SUBJECTIVE ASSESSMENTS OF CAREER DEVELOPMENT:
AN EXPLORATORY STUDY

by

THOMAS M. GILLIGAN
B.A., York University, 1980

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES
(Department of Counselling Psychology)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
July 1983

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Department of Counselling Psychology

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

Date 28th June 1983
ABSTRACT

This exploratory study of career development used a variation of Kelly's (1955) repertory grid methodology to obtain subjective measures of change in levels of positivity toward self and career over the period from adolescence to mid-life. The possibility of significant differences between men and women in the measures obtained provided a secondary focus.

A group of ten male and ten female graduate counselling students, aged between 35 and 45 years, assessed the influence of ten periods in their lives on their career development. Each life period was assessed by means of a set of ten bi-polar constructs related to career development.

Analysis of the variation between the average construct ratings, with repeated measurements across the ten life periods, showed a significant difference in levels of average positivity toward self and career. Subjects began with relatively low levels of positivity during adolescence and gradually acquired higher levels by mid-life. Men, compared to women, felt more freedom overall; acquired and maintained strong feelings of freedom faster; and overcame relatively low feelings of confidence in their decision-making ability earlier.
Specific career counselling intervention strategies were suggested to facilitate the process of becoming more positive about self and career. Possible differences between male and female patterns of career development indicate the risks involved in using exclusively male referenced vocational guidance measures with female clients. The findings and tentative conclusions reached in this exploratory study could be validated by future research in this area.
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ACKNOWLEDGEMENT

I thank my Advisor, Dr. Larry Cochran, for his wit, guidance and patience in helping me to complete this thesis. I also thank my Committee members, Dr. Marshall Arlin and Dr. John Allan, for the support and advice that was so readily available and well appreciated.
DEDICATION

To my two children, Michelle and Sean, who have waited for me to complete this thesis.
CHAPTER I

BACKGROUND REVIEW

(A) Introduction

"Career" is a sequence of work related positions that an individual occupies during the course of a life-time, furthermore, careers exist only as persons pursue them; they are person-centred (Super, 1976). This definition of career is widely accepted in the research literature and reviews of theories of career development (Healy, 1982) and will be used in this study. A review of the research methodology used to investigate career development indicates that there are two main approaches. One method has used an "objective" approach by investigating career development on the basis of an externally judged sequence of positions, events and behaviors in the working life of an individual. The other method has stressed the "subjective" side of career development by analyzing self-reports given by individuals of career-related life experiences. Both methods have contributed to an understanding of career development, however, there are limitations and drawbacks to each approach.
The work of Super (1957), Gribbons and Lohnes (1968) and Flanagan and Cooley (1966) are examples of the "objective" approach to career development that has identified and measured a broad range of quantitatively defined variables associated with career development. The work of Levinson (1978), Vaillant (1977) and Osherson (1980) are examples of the "subjective" approach to career development that has provided rich and meaningful insights into the experiential side of how careers develop. The objective method has provided clear quantified measures and predictions about career development but the data seems far removed from the richness and experience of individual lives and lacks a depth of meaning. On the other hand, the subjective approach has provided a richness and depth of meaning about the ways in which individual careers develop but often the richness of meaning has been obtained at the cost of a lack of confidence in the analysis and conclusions.

This exploratory study will attempt to overcome some of the difficulties inherent in the two research methods outlined in the preceding paragraph. A basic assumption that underlies the method used in this study is that the best judge of individual life experiences is the individual who has had these experiences rather than a neutral observer of the events. Unlike the purely subjective or phenomenological studies, this study will ask individuals to provide both quantitative as well as qualitative measures of the effects of their life experiences (see Chapter III).

A number of questions will be asked in this exploratory study, in an attempt to understand some limited aspects of the
change process presumed to exist in the development of careers. Specifically, the research will attempt to determine if there is a significant change across time in the average reports that individuals give of the effect of significant life periods in the development of their careers and whether the change, if it occurs, is orderly and predictable or random and haphazard.

Secondly, the research will attempt to determine if the average reports show an increase in positivity across periods of life. Thirdly, the research will explore any differences between men and women in the type of change and levels of positivity that they report.

The next section of the first chapter gives a background review of the major theories of career development. Because of the exploratory nature of this study this background review is as thorough as possible without detracting from the main emphasis of the research. The third section of the chapter will look at the "objective" and "subjective" methods of investigating career development by reference to specific studies. The conclusion of the first chapter will define the purpose and scope of the study in more detail than provided in this introductory section. Chapter II gives a description of the method used to conduct the study including demographic data, instruments used to collect the data and the procedures involved. Chapter III gives analyses of the results obtained and Chapter IV concludes the paper with a discussion of the results and limits of the study, including implications of the data and identification of areas worthy of further investigation.
Theories of career development have provided a wide range of concepts and information on the ways in which people select and implement career choices. However, it is difficult to organize the concepts and research findings into a coherent structure (Osipow, 1973). It is even difficult to find an agreed method of classifying the various theories (Norton, 1971). For the purposes of this chapter the main theories and research findings will be classified and discussed by means of the following six approaches to understanding career development: (i) Social Systems (ii) Trait-Factor (iii) Psychoanalytic (iv) Need Theories (v) Developmental (vi) Existential.

(i) Social Systems

The focus of the social systems approach is on the influence of external rather than internal or intrinsic factors that affect the development of an individual career. According to Crites (1969) there are three main categories of non-psychological or social system theories of career development. (i) Accident Theories (ii) Economic Theories (iii) Sociological Theories.

The "Accident" theory provides an explanation of vocational choice as a consequence of chance events in the life of an individual that influence the decisions made with regard to occupation. Miller and Form (1951) analyzed the occupational backgrounds of a large number of young people and failed to discover a common motivating
influence; the conclusion was that career choice was an idiosyncratic reaction to a series of chance events in the lives of individuals.

The "Economic" theory is concerned with the effect of much broader social influences than chance events in the life of any particular individual; these social influences are presumed to occur in a more regulated and "lawful" manner. Particular occupations are perceived as attracting or rejecting individuals on the basis of the economic laws of supply and demand. In addition, individuals are perceived as selecting an occupation which will bring the maximum return for the effort invested (Crites, 1969).

"Sociological" theories look at the social influences on individual career development in terms of institutional and cultural determinants of career choice. A primary interest in career development from the sociological perspective is to define the limits of career choice arising from membership in a particular social class or group. One of the key issues is the effect of sex role socialization on career development and decision making. Diamond (1971) found that sex differences in occupational interests were minimal at the upper occupational levels but more marked at the lower levels. Rose and Elton (1971) looked at differences between sexes in terms of Holland's occupational classification (Holland, 1966) and found that there were significant differences between the sexes. Osipow (1973) concludes that there would seem to be sufficient differences in the career development of men and women to justify the use of separate theories of career development, until at least such time as social conditions change to allow for
more equality in the opportunities that are open to both sexes.

In general, a social system's approach to career development stresses the influence of external rather than internal factors. However, the division between internal and external factors is somewhat arbitrary. For example, if sex role socialization processes result in a more rigid and limited set of career opportunities for women compared to men it can be argued that women in general will feel locked in by circumstances and less free to act than men: Because they do not feel free to act it can be argued that they will not have a feeling of confidence in their ability to make good personal decisions. Personal theories of career development maintain that internal factors such as a sense of good decision making ability, sense of self esteem, etc. are the crucial factors. However, a personal sense of self or set of personal constructs about self and career do not come into being or evolve in isolation from external, impersonal social influences.

(ii) Trait-Factor

The trait-factor approach to career development evolved out of the tradition of psychometrics and occupational psychology (Parsons, 1909). Philosophically and psychologically the focus is on the individual but the emphasis is on the statistically definable and predictable (Crites, 1981). The underlying assumption is that individuals who are attracted to a particular occupational area will share certain personality characteristics and needs. The particular occupation demands certain kinds of aptitudes and abilities
and satisfies certain kinds of needs. There is an interaction between individuals and the environment in which they work that ideally leads to a mutual accommodation and compatibility. The theory in its various forms states that individuals with certain kinds of temperaments, abilities, aptitudes, etc., will be successful and satisfied in one kind of work environment or occupational area and individuals with other kinds of personality traits will be best accommodated in an alternative occupational area. Career development is conceived as a movement or matching process in which an individual gains access to an occupation that is compatible with the individual's aptitudes, interests and general personality characteristics. Trait factor theorists argue that occupational adjustment and, more recently, occupational actualization, consist of being in an environment that is compatible with individual personality (Healy, 1982). The length of time spent in any occupational setting is determined by the degree of compatibility between individual personality characteristics and the opportunity that the environment provides for the expression of those characteristics, i.e. an occupation will be consistently pursued when it affords a higher opportunity for the expression of an individual's personality traits than an alternative occupational area (Campbell, 1971).

According to Herr (1970) one of the major criticisms of the trait factor approach is that it does not allow for change to take place either in the social and occupational environments or in the individual. The theory has also been criticised on the grounds that it promotes the status quo and does not facilitate growth in
the individual (Stern 1970). A third major criticism is that the theory places too much emphasis on the rational cognitive processes that occur in occupational choice and development (Herr, 1970).

Tiedeman (1958) in a review of trait-factor theorists and research studies concluded that the most striking feature of the research data was the marked overlap in interests and aptitudes between people in different occupations. In the same vein, Thorndike and Hagen (1959), in a detailed study of the occupational lives of 10,000 men over a ten year period, found that it was not possible to predict occupational choice and stability by reference to stated aptitudes and interests.

