must be checked for accuracy. A broader view of the labour market may need to be nurtured, a broader range of interests may need to be developed, and an openness to different opportunities may need to be encouraged. Alternative aspirations with associated scripts should be developed in case achieving one's goal may not be a reality due to personal or economic factors. As previously discussed, supports would have to be in place to help the individual work toward achieving their aspirations.

These interventions focus on youth while they are still attending the regular school system. However, the results of this study have certainly demonstrated the need for similar interventions aimed at early school leavers. Community based post school leaving guidance and counselling programs which assist the decided and undecided in the same manner as discussed in the previous two sections is strongly recommended.

Processing Employment and Educational Experiences

Employment and education experiences provide youth with opportunities to gain knowledge about different aspects of the

self (interests, skills, aptitudes, values, needs), specific occupations (job duties, work environment, personal, educational and experiential requirements), the labour market (demands, oversupply, goal-blockages) and the world of work in general. Such information can be quite significant in facilitating the career decision making process, providing it is processed properly. The experience itself, although essential, is not sufficient. It would seem that certain conditions must exist to ensure that the particular experience is of full benefit to the individual from a career development perspective.

Firstly, the individual must perceive the experience as self-relevant. Once the self-relevancy is established, the information gathered from the situational context must be processed in the context of the self and current knowledge. A realistic aspiration requires an integration of knowledge gained about the self, specific occupations, the labour market and the world of work with each other and with existing self-schema and knowledge. Cognitive structures formed to house new found knowledge gained through experience will be of most benefit to the individual if integrated as opposed to remaining separate.

The knowledge that youth gain through such experiences should also be checked for accuracy. If not, an individual may be making career choices based on misinterpretations.

This could result in an individual making false judgements of personal suitability and/or accessibility thus either holding on to unrealistic aspirations or letting go of achievable ones.

In order to process the information, self schemas need to be active in the working self-concept for a sufficient amount of time. This suggests that the education or employment experience needs to be of a significant duration or at least the processing of the information should be. Therefore, in youth employment initiatives as job shadowing and cooperative education where work placements may be of a short duration, it is recommended that a component be built into such programs to facilitate the processing of information gathered. For example, youth could be encouraged to examine what they learned about themselves as a result of the particular experience, how these learnings relate to existing self-knowledge, and what they learned about the labour market. It is also recommended that youth develop scripts for the jobs they explore through such programs as job shadowing, mentoring and coop education. Even if these jobs are not of particular interest to the youth, they will develop strategies for forming scripts and will increase their knowledge of the labour market. Some youth may have the cognitive and metacognitive strategies needed to process the information and integrate knowledge whereas others may not.

Creating Employment and Educational Opportunities

The results of this study clearly indicate that the more work and educational experience youth have, the greater likelihood that occupational aspirations will be formed and maintained over a period of time. As addressed in the previous two sections, simply creating such experiences is not enough. Youth must perceive the experiences as self-relevant and accessible. The nature of the experiences must be such that they relate, either directly or indirectly, to youth's occupational aspirations and youth must be given the opportunity to process the experiences. In addition, the supports must be in place to enable youth to take advantage of the opportunities that are available. Based on these findings, it is recommended that meaningful employment experiences be developed for youth. These job opportunities should contain some form of guidance and counselling interventions which facilitate the processing of the experiences.

In terms of education experiences, this study clearly demonstrated that reentry into some form of training in the year following school leaving is related to higher levels of career decidedness. The longer the wait to attend school, the lower the impact of the experience on career decidedness. However, high school equivalency and skills training programs tend to have long waitlists. Consequently, a large majority

of early school leavers cannot expect to reenter within that time period. It is therefore recommended that accessibility to upgrading and skills training programs be improved. In addition to improving accessibility, a greater variety of educational programs are needed, especially in rural areas so that youth have a greater choice and can take advantage of programs related to their scripts.