Holland (1973) has developed a theory of personality and career development based on six occupational categories and psychological types. Holland's assumption is that individuals with similar personality profiles tend to choose similar occupations. There is a developmental aspect to Holland's theory and some reviews of the theories of career development have classified his position as that of a developmental need theorist. Herr (1970) points out that at the time an individual chooses his occupation his decision is made on the basis of a life history in which a series of experiences and events have interacted with his genetic disposition to create a hierarchy of habitual or preferred methods of resolving social tasks, such as choosing an occupation. It is this hierarchy or personal orientation that causes an individual to select an occupational environment that he perceives will satisfy his particular needs. However, the research on Holland's theory does
not lend a great deal of support to his six personality types. Norton (1971) and Osipow (1973) point out that the theory is subject to the general criticism levelled against the trait-factor approach in that it does not fully explain the ways in which individuals and environments interact with each other and change over time.

(iii) Psychoanalytic

The main concept within the psychoanalytic theory of career development is that occupational choice and activity provide a means of satisfying basic instinctual drives in a socially acceptable manner (Freud, 1962). Career development results from the efforts that an individual makes in order to reduce inner psychological tension and is simply a means to an end rather than being an end in itself (Crites, 1969).

Horney (1950) deviates from the traditional psychoanalytic viewpoint by specifying two different psychological drives that find expression in work. On the one hand, there is a striving toward fulfilment of a "real" self and on the other there is a neurotic compulsion to satisfy a self image based on unrealistic fantasies. Every individual is motivated in the choice of a career and work by a combination of these two inner needs. Horney defines three personality types on the basis of how individuals select and develop on occupational choice in order to meet inner psychological needs.

A further perspective, within the psychoanalytic view of career development, comes from ego psychology. Brill (1949)
differentiates between career choices made in order to satisfy immediate needs for ego gratification and those choices that are made in favour of a long term goal. Sommers (1956) uses the psychoanalytic concept of identification to describe the manner in which early childhood and adolescent experiences affect the selection of an occupation through identification with significant adults who worked in the occupation selected. Bell (1960) points out that vocational choices are made on the basis of irrational decisions that maintain a sense of ego integrity. Galinsky and Fast (1966) define adolescent identity formation problems in terms of vocational decision making processes. Bordin, Nachman and Segal (1963) describe the ways in which particular occupational areas provide outlets for different forms or expressions of psychic energy. Connected with the research of Bordin, a number of studies have been carried out related to particular occupations; on dentists, lawyers and social workers (Nachman, 1960); on clinical psychologists and physicists (Galinsky, 1962); and on engineers (Beall and Bordin, 1964).

Criticisms of the psychoanalytic theory of career development are (i) the theory is based on psychopathological processes whereas career development and vocational choice are a function of normal psychological processes (ii) the research is narrow in focus and the results are not easily generalized (iii) research data that supports the psychoanalytic theory of career choice and development can be explained in a more direct and simple manner by constructs derived from alternate theories (Osipow, 1973).
(iv) Need Theories

Need Theories of career development are based on the theory and research of Roe (1956). According to Roe, a child will only have a proportion of his needs met in the relationship that he has with his parents. Those needs that are not met or are only partially gratified, directly influence the attitudes, abilities, interests and ways that the individual relates to other people. An individual raised in a warm caring relationship will learn to move toward other people and develop interests and abilities that allow him to be in contact with others. On the other hand, an individual raised in a household with a minimal amount of warmth and caring will develop a tendency to move away from others and develop skills and interests in dealing with things rather than people. The choice of a particular occupation will reflect the interest pattern, abilities and forms of behavior that the individual has acquired in learning to satisfy his childhood needs. For example, an individual who has learned to become closely involved with other people will tend to choose an occupation where social interaction skills are valued.

Roe's hypotheses are based on the hierarchy of needs defined by Maslow (1954), with lower order needs such as the need for physical safety and shelter taking precedence over higher order needs such as the need for knowledge or understanding. An individual will try to have his needs for self esteem and a sense of belonging met in his career in ways that are compatible with the related forms of behavior and self perceptions acquired during childhood.
Most of the research aimed at testing Roe's theory has been with relatively small homogeneous populations, representative of specific professional occupational groups (Powell, 1960; Switzer et al. 1962; Green and Parker, 1965). The results of the research have not provided much support for the basic hypotheses of Roe's theory. What the data indicates is that individuals are either person or non-person oriented and this fact alone seems to indicate their occupational choice. It can be assumed from the main research finding that an important aspect of an individual's sense of self and career will be the extent to which a career choice provides satisfaction for the need to belong or to be with other people; with some occupations affording more opportunities for satisfying high need levels to be involved than others.

(v) Developmental

Developmental theories assume that vocational choice is determined by a process of change and adjustment that occurs in fairly well-defined stages over the life of an individual. According to Crites (1969) developmental theories of vocational choice can be traced to the early work of Carter (1940), whose research indicated that successful adjustment and styles of coping in adulthood were dependent upon the way in which interest patterns had been formed during adolescence. Ideally the adolescent acquired a set of interests via a 'Fantasy' and 'Tentative' stage of development and gradually progressed to a more mature and integrated sense of self based on realistic perceptions. It is the development across discrete periods or stages of life from undifferentiated,
unrealistic and immature perceptions of self and vocation to more integetrated and mature levels of functioning that is the key concept of the developmental theories discussed in this section.

Ginzberg et al. (1951) define the process of career development as one that goes through three stages: 'Fantasy', 'Tentative' and 'Realistic'. Within the Tentative and Fantasy stages further sub-stages of development are defined that are linked to specific ages. Although there is allowance for individual variation in terms of the movement from one sub-stage to another the theory assumes that by the mid-twenties a vocational choice will have been made that the individual remains committed to implement during the rest of his career. The process is considered to be generally irreversible because of the investment made in a particular career direction. However, the individual continually seeks a maximum level of satisfaction in the compromise that he makes between his internal subjective needs and the limits imposed by the broader social order. Successful adjustment or career development is attained by the use of specific ego functions; (i) Reality testing (ii) Realistic time perception and differentiation of the present from the future (iii) Inhibition of behavior (iv) A realistic awareness of external limitations and the facility of compromising inner subjective needs and desires to those limitations. An individual who develops a successful career path, in terms of the variables identified by Ginzberg, will have a strong ego and a strong self construct or strong subjective awareness rather than a weak sense of self.
Although Ginzberg relates career development to emotional factors the research has not been successful in clearly identifying the role that those factors play. A second criticism of the research is that the studies have mainly been confined to young adults. Finally, the samples from which the research data were drawn were too small to permit valid generalizations (Osipow, 1973).

Tiedeman and O'Hara (1963) have focussed more upon the cognitive decision making process involved in career development. The research of Tiedeman and O'Hara is directly linked to the developmental concepts of Ginzberg et al. but the theory that they developed is more complex and details the role that an evolving self-complex plays in the negotiation of the developmental stages. Emphasis on the decision making process is evident in the definition of the three main developmental stages identified by Tiedeman and O'Hara viz: (i) Anticipation (ii) Implementation (iii) Adjustment. The stages are further sub-divided; e.g. Anticipation contains the sub-stages of explanation, crystallization, choice and clarification. At each stage of the decisional process the individual is faced with the tasks of "Differentiation" and "Integration", whereby he selects relevant data from a wide range of information that he encounters and then re-integrates the data into a meaningful whole. The evolution or development of a more general self-concept overrides the process of vocational choice. The two processes of 'Differentiation' and 'Integration' facilitate a more general personality development as well as resolving the particular stages or tasks associated with vocational
development: "Career development then is self development viewed in relation with choice, entry and progress in educational and vocational pursuits" (Tiedeman and O'Hara, 1963, p. 46). The personal construct that captures the particular emphasis that Tiedeman and O'Hara place on career development is the idea that an individual gradually acquires a feeling of confidence to make wise personal decisions.

The work of Tiedeman and O'Hara is carried further by Kroll et al. (1970) who describe a process of self-evaluation in childhood and adolescence. As an individual gains experience with the world about him he acquires a sense of competence about himself and the degree to which he can control or must accept the real limits that his environment contains. The vocational decisions that an individual makes during the course of his career are directly influenced by the self-evaluation that he has acquired. A self-evaluation that includes a judgement about himself along a continuum between feeling free to act and feeling locked in by circumstances. The work of Kroll, Tiedeman, O'Hara and the theorists associated with them is described by Osipow (1973) as a bridge between the theory of career development proposed by Ginzberg et al. (1951) and the theory of Donald Super, whose work is discussed later in this paper.

A distinct group of theorists that can be classified somewhat loosely within the developmental framework are those theorists who focus on the cognitive aspects of career decision making. Dilley (1965) relates rational decision making ability to measures of vocational maturity by which vocational maturity is defined as a
progressive increase in measures of planning activity, acceptance of responsibility and a general concern about what is involved in making a good decision. Within the conceptual framework of an evolving self complex, career development becomes the development of a range of individual self perceptions or constructs related to career, that gradually become more integrated and focussed into a unified whole. A commitment to long term goals can be seen as a construct that defines the emphasis on career development provided by Dilley.

A more comprehensive statement of career development, viewed from within a cognitive developmental framework is provided by Knefelcamp and Slepitza (1976) who acknowledge the theories of Ginzberg et al. (1951), Tiedeman and O'Hara (1963) and Super (1957) but claim that these theories do not specify the cognitive processes used by individuals in organizing, integrating and acting upon a wide range of career related information. Knefelcamp and Slepitza have identified nine areas of qualitative cognitive change that takes place in the career development process: (i) Locus of Control (ii) Analysis (iii) Synthesis (iv) Semantic Structure (v) Self Processing (vi) Openness to Alternative Perspectives (vii) Ability to Assume Responsibility (viii) Ability to take on New Roles and (ix) Ability to take Risks with Self. The nine variables constitute a model of career development in which the individual moves from a simple categorical view of career to a more complex perspective. Super (1957) has evolved a much broader and more complex definition of the vocational self concept than the other theorists.
According to Super, the vocational self-concept is part of a complex of self definitions that evolves during the course of an individual's life. The evaluation of the self-concept is a result of an interaction of many factors including genetic endowment, physical, psychological, societal and situational influences. Career development and occupational choice takes place as an individual attempts to express a sense of who he is through the work or occupation that he selects for himself. The vocational self-concept that Super describes is one that evolves over time, is tied to particular chronological periods in the life of the individual and passes through distinct stages of development.

Super has drawn upon the work of Buehler (1933) and Havighurst (1953) to describe the life stages that each individual passes through. The life stages are (i) Growth (ii) Exploration (iii) Establishment (iv) Maintenance (v) Decline. Associated with each life stage are particular vocational tasks that confront the individual and which he resolves by means of particular coping skills, identified by Super (1977) as (i) Planfulness or Time Perspective (ii) Exploration (iii) Acquired Information (iv) Decision Making and (v) Reality Orientation. The importance or significance of any particular coping skill will vary according to the nature of the vocational tasks encountered at each of the life stages but the dominance of any one task during a given life stage does not exclude that task from later life stages (Super and Hall, 1978). Certain attitudes and behaviors are linked to specific age periods: (i) Crystalization (14-18 yrs) (ii) Specification (18-21 yrs) (iii) Implementation
(21-24 yrs) (iv) Stabilization (25-35 yrs) and (v) Consolidation (35 yr plus) (Super, 1963). Career development is conceptualized as a largely irreversible process by which an individual moves toward more realistic, specific and committed occupational choices. Two main points made by Super are (i) career development is a continuous process that takes place over the life cycle (ii) successful adjustment at later stages can be predicted from the manner in which the individual completes the vocational tasks specific to earlier stages. Vocational Maturity, at all stages of career development, has been defined by Super and Kidd (1979) as the degree to which an individual demonstrates his readiness to cope with the tasks of career development, related to a particular life stage, compared to members of his peer age group. Later versions of the theory have substituted the concept of 'Career Adaptability' for that of 'Vocational Maturity' to describe the nature of effective career development in adulthood (Super and Knasel, 1981).

Super has been criticized on the grounds that his theory does not adequately account for the economic and social factors that may influence career decisions in a more direct manner (Osipow, 1973). In addition, although the theory indicates that normal career development will result in an increasing commitment to vocational choices after age 25 there is little evidence to support the notion (Phillips, 1982). However, the theory is perceived as the most comprehensive and has stimulated considerable research in the area of career development (Norton, 1971).
(vi) Existential

The existential theory of career development is more a viewpoint or perspective rather than a formal statement of testable hypotheses. However, the existential view has been included in order to present a subjective side of career development, which is the focus of the research section of this paper.

Compared to more formal theories of career development, where the main focus has been to identify the ways in which life experience affects vocational choice, the existential perspective is concerned with providing an explanation of how vocational choice explains the meaning of an individual's life (Simons, 1966). A basic premise of existential thought is that man is free to create his own meaning in life and that he gains a sense of who he is by acting to realize his own values and accepting responsibility for the consequences that follow from his choices. Within the real limits imposed by the circumstances of a man's life he is free to act and that freedom includes the freedom to avoid the anxiety of choosing to act with self responsibility. Seen from this perspective career development is the process of choosing a vocational path that will allow an individual realize the values that are meaningful to him in life. Career development is a process that leads from a sense of self-centredness and isolation to one of being connected to others in a more altruistic way (Simons, 1966). According to Bolland and Walker (1981) of all the available choices to be made in life the choice of occupation and career may be the most critical to self-definition. It is through commitment and meaningful choices that
an individual moves in the development of a career from a floundering purposeless existence to a sense of purpose in life (Standley, 1971). Commitment to long term goals is a construct that was used in an earlier section of this paper to describe the cognitive approach to career development, however, it is also relevant to the existential position, where there is a special focus on the development of personal commitment in the life of an individual. Another construct that describes the existential position, even more fully is the degree to which an individual develops a meaningful involvement in career or experiences a lack of meaning and involvement. Although there are some similarities, an existential view of career development contrasts strongly at one point with the developmental theories in which career development is perceived as a process that inevitably reaches a final stage of decline. The existential view of man, the creator of meaning, provides a concept of an ongoing prime of life in which there is always an opportunity to create more meaning.

(C) Research Into Career Development

In this section of the paper a brief review will be given of a number of research studies that have looked at adult career development. The research falls into two categories. The first category contains studies based on a quantitative "objective" approach, that relies on data directly observed and measured by the researcher. The second category looks at the "subjective" side of career development by means of a qualitative analysis.
(i) Objective Studies:

(a) Career Pattern Study

This study began in 1950 by Super and his associates, who initiated a longitudinal study of the variables associated with career development and vocational choice. The research population consisted of 342 eighth and ninth grade boys who were tested during high school, mailed questionnaires two years after high school and interviewed and tested at age twenty five and age thirty five. The testing, interviews and questionnaires were attempts to obtain quantitative measures on a number of theoretical variables presumed to be associated with successful career development at particular life stages. Each individual was compared to the group norm or average on the variable measures that had been obtained and was judged to be vocationally mature or immature on the basis of how well he compared. Successful adjustment or vocational maturity at one life stage was presumed to be a reliable predictor of adjustment at later stages.

Analysis of the study data at age twenty-five indicated that high scores on the variables measured during the adolescent phase of career development, and considered to be the skills needed to fulfill the vocational tasks of that period, had a positive correlation with successful career development at the later stage. Variables such as occupational information, planning and interest maturity were positively correlated with career satisfaction,
college grades and quality of job changes. However, a number of socio-economic variables associated with parental status and the general intelligence levels of the subjects were also positively correlated with later successful career development. Furthermore, consistency of occupational preference could not be reliably predicted from the levels of adjustment at the adolescent period. Later attempts to extend the methodology to an analysis of vocational maturity and career development at mid-life have not been successful. The main difficulty has been to identify the specific occupational tasks that adults share in common at this period of their career (Super and Knasel, 1981).

(b) Career Development Study

The Career Development Study began in 1958 and was based on a sample of 57 boys and 54 girls, 8th grade school age in five Massachusetts communities. A set of eight scales, termed Readiness for Vocational Planning (R.V.P.) were scored from a series of structured interviews. The procedure was repeated at the 10th grade level and contact was made with follow-up interviews for a period of twelve years; the average age of the subjects was 25 at the time of the last interview. In 1980 a follow-up survey and final data collection was made, 21 years after the start of the study. The focus of this final survey was to obtain data from the subjects regarding their educational and career experiences of the previous ten years.
The Career Development Study was based on the notion of 'Career Pattern' in which "Career is conceived as the process of educational and vocational development and pattern is the profile of scores on a career variable observed repeatedly over a long time span" (Gribbons and Lohnes, 1982, p. 8). Eight subscales were used to rate the interview content and made up the 'Readiness for Vocational Planning' (R.V.P.); a device for measuring career maturity. The subscales were:

(i) Curriculum choice factors.
(ii) Occupational choice factors.
(iii) Ability to describe strengths and weaknesses.
(iv) Accuracy in estimating abilities and achievements.
(v) Adequacy of evidence for self attributes.
(vi) Awareness of interests.
(vii) Awareness of values.

The responses were rated on a 3-point scale designed to provide a measure of vocational maturity.

Results of the study, based on a comparison of the scores on the R.V.P. indices of career maturity at age 20, were mixed. The eighth-grade R.V.P. scores had a low positive correlation with career maturity indices at age 20 but the tenth grade R.V.P. scores were not correlated. The findings suggested either that the R.V.P. was not sensitive enough to measure career maturity or that, contrary to theory, career maturity does not develop continuously (Healy, 1982).

In 1980 contact was made with 91 of the original 108 subjects. The purpose of the follow-up at this point was to obtain minimal
career information on what the subjects were doing in 1980 and their educational and vocational experiences of the previous ten years. The information was gathered by means of a questionnaire and telephone calls. A comparison of 1958 occupational aspirations with 1980 occupations actually attained showed that only six men and six women were in the same or closely related occupations. Overall the results indicated that the men as a group fared better than the women in meeting the hopes and aspirations that they had set for themselves in 1958.

(c) Project Talent

Project Talent began in 1960 and took the form of an inventory of the U.S. high school population. The inventory was based on a sample of 400,000 high school students selected from 1353 secondary schools. The intention of the study was to take "an inventory of the aptitudes and resources for the nations needs in professional, technical and public service fields" (Flanagan et al., 1962, p. 5). Each student took a battery of aptitude and ability tests, a demographic questionnaire, an interest inventory, an activities inventory, two open-ended essays intended to identify ideal occupations and questions about the type of career guidance services available to them. Follow-up contacts were made one, five and ten years after high school graduation.

The major results of the study indicate that

(i) High school interest, ability, aptitude and information test scores have a moderate relationship to the type of occupation
There is no page 25 in this thesis.
selected five and eleven years after high school. However, what seemed most significant was the overlap in interests, abilities and aptitudes between people in various occupational fields. "Thus a wide variety of occupations is open to any one student" (Flanagan, 1973, p. 12).

(ii) Most career plans and occupational choices made at the high school level were unrealistic, with a large proportion of the students expressing preference for occupational levels and fields that were not suitable for their educational qualifications, abilities and aptitudes.

(iii) There was a great deal of instability in the occupational choices that were made at the high school level. Five years after high school only 18.6% of the students in the study still planned to pursue the careers that they had chosen during adolescence.