As is the case with employment experience, youth need to perceive education experiences as self-relevant in order to truly benefit from the experiences from a career development perspective. It is therefore recommended that postsecondary institutions implement a selection process which involves helping prospective students assess the personal suitability and accessibility of their occupational aspirations. This type of admissions procedure is currently in use for such programs as medicine, law and graduate studies. Employing such a procedure for all types of training programs would increase degree of personal, academic and employment success experienced by students.

Recommendations for Further Research

It was apparent from the analysis that the amount of work experience did not, by itself, account for changes in career decidedness. Both the GA and LA groups experienced similar amounts of work. Research is needed to determine if there

were qualitative differences in these work experiences of these individuals.

Similarly, participation in an education program did not, in itself, account for changes that took place in career decidedness. Comparative numbers of NA, LA and GA group members, attended some form of education or training. An examination of the nature of the education experience and the purpose for participation may reveal differences which influence career decidedness.

The NA group tended to be rural and female. Research should be done to see if marital status, homecare responsibilities, and social values are factors in influencing levels of decidedness in this group.

It is important to learn more about how goal-blockages are perceived, particularly as related to external boundary conditions. Research would explore such factors as mobility in the labour force, accuracy of perceptions, and the location and skill requirements of work and educational opportunity.

It would be helpful to determine the relationship between employment and education experience and the perception of goal-blockages. Specifically, the nature of the cause-effect should be examined to determine if perception of barriers results in decreased employment and education participation or if a lack of labour market and educational success results in the perception of a barriers.

The MA group maintained career decidedness over the four year period of this study, however, it is unknown if they changed the nature of their occupational aspirations. By examining the actual occupational aspiration expressed at school leaving in 1988 and approximately four years later in 1992, changes in the aspiration in response to personal judgements of suitability and accessibility could be explored. Factors related to changes in specific aspirations could be analyzed.

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Appendix A

Data Collection Summary - YTLM

This thesis is a secondary analysis of the YTLM project's longitudinal study of early school leavers. The original group of early school leavers who were surveyed in 1988 were identified with the assistance of schools across the province of Newfoundland and the Department of Education. In the fall of 1987, principals working in schools with grade seven or higher were sent a letter requesting assistance in identifying the names and addresses of those youth who would leave school prior to fulfilling graduation requirements that academic year. It was hoped to identify all youth who left school during a full calendar year. However, the period from Easter 1987 to Easter 1988 was chosen because the summer period was believed to be significant. The seasonal work period in Newfoundland begins its summer cycle in the spring, soon after the Easter break, and difficulties in identifying school leavers over this period were expected. Selecting the Easter 1987 to Easter 1988 period reduced ambiguities in identifying school leavers.

Field interviewers followed up with school principles during the winter and spring of 1988 in order to identify all youth who dropped out of school within the specified time period. Returns received from principals were also compared to student withdrawal records of the Department of Education

and additional subjects were discovered. Once the early school leavers were identified, field interviewers residing in the same area as participating schools, attempted to locate and interview each of the youth. Field interviewers were nominated by school officials based on their knowledge of the residence/school area and their ability to interact with the early school leavers. Once recruited, all field interviewers were trained by a combination of letter and telephone procedures. They were provided with an interview manual which outlined responsibilities of the interviewer, interviewing skills and techniques and a guide to specific questions in the instrument.

Three hundred and forty one schools were identified as having grades seven or higher, comprising 59.5% of the provincial school total. Of those schools surveyed, fourteen decided not to participate. Because virtually no early school leavers were identified by principals of schools combining elementary or primary and elementary with grades seven, eight and nine, these schools (138 schools or 24.1% of the schools surveyed) were excluded from the two follow-ups by field interviewers in the sampling process. An interview process, as opposed to mail-out, was chosen as the means for data collection. An interview protocol was developed in the fall of 1987 and spring of 1988 based on reviews of relevant literature including dropout questionnaires and interview

forms and the research questions to be analyzed. The questionnaire was revised and refined in a number of stages by the YTLM project team in consultation with the Department of Education's Project Advisory Committee. In its later stages of development, the questionnaire was administered to a small sample of early school leavers as a field test of the instrument. The final questionnaire was highly structured with a few open ended questions.