(d) Summary

The "objective" research studies, outlined above, have used a particular methodology that has provided a wealth of statistical data and factual information concerning career development, career patterns and vocational choice. However, there are two points worth making concerning the limitations of this approach. First, there is an underlying assumption that scientific validity in research is dependent upon the analysis of data by a trained observer, rather than by the self report of the individual who experiences the event. Alternative points of view would suggest that even the most carefully trained observer influences both the
structure of the experiment and the interpretation of the results as a consequence of his own bias and expectations. Secondly, the impressions gained from dry statistical data hardly do justice to the richness and meaning of actual life experiences in the career of an individual. This point is clearly of concern in the Career Development Study where the investigators state "Behind the formalism of our analytic devices we are aware of real lives in progress in terms we cannot share with our readers" (Gribbon and Lohnes, 1982, p. 115).

(ii) "Subjective" Studies

(a) Levinson D.J.: "The Seasons of a Man's Life"

The study began in 1968 and ended in 1973. The research subjects were 40 men aged between 35 and 45, with 10 men in each of the following occupational categories (i) Hourly workers in industry (ii) Business executives (iii) Novelists (iv) Biologists. The study wanted to gain an understanding of the nature of adulthood by examining the lives of the men from a developmental perspective.

Adulthood was conceived in terms of a life-course theory of development and the focus of the study was on the flow of the individual life, defined in terms of the patterning of specific events. Particular emphasis was given to events that occurred in the area of career development because the researchers perceived the area of work as the main connection between the individual
and society. The stated objective of the study was to gain some significant ideas, tentative generalizations and useful research methods into the process of adult development (Levinson, 1978, p. 8).

Each man was interviewed between 5 to 10 times for a period of 1 to 2 hours over two weeks. The taped transcripts amounted to 300 pages per man. The method was described as 'biographical interviewing' aimed at eliciting responses to specific areas of adjustment and relationship in the lives of each of the men, e.g. the areas of career, family, religion, illness. The preparation of a complete biographical sketch of the life of each man and the creation of a developmental theory to account for the findings, took place at the same time. The researchers compared the biographical data of the men in the study to the published biographies of men such as Luther, Gandhi and Dante in order to create a theory of adult development, "Our essential method was to elicit the life stories of 40 men to construct biographies and to develop generalizations based on these biographies" (Levinson, 1978, p. 16).

The results showed a basic source of order in the life cycle in which each adult passed through a similar sequence of developmental periods and was confronted by similar tasks within each period. The periods were connected to chronological age. Tasks of the 'Novice Period', which extended from age 17 to 32, included forming relationships and making a choice and commitment to an occupation. The idea of forming an occupation was considered to be a more appropriate description of a process that extended over the novice phase and beyond, rather than the notion of
choosing an occupation, which was seen as too narrow a description. Commitment was seen as an essential part of the task of forming an occupation and at the end of the novice phase a period of consolidation and development begins, based upon the experience and training of the earlier years. After the transition period, in the early 30's, a man enters a "Settling Down" period, roughly from age 33 to 40, in which he dedicates himself to past choices. At age 40 to 45 there is a 'Mid-Life Transition", when it becomes necessary to re-appraise his life to that point and to work on new developmental tasks. For the great majority of the men, about 80 per cent of the subjects, the Midlife Transition is a time of moderate to severe crisis as they tried to integrate the prior experience of their lives with the knowledge and awareness of the limited time remaining to them.

(b) Vaillant G.E.: "Adaptation to Life"

The longitudinal research project known as 'The Grant Study' began in 1938 and was based on a select population of 268 male college undergraduates. The study focussed on the nature of mental health in adulthood and the processes of adaption to the emotional difficulties of adulthood, defined in terms of the psychodynamic concept of ego defence mechanisms. At the start of the project each subject was given a battery of psychological and psychometric tests and an intensive series of eight psychiatric interviews in order to establish a data base. After college graduation the subjects completed a detailed annual questionnaire
relating to work, family, medical, and psychological areas of interest to the research team. In 1950/52 each subject was inter­viewed and again in 1968 when Vaillant, a psychiatrist associated with the research study, conducted intensive interviews with 95 of the original subjects.

Prior to the interview with each man, Vaillant became familiar with the several hundred pages of documents in each man's file. The interviews were conducted in a semi-structured manner in which the interviewer used a series of open ended questions to probe for information relating to work, medical, psychological and family concerns. In addition, rating scales were used to establish a systematic and reliable method of standardizing the value judg­ments made during the interview.

The results of the interviews were interpreted from a psycho­dynamic orientation to show how adaptation in adulthood can be described in terms of a hierarchy of adaptive ego defence mechanisms. There were four "levels" of adaptation, with the fourth level, common in "healthy" adults, consisting of the defenses of Sublimation, Altruism, Suppression and Humor (Vaillant, 1977, p. 80). The other three levels were Psychotic, Immature and Neurotic. Analysis of the adaptive coping defenses, used by the men in the study, revealed that the defenses were more often healthy than pathological. Adaptation in adulthood was related to the developmental stages defined by Erikson (1963). Men aged from 25 to 35 were described as being primarily concerned with career development and consolidation. The research indicated
that an important inner process occurred during the period of career consolidation, when the individual first acquired new values from non-parental role models and then ended the process by finally rejecting them. Traits that were identified during the adolescent period were not enduring and did not prove to be reliable predictions of adult patterns of behavior. However, early childhood experiences were found to be reliable indicators of the manner in which the subjects developed adult relationships in later life: children who had experienced warmth and caring in their family relationships tended to develop into warm caring adults who related easily to others, whereas children from homes with little affection or caring, tended to be more withdrawn from people, prone to mental illness, dependent and lacking in trust.

(c) Osherson S.D.: "Holding On or Letting Go"

The results of the study were published in 1980, following an intensive examination of the life histories of a group of 20 men, who had made mid-life career changes. The researchers sought to understand the nature of career and career change during adulthood. The specific goals of the research were to obtain information on (i) the meaning of initial occupational choice, (ii) the role of 1st career choice in adult personality development, (iii) the factors that were involved in mid-life dissatisfaction and stress.

All twenty men in the study were white males, aged between 35 and 50, who had made a career change from a first career choice
as a professional to a second career as an actor, visual artist or potter. A series of interviews took place with each man over a two-week period. All of the interviews were conducted within three to ten years after the career change. The interview technique was described as 'free association' method, which allowed each subject to impose his own structure in recalling and describing the subjective experience of his career development. The interviewer did not ask direct questions or attempt to direct the interview. There were almost eight hours of interview time, resulting in more than two hundred pages of taped transcription, for each person in the study. The theoretical model of career development and mid-life career change evolved out of the study and was not well defined until the study was half-completed.

The research data were interpreted to show that:

(i) The first career choice in young adulthood is an attempt to realize an "idealized" rather than realistic self concept. The idealized self-concept denies unacceptable aspects of the individual's personality and the first career choice represents a commitment to parental values.

(ii) The main issue at mid-life is to re-define the self-concept and this involves a loss of the expectations and fantasies of young adulthood, concerning career. The process of separation from parental values and the establishment of an autonomous sense of self can extend well into the mid-life period.

(iii) All aspects and involvements of an individual's life are reflected in the mid-life career change.
(iv) The process of change at mid-life and the meaning of a mid-life career change can become either a process of adaptation and personal growth or can take the form of a maladaptive defensive reaction in which the individual denies the reality of his experience.

The theoretical model of mid-life (career) change that evolved out of this research study consisted of a three stage process. (i) There is a disruption of the self concept (Crisis) (ii) A reorganization of the self concept (Adaptive or Maladaptive) (iii) Stabilization of the self-concept (Integration).

(d) Summary

The three "subjective" studies, outlined above have used the interview method in order to obtain a wealth of rich and meaningful information about career development and adult change processes that is missing from the austere statistical measurements of the "objective" studies, described in the previous section. However, there are a number of points that can be made concerning the limits of the methodology used in the studies mentioned in this section. (i) There is an exclusive focus on the subjective experience of male career development patterns; given the different socialization process and expectations tied to the female role, it is possible that women will have a different "experience" in career development. (ii) The studies have taken a narrow range of occupations and the results have been based on small samples; these two factors limit the generalization of the conclusions.
(iii) The amount of verbal data collected from each subject amounted to hundreds of pages of taped transcripts and created a problem of interpretation. The solution to this problem invariably resulted in the researcher imposing his own system of interpretation. In the case of the Grant Study the method of interpretation was the psychoanalytic frame of reference whereas the method used by Osherson was more idiosyncratic.

"The key question was how to organize and reduce this material into some meaningful and coherent form.....The manner in which this occurs is not, for me, completely amenable to explanation at this point, since much of the process is integrally tied up with how one learns to listen to and understand people as a clinician" (Osherson, 1980, p. 232).

(iv) The conclusions are expressed in global terms such as "self concept formation" and "processes of adaptation", and are not precise or well defined.

(D) Purpose and Scope of This Study

A basic assumption of this paper is that 'Career' can be understood as a sequence of work related events and activities in the life of an individual. The main focus of this paper will be to look at the nature of the process that connects these events and activities.

Most of the theories of career development outlined in the preceding sections, define 'Career' as a developmental process in which changes in career patterns occur as a function of time.
The questions that will be asked in this paper are:

(i) If an individual is asked to rate ten personally significant life periods, using a set of bi-polar constructs related to career development, will the average rating across the periods of life change in an orderly predictable manner or will the change be random and haphazard.

(ii) Will the average rating on the set of personal career constructs show a significant difference in positivity across the ten periods of life.

(iii) Will men and women show any significant difference in the levels of positivity or kind of change that takes place in the average construct rating across the ten periods of life.

This paper will look at the nature of career development by using a research method in which the subjects will provide both the data and an assessment of that data. The data will take the form of self reports on periods in the lives of the individual subjects, that each considers to have been influential in the development of their careers. The objective assessment of the data will be accomplished by having each subject rate the periods that they have identified. The rationale behind this method is to provide a basis of comparison with the assessment and interpretation of data obtained via research methods in which the subjects provide the data and the researcher provides an assessment based on some theoretical orientation.

The research sample size, general population characteristics and method of subject selection was deliberately narrow in focus
because of the need to obtain a relatively homogeneous population, suitable for the aims of the research, within the time limits and other restraint factors imposed on the researcher. In addition the research will address a particular aspect of theories of career development by using a novel method of investigation in an attempt to combine both subjective and objective methods of research. Consequently, the main thrust of this project is exploratory in nature and the conclusions drawn will be tentative generalizations rather than definitive statements about career development. It is hoped that the study will serve to stimulate further research in the area of career development by contributing to the development of a useful research method and indicate areas in which future research may be most profitable.
CHAPTER II

METHOD

(A) Subjects

The subjects in the study were all graduate students registered in programmes offered by the Department of Counselling Psychology in the Faculty of Education at the University of British Columbia. The subjects were selected in a non-random manner in order to ensure that the sample age range was between 35 and 45 years of age. There were ten male and ten female subjects: the mean age of the male subjects was 39.1 years and the mean age of the female subjects was 40.8 years.

(B) Instruments

A variation of Kelly's (1955) repertory grid methodology was used. The repertory grid has been used to provide quantitative measures of psychological changes, that are assumed to occur over time, in the ways that individuals construe or perceive events, people, situations, etc. (Bannister and Fransella, 1971). The use of the repertory grid technique has been described as a research
method in which the subject is also an experimenter; the researcher and the subject collaborate in a mutual exploration of the subjects life experience (Bannister and Mair, 1968). Repertory grid methodology is well established and has proved to be useful in the study of a wide range of matters of concern in the area of psychological research (Slater, 1976).

A grid is a set of elements (people, events, periods of life, objects etc.) that have been evaluated by means of a set of constructs (bipolar concepts such as strong/weak). In using the repertory grid to evaluate careers, each grid is a set of periods in the development of a career, that have been rated on a set of bi-polar constructs. In order to complete a grid it is necessary to have
(i) a method of eliciting elements (ii) a source of constructs (iii) a method of rating the bi-polar alternatives (Cochran, 1980).

(i) Elements

The elements used in this study were periods of life that individuals selected as being significant times in the development of their careers. The twenty subjects in the study were asked to identify, label and number in chronological order, from adolescence to the present time, ten periods of their lives that they considered to have been important and distinctive in the development of their careers (see Appendix C).
(ii) Constructs

A set of ten bi-polar constructs were supplied to each subject. The constructs were selected on the basis of their usefulness to the researcher as a means of exploring the subjective side of career development and because they were judged to represent a broad range of issues and variables identified within the research literature and theories of career development. The following constructs were chosen for use in the study:

<table>
<thead>
<tr>
<th>Career/Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) A Strong Sense of Self</td>
</tr>
<tr>
<td>(of who you are and where you are going)</td>
</tr>
<tr>
<td>/ A Weak Sense of Self</td>
</tr>
<tr>
<td>(2) A Strong Sense of Self Esteem</td>
</tr>
<tr>
<td>/ A Weak Sense of Self Esteem</td>
</tr>
<tr>
<td>(3) Satisfied with Career Progress</td>
</tr>
<tr>
<td>/ Dissatisfied with Career Progress</td>
</tr>
<tr>
<td>(4) A Strong Commitment to Long-Term Goals</td>
</tr>
<tr>
<td>/ A Weak Commitment to Long-Term Goals</td>
</tr>
<tr>
<td>(5) Feel In Control of My Own Destiny</td>
</tr>
<tr>
<td>/ Do Not Feel in Control of My Destiny</td>
</tr>
<tr>
<td>(6) A Meaningful Involvement In Career</td>
</tr>
<tr>
<td>/ A Lack of Meaning and Involvement In Career</td>
</tr>
<tr>
<td>(7) Sense of Belonging with Others</td>
</tr>
<tr>
<td>/ Sense of Isolation and Cut Off From Others</td>
</tr>
<tr>
<td>(8) Feeling Free to Act</td>
</tr>
<tr>
<td>/ Feeling Locked in by Circumstance</td>
</tr>
<tr>
<td>(9) Harmony in One's Style of Life: Feeling settled and</td>
</tr>
<tr>
<td>content</td>
</tr>
<tr>
<td>/ Disharmony in One's Style of Life: Feeling unsettled and</td>
</tr>
<tr>
<td>discontent</td>
</tr>
<tr>
<td>(10) A Feeling of Confidence in One's Ability to Make Wise</td>
</tr>
<tr>
<td>Personal Decisions</td>
</tr>
<tr>
<td>/ A Lack of Confidence in One's Ability to Make Wise Personal Decisions</td>
</tr>
</tbody>
</table>
(iii) Rating Scale and Forms

For each period the subjects were asked to give their age at the start of that period and to complete two sentence stems to reflect the way that they felt and thought about themselves at that time. The subjects were then asked to rate the period on each of the ten bi-polar career constructs on the basis of a five point rating scale, using the following format:

A Strong Sense of Self  . . . .  A Weak Sense of Self
Esteem

Subjects were asked to circle the dot that best reflected the way that they perceived themselves to be at the time period. The dot on the extreme left represents a strong or positive sense of self esteem in relation to career development, whereas the dot on the extreme right represents a weak or negative sense of self esteem. The middle dot represents an ambivalent sense of self esteem and the remaining two dots represent somewhat positive or somewhat negative levels of self esteem. Numerical ratings were assigned to the dots with a value of 5, indicating a high degree of positivity, assigned to the extreme left dot; moving from left to right the dots correspond to ratings of 5, 4, 3, 2, and 1 respectively. The ten periods were rated separately, using a separate rating sheet for each period, and completed in chronological order by each subject. The procedure resulted in a set of ten subjective measures for each of the periods of career development in the lives of the subjects in the study. A sample of the rating form, which each subject used
for each of the ten career life periods, is contained in Appendix (A).

(C) Data Collection and Procedures

Data were collected individually from twelve of the subjects and in three small groups from the remaining subjects. Following a brief general introduction to the study (Appendix B), the subjects were asked to follow a 'Career Life Line' procedure, (Appendix C), in order to identify ten periods in their lives that had been significant in their career development; to label each period in such a way that it would help them recall the significant sense of meaning that it held for them; finally to number the ten periods in chronological order from adolescence to the present time. The subjects were then provided with a set of ten rating forms, one for each life period, and asked to follow the rating procedure given in Appendix (D).

The procedure described above, and in Appendices (B), (C) and (D) was followed in a standard manner, with no difference between individual and group administrations. The introduction and administration of the procedure took between forty and fifty five minutes to complete.
(A) **Analyses of the Average Construct Ratings**

For each subject, individually, the construct ratings for each of the ten life periods were averaged, so that each individual had ten averages; one for each period of his/her life. An analysis of variance for two factors, with sex (male/female) as one factor and time periods as the second, was computed with repeated measurements across the ten periods of time (Ferguson, 1981, p. 326). The results indicate that there is a significant difference in positivity across periods of life ($p > 0.001$). Inspection of the means indicates that the subjects began with a relatively low degree of positivity, regarding self and career, and gradually moved toward a higher degree of positivity (see Table 1).
Table 1

Analysis of Variance of the Average Construct Ratings between Males and Females, with Repeated Measurements Across Time Periods

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>389.219</td>
<td>1</td>
<td>389.219</td>
<td>1.195</td>
<td>0.289</td>
</tr>
<tr>
<td>Within</td>
<td>5863.563</td>
<td>18</td>
<td>325.753</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>2380.118</td>
<td>9</td>
<td>264.458</td>
<td>3.725</td>
<td>0.001</td>
</tr>
<tr>
<td>Sex/Time</td>
<td>1047.930</td>
<td>9</td>
<td>116.437</td>
<td>1.640</td>
<td>0.108</td>
</tr>
<tr>
<td>Within</td>
<td>11502.188</td>
<td>162</td>
<td>71.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

However, there was no significant main effect for sex (male/female) and no significant interaction effect between sex and time periods. By inspecting the average construct ratings given for each of the ten periods of life (see Table 2), it becomes apparent that the twenty subjects in the study tended to become more positive over time. With each successive period of life the subjects tended to show higher levels of positivity.
Table 2

Average Construct Ratings Across Life Periods

<table>
<thead>
<tr>
<th>Life Periods</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(B) Extended Analyses of Each Career Construct

Given that there is a significant difference across the ten periods of life for the average construct ratings, it seemed reasonable to test the results on each of the ten individual constructs to see if there were any differences between the male and female ratings for specific constructs and to assess the degree to which individual construct ratings affected the overall trend toward greater positivity. The method used was to take the ratings given on each construct and obtain an average rating for each construct for each period of time. An analysis of variance for two factors, with sex (male/female) as one factor and time periods as the second, was computed for each construct with repeated measurements across the ten periods of time.
(Ferguson, 1981, p. 326). The results showed that, on average, some constructs were rated in a significantly different manner across the ten periods than other constructs ($p < 0.05$). The analyses of the data obtained for all ten constructs is presented below. Each construct is discussed separately, with reference to any significant difference in the ratings across the ten periods of life and, where relevant, any significant differences between men and women. The mean ratings for each construct at each period of life are presented in Appendix (E).