The field interviewers had the option of administering the questionnaire either face-to-face or by telephone. Interviewers attempted to locate and interview early school leavers residing in their respective school areas. Forwarding addresses of those youth who had moved from the local area were sent to the YTLM staff at Memorial University, where the subjects were located and interviewed by long distance telephone. Any youth who reported that they had returned to school were not interviewed.

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APPENDIX B - TABLES

Table 1

Respondents by Gender and Region of Residence

	Region of Residence					
	Rural		Urban		Total	
Gender	Freq.	Percent	Freq.	Percent	Freq.	Percent
Male	339	73.5	122	26.5	461	62.0
Female	222	78.7	60	21.3	282	38.0
Total	561	75.5	182	24.5	743	100.0

Table 2

Change in Occupational Aspiration Status (CA)

	Change in Occupational Aspiration Status (CA)				
	No Aspirations (NA)	Lost Aspirations (LA)	Gained Aspirations (GA)	Maintained Aspirations (MA)	Total
Freq.	110	113	182	338	743
Percent	14.8	15.2	24.5	45.5	100.0

Table 3

Career Decidedness 1988 and 1992

		Survey 1 (1988)		
Survey 3 (1992)		Undecided	Decided	Survey 3 Totals
Undecided	Freq.	110	113	223
	Percent	14.8	15.2	30.0
Decided	Freq.	182	33.8	520
	Percent	24.5	45.5	70.0
Survey 1 Totals	Freq.	292	451	743
	Percent	39.3	60.7	100.0

Table 4

Change in Occupational Aspiration Status by Region of Residence and Gender

		Change in Occupational Aspiration Status (CA)[c]									
		No Aspirations (NA)		Lost Aspirations (LA)		Gained Aspirations (GA)		Maintained Aspirations (MA)		Total	
		Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Rural	Male	33	9.7	60	17.7	79	23.3	167	49.3	339	60.4
	Female	58	26.1	39	17.6	63	28.4	62	27.9	222	39.6
Urban	Male	12	9.8	11	9.0	22	18.0	77	63.1	122	67.0
	Female	7	11.7	3	5.0	18	30.0	32	53.3	60	33.0
Gender[a]	Male	45	9.8	71	15.4	101	21.9	244	52.9	461	62.0
	Female	65	23.0	42	14.9	81	28.7	94	33.3	282	38.0
Region[b]	Rural	91	16.2	99	17.6	142	25.3	229	40.8	561	75.5
	Urban	19	10.4	14	7.7	40	22.0	109	59.9	182	24.5
Total		110	14.8	113	15.2	182	24.5	338	45.5	743	100.0

[a] CA x Gender; Chi Square = 21.93; $p<.05$
[b] CA x Region; Chi Square = 39.07; $p<.05$
[c] Log Linear Model = Gender x Region x CA; Chi Square = 6.59; $p>.05$

Table 5

1989 Employment Experience (Total Months Worked)

Change in Occupational Aspiration Status (CA)			
No Aspirations (NA)	Lost Aspirations (LA)	Gained Aspirations (GA)	Maintained Aspirations (MA)
3.76	4.85	5.04	6.28

ANOVA: $F(CA)=6.93$; $df=3, 727$; $p \leq .05$
$F(Gender)=4.27$; $df=1, 727$; $p \leq .05$
$F(Region)=10.34$; $df=1, 727$; $p \leq .05$