**Construct 1**

"A Strong Sense of Self (Of Who You are / A Weak Sense of Self" and Where You are Going)

**Result:** There was no significant difference in a sense of self across periods of life.

**Construct 2**

"A Strong Sense of Self Esteem / A Weak Sense of Self Esteem"

**Result:** There is a significant difference in self esteem across periods of life ($p < 0.001$). Both men and women showed a gradual increase in levels of self esteem across the ten periods of life.
Construct 3
"Satisfied with Career Progress / Dissatisfied with Career Progress"

Result: There is a significant difference in satisfaction with career progress across periods of life (p < 0.002). Both men and women become more satisfied with their career progress across the ten periods of life.

Construct 4
"Strong Commitment to Long Term Goals / Weak Commitment to Long Term Goals"

Result: There is a significant difference in the strength of commitment to long term goals across periods of life (p < 0.001). Both men and women become more strongly committed to long term career goals across the ten periods of life.

Construct 5
"Feel In Control of My Own Destiny / Do Not Feel In Control of My Destiny"

Result: There was no significant difference in feelings of control of one's own destiny across periods of life.

Construct 6
"A Meaningful Involvement In Career / A Lack Of Meaning and Involvement In Career"

Result: There is a significant difference in meaningful involvement in career across periods of life (p < 0.001). Both men and women gradually acquired a more meaningful involvement in their careers across the ten periods of life.
Construct 7
"Sense of Belonging With Others / Sense of Isolation and Cut Off from Others"

Result: There was no significant difference in a sense of belonging with others across periods of life. Both men and women felt a relatively strong sense of belonging with others that did not change significantly across the ten periods of life.

Construct 8
"Feeling Free to Act / Feeling Locked In By Circumstance"

Result: (i) There is a significant difference in feelings of freedom across periods of life ($p < 0.005$)

(ii) Women and men differ in their feeling of freedom ($p < 0.04$) with men feeling more free than women overall.

(iii) Women differ significantly from men in the way their sense of freedom varies across periods of life ($p < 0.009$). Men maintain relatively high feelings of freedom across all ten periods whereas women tend to feel locked in by circumstances during the early periods and feel a strong sense of freedom only in the later periods.
Construct 9

"Harmony in One's Style of Life / Disharmony in One's Style of Life: Feeling settled and content Feeling Unsettled and discontent"

**Result:** There is a significant difference in feelings of harmonious life style across periods of life (p < 0.05). Both men and women gradually experience an increase in the levels of contentment and harmony in the life style that they have developed across the ten periods of life.

Construct 10

"A Feeling of Confidence in One's / A Lack of Confidence in One's Ability to Make Wise Personal Decisions"

**Result:** (i) There is a significant difference in feelings of confidence in decision making across periods of life (p < 0.001). Both men and women gradually become more confident in their ability to make wise personal decisions.

(ii) Men and women vary in significantly different ways across periods of life (p < 0.002). Both men and women experience a relative lack of confidence in their ability to make wise personal decisions during the early periods of life, however, men establish strong feelings of confidence to make wise decisions sooner than women.
(C) **Extended Analyses of Ages and Periods**

Given that there is a significant difference across the ten periods of life for the average construct ratings and also significant differences between men and women in the ratings of individual constructs, it was of interest in this exploratory study to look at these differences further by calculating the average age given at the start of each period (see Table 3).

<table>
<thead>
<tr>
<th>Periods of Life</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
<th>Average Age</th>
</tr>
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The results showed that (i) Men, as a group tended to recall more significant periods of life during adolescence than those recalled by women (ii) Women, as a group tended to recall more significant
periods of life during their thirties than those recalled by men
(iii) The average age at each period was similar for men and women
across the ten periods of life, with the exception of the last three
periods where the average ages of men tended to be lower than those
given by women.
CHAPTER IV

DISCUSSION

The results showed a statistically significant difference in the positivity of feelings about self and career across the life periods from adolescence to mid-life. Feelings of positivity were relatively low during adolescence and the early twenties, particularly for women. However, over a period of approximately fifteen to twenty years, the subjects in this study gradually became more positive. In addition to this change in positivity, there were also statistically significant average differences for seven of the ten individual constructs, with a similar progression from relative negativity to more positivity over time.

(1) A strong sense of self esteem
(2) Satisfied with career progress
(3) A strong commitment to long term goals
(4) A meaningful involvement in career
(5) Feeling free to act
(6) Harmony in one's style of life
(7) A feeling of confidence in one's ability to make wise personal decisions
Also, men differed significantly from women on two of the ten constructs. First, men felt more freedom to act than women and men maintained relatively high feelings of freedom across all ten periods of life, whereas women start low and acquired strong feelings of freedom, equivalent to those of the men, only later in life. Second, men felt more confident to make decisions. Although both men and women experienced relatively low feelings of confidence during the early life periods, men established strong feelings sooner than women.

Limitations

There are a number of factors that limit the significance and generalizability of the results obtained in this study. First the number of subjects in the study was small with ten female subjects and ten male subjects. Secondly, the population sample, although relatively homogeneous in character, was drawn exclusively from a group of graduate counselling students at the University of British Columbia and the data obtained were therefore measures of a narrow professional occupational group. Thirdly, the data were obtained from a particular age group and the generalizability of the results is limited by a possible cohort effect existing within that group.

Also, the selected constructs were limited in the number and the range of theoretical variables that they encompassed. It is possible that a different selection of constructs or a greater number of constructs could have produced greater or lesser degrees of positivity in the data obtained. Furthermore, positivity is
only one aspect of the change process and a measure of positivity alone does not provide an adequate explanation of why the change takes place at all. This study did not attempt to determine the relationships that exist between individual constructs and it is not known whether levels of positivity in one area of career development are dependent or independent of other areas.

Finally, there is the limitation due to the self report method itself. Subjects provided personal recollections of experiences that had occurred in the past. It is possible that the memory of the experience differed from the experience they actually had. However, the focus of this exploratory study was to obtain subjective verification of the data. The value of this study was to explore specifically the subjective view of career development and all discussion in this paper proceeds from that point.

Significance

First, levels of average positivity regarding self and career gradually increased over an extended period from adolescence to mid-life. This finding supports the basic assumption of theories of adult development, of which career development is a particular aspect, in which change takes place as an ongoing gradual process rather than as a series of reactions to random accidental events. This result does not support "accident" theories of career development, such as those of Miller and Form (1951), who did not find evidence of an internally motivated process of change in career
development and concluded from their data that change took place in the career lives of individuals as a response to haphazard external events or "accidents": The data obtained in this study was too orderly and progressive to be accounted for on the basis of a series of reactions to random "accidental" events. A more plausible conclusion is that career development occurs as an internally motivated process of change in which individuals struggle to become more positive in their feelings and attitudes toward self and career and do so gradually over an extended period of time.

The fact that the individuals in this study gradually become more positive toward self and career, over a period that extended into mid-life, does not support those theories of career development that perceive the establishment of positive feelings and attitudes as an event that occurs relatively early in the development of careers and is maintained from that point on. Stage development theorists such as Ginzberg (1951) and Super (1957) perceive career development evolving through a number of discrete stages in which a strong sense of self and career is normally established during the early formative periods and maintained from that point on. The data obtained in this study suggest that the development of a strong sense of self and career is a problematic issue in the lives of most individuals, that is gradually resolved over an extended period of time.

In addition, the finding of a gradual increase in levels of positivity did not support cyclical or 'crisis' theories of career
development; in which the individual progresses through a series of transition points involving marked reductions in the levels of positivity toward self and career. However, it is worth noting that Levinson (1978) does acknowledge that many men pass through the transition points of career development smoothly and without distress. On the other hand, Osherson (1980) clearly implies that before transition can take place it is invariably preceded by a crisis or disruption. The subjects in this study were all graduate students enrolled in a formal programme of studies. It can be argued that enrollment in a graduate programme, with its high levels of personal, emotional and financial investment, constitutes a major career transition. But there was no evidence to suggest that a crisis, manifested by significant reductions in levels of average positivity preceded such a transition. The data suggest a gradual increase in levels of positivity; a process that is not significantly affected by 'crisis' or transition points, at least in the sense of drastic changes in positivity.

A number of the individual construct ratings manifested significant change and deserve comment. In addition, two of the statistically non-significant results can be interpreted to provide support for the need theory of career development. However, it is important that any individual construct rating be viewed within a set of constructs, designed to elicit an overall or average response to career development.
There is no page 56 in this thesis.
The two statistically non significant constructs that deserve comment are:

(i) "A Sense of Belonging With Others / A Sense of Isolation and Cut Off from Others"

(ii) "A Strong Sense of Self (of who you are and where you are going) / A Weak Sense of Self"

Visual inspection of the mean ratings for the two constructs (see Appendix E) showed that, on average, relatively strong levels of positivity were maintained across the life periods. Subjects in this study had a relatively strong sense of self and strong feeling of belonging with others during the early life periods and maintained these high levels of positivity into mid-life. These results are consistent with need theories of career development (see Chapter II). According to the need theory of career development, proposed by Roe (1956), the graduate counselling students in this study comprise a professional group that could be expected to have a strong sense of belonging with others and to attain a strong sense of self when this basic need to belong with others was met. The individuals in this study had chosen an occupation that brought them into close contact with other people and, based on a need theory of career development, a relationship between the two constructs, mentioned above, would be expected. Also, a lack of statistical significance in the results obtained can be partly accounted for by relatively high levels of positivity that were present for the two constructs during the early life periods. Additional increases in positivity would not be as significant as would other constructs where the initial levels of positivity were lower.
Although the subjects did not become significantly stronger in their sense of self across the ten life periods there was one aspect of their sense of self that did acquire statistically significant changes in levels of positivity; this aspect was a sense of self esteem.

"A Strong Sense of Self Esteem / A Weak Sense of Self Esteem". Developmental theorists, such as Super, maintain that career maturity involves the development and implementation of a self concept through occupational choice. The data obtained in this study indicates that there may be a difference between the way in which an individual develops a sense of who he is and where he is going (i.e. a sense of self) and the development of a sense of self esteem. In other words, the two constructs are different, though possibly correlated, aspects of the self concept. It may be that before the basic personality needs are met and a strong sense of self developed, that an individual is unable to acquire strong positive feelings of self esteem. The data suggests a particular order of development in the relationship between the three constructs mentioned.

There were significant changes in levels of positivity on a number of individual constructs that form a set of constructs consistent with the existential view of career development (see Chapter II):

(i) "Feeling Free to Act / Feeling Locked in by Circumstances"

(ii) "A Feeling of Confidence / A Lack of Confidence in One's Ability to Make Wise Personal Decisions"
(iii) "A Meaningful Involvement / A Lack of Meaning and Involvement In Career"

An existential view of career development maintains that individuals are free to create their own meaning in life and career is an area in which major existential decisions are made. From an existential perspective, the creation of meaning, or a meaningful involvement in career, can only be achieved when an individual makes decisions to act in such a way that significant personal values are realized. In other words, individuals can create meaning in their lives only if they feel free to act so as to make the necessary wise personal decisions that lead to the realization of personal values. The acquisition of meaning is a gradual process that develops throughout the life of an individual and is dependent upon a gradually increasing sense of freedom to act and upon making wise personal decisions. The gradual increase in levels of positivity on the three constructs mentioned above is consistent with an existential view of career development.

Two constructs that reflected cognitive theories of career development were:

(i) A Strong Commitment to / A Weak Commitment to Long Term Goals
(ii) A Feeling of Confidence / A Lack of Confidence in One's Ability to Make Wise Personal Decisions

The results obtained showed an observable increase in levels of positivity across the ten life periods. In other words, a sense of planning or commitment to long term goals and the ability to make wise decisions are individual attributes that evolve gradually
over an extended period of time. For the individuals in this study, the ability to make wise personal decisions and to make strong commitments to long term goals were relatively problematic during the early life periods. The idea of a gradual prolonged evolution of the cognitive attributes involved in career development is provided by some cognitive theorists such as Dilley (1965) and Knefelcamp and Slepitza (1976). The results obtained in this study support that notion. On the other hand, cognitive theorists such as Tiedeman and O'Hara (1963) assume that the ability to make wise personal decisions is established at a relatively early stage of career development. Furthermore an individual's career progresses from those early periods on the basis of how he utilizes that ability to surmount various tasks at later stages. The results obtained in this study do not lend support to the idea that the ability to make wise personal decisions is formed during the early stages of career development.

The average of the ten construct ratings, calculated across the ten life periods, failed to show a statistically significant main effect for sex (male/female) and no significant interaction effect between sex and time periods (see Table 1, p.43). However, two of the individual constructs did show a statistically significant difference in the average ratings across periods of life given by men compared to those given by women. The two constructs were:

(i) "Feeling Free to Act / Feeling Locked in by Circumstances"

(ii) "A Feeling of Confidence / A Lack of Confidence in One's Ability to Make Wise Personal Decisions"
On average men compared to women experienced significantly greater feelings of freedom across the ten life periods. Women differed from men during early life periods by having a significantly lower sense of freedom to act and significantly lower feelings of confidence in their ability to make wise personal decisions. Although the average levels of positivity, derived from all ten constructs, were not significantly different for men and women during the early life periods, it would appear from the statistical difference obtained on two of the individual construct ratings plus a visual inspection of the mean ratings across the ten life periods (see Table 2, p. 44 and Appendix E) that the process of career development is somewhat different for women compared to men. This finding reflects on the results of a number of theoretical studies of career development based on exclusively male population samples. In particular, the self concept theory of career development proposed by Super (1957) has as one of its principal axioms that later periods of adjustment and levels of career maturity are directly affected by the way in which earlier periods are resolved. The measures used by Super to determine successful adjustment and career development at any particular life stage are derived from male group norms. If standards based on male group norms had been applied to the women in this study during their early periods of career development, the results would probably have indicated poor adjustment and low levels of career maturity at later periods of life. A prediction that would not have been supported by the
results of this study.

In general, the results were significant in a number of ways. First, the levels of positivity regarding self and career gradually increased over an extended period of time in the lives of the individuals in this study. This finding failed to support either "accident" theories or "crisis" theories of career development, where a less orderly and progressive evolution of positivity would have been expected. Second, the data suggest that the acquisition of strong positive feelings toward self and career is a problematic issue in the lives of most individuals, that takes an extended period of time to resolve. These results do not support "stage" theories of career development, that assert that the establishment of positive feelings takes place during the early life periods and is maintained from that point on. Third, a number of individual constructs provided results that reflect on specific theories of career development. (i) A relatively strong sense of belonging was maintained by the individuals in this study across the ten life periods. This finding is consistent with need theories of career development, that would predict a strong need to belong to be a dominant characteristic of a professional group, such as counsellors, who are closely involved with other people in their work. (ii) Individuals in this study showed strong increases in their levels of self esteem. Self-esteem changed significantly across the ten life periods whereas a strong sense of self did not show a statistically significant change. The difference
in the results obtained for the two constructs suggests that implementation of the self concept in career development is a process that follows a particular sequence of development for separate aspects of the self concept rather than a single global development; this possibility is not fully considered in existing self concept theories of career development. (iii) Freedom to act, ability to make wise personal decisions and meaningful involvement in career are three constructs that showed observable increases in levels of positivity. The results are consistent with an existential view of career development, with its emphasis on decisions that lead to the realization of personally meaningful values. (iv) Planfulness, in the form of a strong commitment to long term goals and decision making in the form of a feeling of confidence in one's ability to make wise personal decisions were two constructs that reflect cognitive theories of career development and that showed observable increases in levels of positivity across the ten life periods. The finding does not lend support to those cognitive theories of career development that perceive the normal establishment of decision making ability to take place during the early periods of career development alone; for most individuals in this study the ability to make wise personal decisions was a problem that was only resolved gradually over an extended period of time. (v) There were significant differences between men and women in their feelings of freedom and confidence to make wise decisions, with women feeling less free and confident than men, particularly during the early stages of career development. The statistically
different results suggests that the process of career development for men and women is different, with obvious implications for those theories of career development that do not take this difference into account.

Practical Application

The results indicate that the establishment of strong positive feelings toward self and career is a process that individuals find to be problematic during the early periods of career development and one that resolves itself only after an extended period of time, in the lives of most individuals. The questions that face counsellors are what practical steps or interventions can be undertaken to (a) help clients during the early problematic periods of career development and (b) facilitate the process of increasing positivity toward self and career across the life span. The answers to the questions can only be indicated at this exploratory level of the research. However, the significance of the data obtained for the individual construct ratings provide a useful starting point for developing more effective career counselling intervention strategies.

From the data it would seem that there is some validity to a 'need' theory of occupational choice and career development. The basic research in this area has provided support for the idea that individuals successfully choose occupations on the basis of their desired level of involvement with others; a desire or need that
stems from early childhood experiences. The results obtained in this study support the basic research findings in this area and further indicate the possibility of a particular sequence of development for separate aspects of the self concept. It is suggested from the results obtained in this study, that counsellors should first help clients to explore their basic needs in the area of involvement with other people before going on to help increase levels of self esteem or other aspects of the self concept.

Connected to the idea that there is a particular sequence of development for separate aspects of the self concept is the possibility that a strong sense of self is independent of and precedes a strong sense of self esteem. It would seem that a strong sense of self or identity develops, at least with the individuals in this study, during early life periods; exploration of the constituent elements of a sense of identity may help to identify the factors that will contribute to action plans designed to increase feelings of positivity about self. In other words, a counsellor/client exploration of the client's sense of self, during the early phase of career counselling, may reveal both strong negative self images, to be removed, as well as strong positive self images, to be enhanced and implemented via career development.

Some support was provided for an existential view of career development that connected increased feelings of positivity about decision making ability and freedom to act with more meaningful involvement in career. A focus on intervention strategies that increase an individual's awareness of his personal values (Simon et al. 1972) is a practical means of implementing the existential
view of career development, in which an individual acquires meaning through the realization of personal values. Freedom to act provides another existential focus point, when intervention strategies are used that both acknowledge the real limitations that exist in every individual's life and at the same time, attempt to enhance a sense of internal locus of control.

The results indicated that one of the most significant problem areas, overlooked by a number of cognitive theories of career development, was the ability to make wise personal decisions. To some extent the manifestation of indecisive behavior or poor decision making ability may be due to a lack of information, however, the individual may also have failed to develop the ability itself to make wise decisions; a deficit that can be remedied by a number of practical intervention strategies, particularly those of Janis and Mann (1977).

Finally, two constructs, the freedom to act and confidence in one's ability to make wise personal decisions, showed significant differences in the development of levels of positivity across the life periods for women compared to men. Although both women and men experienced lower levels of positivity during the early life periods, the difficulties were more extreme for women, though not predictive of their later periods of positive and successful development. The significance of the difference lies in the possibility of different career development patterns for women compared to men. The nature of the factors that may influence the development of different career patterns between the sexes is not clear from
the data obtained in this study, however, men may acquire a much broader range of employment experience faster than women because of the greater feelings of confidence that they have in their decision-making ability. The possibility exists that during the early stages of career development men gain experience by applying for and obtaining jobs that they don't have related experience for, feeling confident that they can learn on the job. Women don't have the same confidence in their decision making ability and therefore are more limited in the range of jobs that they apply for. Counsellors can help women become more confident in their ability to learn on the job, thereby gaining valuable employment experience that would otherwise not be available to them. Another practical application of the difference obtained in male and female results, is that career counsellors need to be careful in the use of measurements or tests of vocational maturity or career readiness with female clients, when the theoretical foundations and standards of measurement are based on male group norms.