Table 6

1991 Employment Experience (Total Months Worked)

		Change in Occupational Aspiration Status (CA)			
		No Aspirations (NA)	Lost Aspirations (LA)	Gained Aspirations (GA)	Maintained Aspirations (MA)
Rural	Males	3.27	5.58	6.19	6.20
	Females	2.63	4.26	3.44	5.40
Urban	Males	7.25	6.00	7.27	7.01
	Females	0.57	4.33	5.67	5.33
Total Gender	Males	4.36	5.70	6.48	6.50
	Females	2.43	4.17	3.99	5.39
Total Region	Rural	2.89	5.06	5.02	6.02
	Urban	4.79	5.64	6.60	6.54
Overall		3.43	5.04	5.64	5.98

ANOVA: F (CA x Gender x Region) = 2.88; df=3; $p \leq .05$
F (CA x Gender) = 1.66; df=1; $p > .05$
F (CA x Region) = 0.82; df=1; $p > .05$
F (CA) = 7.03; df=3; $p \leq .05$
F (Gender) = 20.99; df=1; $p \leq .05$
F (Region) = 2.97; df=1; $p > .05$

Table 7
Log-Linear Analysis of CA, 1989 Education Experience, Gender and Region of Residence

			Change in Occupational Aspirations (CA)									
		Participated in Education 1989	No Aspirations (NA)		Lost Aspirations (LA)		Gained Aspirations (GA)		Maintained Aspirations (MA)		Total	
			Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
	Males	Yes	9	8.9	13	12.9	20	19.8	59	58.4	101	29.8
Rural		No	24	10.1	47	19.7	59	24.8	108	45.4	238	70.2
	Females	Yes	13	16.0	14	17.3	19	23.5	35	43.2	81	36.5
		No	45	31.9	25	17.7	44	31.2	27	19.1	141	63.5
	Males	Yes	4	11.8	2	5.9	6	17.6	22	64.7	57	46.7
Urban		No	3	11.5	1	3.8	12	46.2	10	38.5	65	53.3
	Females	Yes	4	11.8	2	5.9	6	17.6	22	64.7	34	56.7
		No	3	11.5	1	3.8	12	46.2	10	38.5	26	43.3
	Males	Yes	12	7.6	18	11.4	27	17.1	101	63.9	158	34.3
Gender		No	33	10.9	53	17.5	743	24.4	143	47.2	303	65.7
	Females	Yes	17	14.8	16	13.9	25	21.7	57	49.6	115	40.8
		No	48	28.7	26	15.6	56	33.5	37	22.2	167	59.2
	Rural	Yes	22	12.1	27	14.8	39	21.4	94	51.6	182	32.4
Region		No	69	18.2	72	19.0	103	27.2	135	35.6	379	67.6
	Urban	Yes	7	7.7	7	7.7	13	14.3	64	70.3	91	50.0
		No	12	13.2	7	7.7	27	29.7	45	49.5	91	50.0
Overall		Yes	29	10.6	34	12.5	52	19.0	158	57.9	273	36.7
		No	81	17.2	79	16.8	130	27.7	180	38.3	470	63.3
Total			110	14.8	113	15.2	182	24.5	338	45.5	743	100.0

Log-Linear Model is CA x ED89 + CA x Gender + CA x Region + Gender x ED89 + Region x ED89; Chi-Square = 14.85; $p > .05$
CA x ED89; Chi-Square = 26.76; df=3; $p \leq .05$
CA x Gender; Chi-Square = 44.55; df=3; $p \leq .05$
CA x Region; Chi-Square = 19.01; df=3; $p \leq .05$
Gender x ED89; Chi-Square = 8.94; df=1; $p \leq .05$
Region x ED89; Chi-Square = 12.15; df=1; $p \leq .05$

Table 8.
Change in Occupational Aspiration Status by 1991 Education Experience

			Change in Occupational Aspirations (CA)									
		Participated in Education 1991	No Aspirations (NA)		Lost Aspirations (LA)		Gained Aspirations (GA)		Maintained Aspirations (MA)		Total	
			Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
	Males	Yes	4	6.7	10	16.7	15	25.0	31	51.7	60	17.7
Rural		No	29	10.4	50	17.9	64	22.9	136	48.7	279	82.3
	Females	Yes	8	18.6	5	11.6	12	27.9	18	41.9	43	19.4
		No	50	27.9	34	19.0	51	28.5	44	24.6	179	80.6
	Males	Yes	2	7.7	2	7.7	4	15.4	18	69.2	26	21.3
Urban		No	10	10.4	9	9.4	18	18.8	59	61.5	96	78.7
	Females	Yes	0	0.0	0	0.0	5	50.0	5	50.0	10	16.7
		No	7	14.0	3	6.0	13	26.0	27	54.0	50	83.3
	Males	Yes	6	7.0	12	14.0	19	22.1	49	57.0	86	18.7
Gender		No	39	10.4	59	15.7	82	21.9	195	52.0	375	81.3
	Females	Yes	8	15.1	5	9.4	17	32.1	23	43.4	53	18.8
		No	57	24.9	37	16.2	64	27.9	71	31.0	229	81.2
	Rural	Yes	12	11.7	15	14.6	27	26.2	49	47.6	103	18.4
Region		No	79	17.2	84	18.3	115	25.1	180	39.3	458	81.6
	Urban	Yes	2	5.6	2	5.6	9	25.0	23	63.9	36	19.8
		No	17	11.6	12	8.2	31	21.2	86	58.9	146	80.2
Overall		Yes	14	10.1	17	12.2	36	25.9	728	51.8	139	18.7
		No	96	15.9	96	15.9	146	24.2	266	44.0	604	81.3
Total			110	14.8	113	15.2	182	24.5	338	45.5	743	100.0

Log-Linear Model: ED91 + CA x Gender + CA x Region; Chi-Square=20.02; df=19; p>.05

Table 9
Change in Occupational Aspiration Status by Perception of Goal-Blockages

Goal-Blockage	Perceived as a Problem	Change in Occupational Aspiration Status (CA)									
		No Aspirations (NA)		Lost Aspirations (LA)		Gained Aspirations (GA)		Maintained Aspirations (MA)		Total	
		Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Hard to find a job I like[a]	Yes	83	17.5	76	16.0	113	23.8	202	42.6	474	64.3
	No	25	9.5	36	13.7	67	25.5	135	51.3	263	35.7
Lack of job search skills[a]	Yes	37	19.7	31	16.5	56	29.8	64	34.0	188	25.5
	No	71	12.9	81	14.7	126	22.9	272	49.5	550	74.5
Disability[a]	Yes	14	34.1	3	7.3	9	22.0	15	36.6	41	5.5
	No	94	13.4	110	15.7	173	24.7	322	46.1	699	94.5
Age	Yes	11	11.3	12	12.4	25	25.8	49	50.5	97	13.2
	No	97	15.2	100	15.6	157	24.5	286	44.7	640	86.8
Money[b,c]	Yes	60	17.7	53	15.6	82	24.2	144	42.5	339	46.1
	No	47	11.8	58	14.6	99	24.9	193	48.6	397	53.9
Lack of experience[b]	Yes	79	15.5	83	16.3	126	24.7	222	43.5	510	69.5
	No	29	12.9	29	12.9	53	23.7	113	50.4	224	30.5
No high school diploma[a]	Yes	58	16.2	52	14.5	102	28.4	147	40.9	359	49.3
	No	49	13.3	58	15.7	77	20.9	185	50.1	369	50.7
Lack of jobs[a,c]	Yes	78	15.4	92	18.1	130	25.6	207	40.8	507	68.9
	No	30	13.1	20	8.7	51	22.3	128	55.9	229	31.1

Log-Linear Analysis:
[a] Perception of Blockage x CA; Chi-Square $p \leq .05$
[b] Perception of Blockage x Gender; Chi-Square $p \leq .05$
[c] Perception of Blockage x Geography; Chi-Square $p \leq .05$