In general, the practical application of the results should create intervention strategies that will help clients overcome the problems associated with developing a positive view of self and career during the early life periods and facilitate the process of gradually increasing levels of positivity across the life span. Specific intervention strategies based on the significance of individual construct results were developed to address the two main objectives given above. In particular, counsellors could (i) help clients explore their basic needs for involvement with other people
before focussing attention on increasing levels of self esteem or
other aspects of the self concept (ii) help clients explore their
sense of identity in terms of its negative as well as positive
components, as a focus for future action plans (iii) help clients
develop an awareness of the personal values that they will realize
in the development of a meaningful career (iv) help clients
develop an internal basis of control as a means of increasing a
sense of freedom to act (v) help clients develop the ability to
make wise personal decisions for example by teaching a conflict
model of decision making (vi) be aware of possible differences
in the career development patterns of women compared to men and
the appropriateness of using vocational testing instruments based
on male group norms, with female clients.

Future Research

A number of possible future research directions are indicated
by the results and conclusions of this study. First, the validity
and generalizability of the data obtained could be increased by
improvements in the methodology used. Limitations of this study
were created by the use of a narrow population sample and future
research could attempt to overcome this problem by the use of
different sampling procedures.

Second, the research obtained significant results on measures
of positivity, however, this is only one aspect of the change process
involved in career development and the measures obtained do not
provide an explanation of why the change process takes place at all.
Future research could augment the quantitative data obtained with a more detailed qualitative analysis of the individual life periods that influenced career development.

The question of why women seem to have greater problems than men, regarding some constructs, during the early developmental periods is one that could also be profitably addressed by a more detailed analysis of the actual flow of events during those early periods. A possible conflict in choice between occupation and marriage seemed to be evident in the self statements that the women provided for the early life periods and this conflict may influence the career development of women in ways that are different from the process experienced by men; future research could examine this tentative hypothesis.

Analysis of the individual construct results provided tentative conclusions of a theoretical and practical significance. Future research directions could evaluate a number of these conclusions. One suggestion indicated by the data was that a strong sense of self or personal identity precedes the development of a strong sense of self esteem. Future research in this area could attempt to determine the nature of the relationship that exists between different aspects of the self concept, identify the factors that influence their development and investigate the ways in which levels of positivity can be increased.

A number of specific intervention strategies were suggested for increasing levels of positivity and future research could evaluate the effectiveness of these proposed strategies. Particular
research could be directed toward evaluating the influence of counselling strategies that (i) strengthen a sense of internal locus of control (ii) heighten an awareness of personal values and (iii) increase general decision-making ability on the overall levels of positivity that individuals have toward self and career.
Summary and Conclusion

This study was designed to obtain subjective measures of change in levels of positivity toward self and career over the period from adolescence to mid-life. A secondary focus of the study was to see if there were any significant differences in the measures obtained from men compared to those from women.

Using a variation of Kelly's (1955) repertory grid methodology, a group of ten male and ten female graduate counselling students, aged between 35 and 45 years, assessed the influence of ten periods in their lives on the development of their careers. Each life period was assessed by means of a set of ten bi-polar constructs related to career development.

Analysis of the variation between average construct ratings, with repeated measurements across the ten life periods, showed a significant gradual change in levels of average positivity toward self and career between adolescence and mid-life. Subjects began with relatively low levels of positivity during the early periods of life and gradually moved toward higher degrees of positivity at mid-life. Significant differences were found in the measures obtained from men compared to women, with men feeling more freedom to act overall, and acquiring and maintaining strong feelings of freedom sooner than women; also men increased relatively low feelings of confidence in their decision-making ability sooner than women did.
The results suggest that the acquisition of strong positive feelings toward self and career is a problematic issue in the lives of most individuals; one that takes an extended period of time to resolve and constitutes a process that may be effectively facilitated by the use of specific counselling intervention strategies. Possible differences between male and female patterns of career development indicate the risks involved in using exclusively male referenced vocational guidance measures with female clients. The direction of future research would be to validate the findings and tentative conclusions reached in this exploratory study.
BIBLIOGRAPHY


Havighurst, R.J. Human development and education. New York: Longmans, Green, 1953.


SECTION B. CAREER PERIOD RATING FORM

(1) AGE: ______ PERIOD NAME: ___________________ PERIOD NUMBER: ______

(2) Complete the sentences to reflect the way you remember this period.

(i) I thought that I ...........

(ii) I felt that I ...........

(3) Consider each of the ten constructs listed below and circle the dot which best describes your thoughts and feelings about yourself during this period.

<table>
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<td></td>
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<tr>
<td>Feel In Control of My Own Destiny</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Meaningful Involvement In Career</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>Feeling Free to Act</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>A Feeling of Confidence in One's Ability to Make Wise Personal Decisions</td>
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A Weak Sense of Self
A Weak Sense of Self Esteem
Dissatisfied with Career Progress
A Weak Commitment to Long-Term Goals
Do Not Feel In Control of My Destiny
A Lack of Meaning and Involvement In Career
Sense of Isolation and Cut Off from Others
Feeling Locked in by Circumstance
Disharmony in One's Style of Life: Feeling unsettled and discontent
A Lack of Confidence in One's Ability to Make Wise Personal Decisions
APPENDIX B

My name is Tom Gilligan and I am a graduate student completing my M.A. in Counselling Psychology at the University of British Columbia. This study will ask individuals to reflect on periods of their lives that they think were of special significance or influence in the development of their careers. The data being collected will provide additional information about career development.

Although I appreciate your co-operation in this study please remember that your participation is voluntary and that you are free to refuse to answer any questions or to withdraw at any time. Should you choose to withdraw please be assured that you may do so without recrimination or negative consequences. Alternatively, should you be willing to participate then completion of forms will represent your formal consent to do so.

All data required will be gathered today and is expected to take about one hour. To ensure confidentiality the data will be recorded by means of a code number for each individual, however, I will ask you to put your name on a separate card that will be destroyed after the data has been collected and the procedures verified.

The procedure to be followed today is as follows: First, I will ask each of you to identify, label and number ten separate periods in your lives that you consider to have been significant in the development of your career. Then I will ask you to consider each period separately, giving your age and a brief thought about
yourself at that time. Finally, I will ask you to rate each period by means of ten constructs that I will provide.

The results will be included in my Masters Thesis and will be available at the Dept. of Counselling Psychology later in the summer.
After you have put your name on the small green code card I would like you to turn to Section A called 'Career Life Line'.

I would like you to mark ten points on the vertical black line that bisects the page. Each point will represent a period or time in your life that had some special significance or feeling to you and that in someway affected the development of your career. Identify each period or mark that you make with a single word or phrase that will help you to recall that period to mind later in the procedure. Write each word or phrase opposite the mark on the right side of the line, under the heading "Period Name". When you have identified, marked and labelled ten such periods, go back down the left hand side of the career life line and give each period or mark a number from one to ten, with the numbers running consecutively from 1 for the period closest to adolescence to 10 for the period closest to the present time.

At this point are there any questions on the procedure to be followed? Take the time you need and feel free to ask for assistance or clarification of the procedure at any point. We will proceed to Section B when everyone has completed Part A.
Make ten marks on the "life-line" to represent ten separate periods of your life that in some way contributed to your career development: each period will have a special feeling or significance for you. Number each period, with number (10) being the period closest to the present time. Give each period a name that will help you identify and recall the events and feelings of that time.
In Section B you will find 10 Career Period Rating Forms; each rating form is identified with a period number from 1 to 10. Complete the ten rating forms, one at a time, in the following manner.

In Part (1) enter your age and the period name or phrase that you gave in Section A. Then reflect on how you felt and thought about yourself as an individual at that time and complete the two sentences in part 2. Finally consider each of the ten constructs that are provided and circle the dot that best describes your thoughts and feelings about yourself during the period.

I want to stress once more the confidentiality of your responses and ask that you try to gauge as accurately as possible your thoughts and feelings at each period as you complete these construct ratings.

Are there any questions on the procedure to be followed. Take the time you need and feel free to ask for assistance or clarification of the procedure at any point. When you have completed the ten rating forms please give them to me together with the Career Life Line and code card. I would like to thank you for your participation.
APPENDIX E

INDIVIDUAL MEAN CONSTRUCT RATINGS ACROSS LIFE PERIODS

Construct 1

"A Strong Sense of Self / A Weak Sense of Self"

<table>
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<th>Life Periods</th>
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Construct 2

"A Strong Sense of Self Esteem / A Weak Sense of Self Esteem"

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"Satisfied With Career Progress / Dissatisfied With Career Progress"

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Construct 4

"Strong Commitment to Long Term / Weak Commitment to Long Term Goals"

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Construct 5

"Feel In Control of My Own Destiny / Do Not Feel In Control of My Own Destiny"

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Construct 6

"A Meaningful Involvement In Career / A Lack of Meaning and Involvement in Career"

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Construct 7

"Sense of Belonging with Others / Sense of Isolation and Cut Off From Others"

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Construct 8

"Feeling Free to Act / Feeling Locked In By Circumstance"

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Construct 9

"Harmony in One's Style of Life: / Disharmony in One's Style of Life: Feeling Settled and Content Feeling Unsettled and Discontent"

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Construct 10

"A Feeling of Confidence in One's / A Lack of Confidence in One's Ability to Make Wiser Personal Decisions Ability to Make Wise Personal Decisions"

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