1

CANADIAN THESES ON MICROFICHE

I.S.B.N.:

THÈSES CANADIENNES SUR MICROFICHE

National Library of Canada
Collection Development Branch

Canadian Theses on
Microfiche Service

Ottawa, Canada
K1A 0N4

Bibliothèque nationale du Canada
Direction du développement des collections

Service des thèses canadiennes
sur microfiche

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us a poor photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de mauvaise qualité.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

37

National Library
of Canada

Bibliothèque nationale
du Canada

CANADIAN THESES
ON MICROFICHE

THÈSES CANADIENNES
SUR MICROFICHE

0-315-07699-2

55619

NAME OF AUTHOR/NOM DE L'AUTEUR Brian E. Mavis

TITLE OF THESIS/TITRE DE LA THÈSE Personal Projects as Indicators of Change in Men at Midlife.

UNIVERSITY/UNIVERSITÉ Carleton University

DEGREE FOR WHICH THESIS WAS PRESENTED/
GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE Master of Arts

YEAR THIS DEGREE CONFERRED/ANNÉE D'OBTENTION DE CE GRADE 1981

NAME OF SUPERVISOR/NOM DU DIRECTEUR DE THÈSE Dr. Brian R. Little

Permission is hereby granted to the NATIONAL LIBRARY OF
CANADA to microfilm this thesis and to lend or sell copies
of the film.

The author reserves other publication rights, and neither the
thesis nor extensive extracts from it may be printed or other-
wise reproduced without the author's written permission.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈ-
QUE NATIONALE DU CANADA de microfilmer cette thèse et
de prêter ou de vendre des exemplaires du film.

L'auteur se réserve les autres droits de publication; ni la
thèse ni de longs extraits de celle-ci ne doivent être imprimés
ou autrement reproduits sans l'autorisation écrite de l'auteur.

DATED/DATE

April 14 1981

SIGNED/SIGNÉ

Brian E. Mavis

PERMANENT ADDRESS/RÉSIDENCE FIXE

R.R.#3,

NAVAN, Ontario

KOH 2S0

29

Personal Projects as Indicators
of Change in Men at Midlife

C

Brian Mavis,

A thesis submitted to the
Faculty of Graduate Studies and Research
in partial fulfillment of the requirements
for the degree of Master of Arts

Carleton University
Ottawa, September, 1981

The undersigned recommend to the Faculty
of Graduate Studies and Research acceptance of the thesis
"Personal Projects as Indicators of Change
in Men at Midlife"
submitted by Brian Mavis
in partial fulfillment of the requirements for
the degree of Master of Arts

F. R. Little
.....
Thesis Supervisor

[Signature]
.....
Chairman, Psychology Department

Carleton University

November 1981

Acknowledgements

I would like to extend my appreciation to Brian Little for his continued interest and advice; also for just happening to turn 40 at the right time.

I would like to also thank John Partington for his suggestions regarding the use of subjective age measures.

ABSTRACT

This study focusses on changes which occur during the middle adult years and how these changes are mediated by the nature of the projects men are engaged in. Necessarily, such an investigation involved confronting issues related to the efficacy of age as a predictor, and the consistency and continuity of behaviours through time and space. The methodological approach used was based on Personal Projects Analysis (Little, Note 1) and involves the subjective evaluations of current activities and commitments. By extending the methodology to the classification of activities and examining relationships within categories, the moderating effects of activity type can be isolated. The subjects consisted of 134 men between 33 and 58 years of age. Correlational and linkage techniques were used for the analysis. The results indicate that actual patterns of activity are stable with respect to age but attitudes towards activities change with time. For example, self-related projects become more enjoyable and under more control with age. In addition, chronological age proved to be a poor index of change compared to more subjective age estimates. Family age, indicative of the family life cycle, provided the most useful framework for understanding the nature of the changes found. As

children grow up, there is more time to spend in recreation and social activities.. The controversy of male midlife crisis was also examined. Evidence supporting crisis-like events in midlife was found, although assertions of it's universality and fixedness with age were not substantiated.

Table of Contents

	page
INTRODUCTION	1
Consistency, Continuity, and Growth	5
The Middle Adult Years	9
Transition or Crisis?	16
The Personal Project as a Unit of Analysis	19
Personal Projects as Indicators of Change	23
METHOD	27
Subjects	27
Procedure	27
RESULTS	30
Subjective Evaluations of Age	31
Content-Structure Variations of Personal Projects	43
Life Satisfaction and Quality	67
"Midlife Crises"	74
DISCUSSION	94
Limitations of the Subject Pool	94
Personal Age and Aging	95
Content Categorization	99
A Priori Hypotheses	101
The Family Life Cycle	105
Men's View of Their Lives	110
Cohort Effects	113
Men and Midlife Crises	114
Coping With Distress	118
RECAPITULATION	122
Future Research	124
Footnotes	126
Reference Notes	127
References	128
APPENDIX A	134
APPENDIX B	137
APPENDIX C	150
APPENDIX D	153
APPENDIX E	158

List of Tables

Table 1	Means and Standard Deviations of All Variables	32
Table 2	Frequency of Responses For Subjective Age Questions	36
Table 3	Intercorrelations of Subjective Age Variables	37
Table 4	Stepwise Regressions of Chronological Age	38
Table 5	Classification of Salient Age Characteristics for Men	42
Table 6	Frequencies of Project Categories	44
Table 7	Project Profile Pattern Similarity Coefficients	46
Table 8	Means of Project Dimensions and Age Differences by Category	49
Table 9	Participation Overlap for Selected Activities	52
Table 10	Summary of ANOVA's of Project Dimensions by Age and Category	53
Table 11	Interaction of Others' View of Importance By Age and Category	55
Table 12	Interaction of Negative Impact by Age and Category	56
Table 13	Interaction of Challenge by Age and Category	57

Table 14	Significant Variable Correlations With Age and Age Factors	59
Table 15	Significant Correlations of Project Dimensions and Age Variables	60
Table 16	Relative Frequencies of Activities by Age Group	66
Table 17	Intercorrelation of Indices of Life Quality and Satisfaction	71
Table 18	Mean Life Graph Heights by Described Year and Age of Respondent	72
Table 19	Analysis of Variance for Mean Graph Heights - All Data	73
Table 20	Analysis of Variance for Mean Graph Heights - 40+ Years	75
Table 21	Life Satisfaction and Quality by Age Group	76
Table 22	Age Dip in Life Graph by Age of Respondent	78
Table 23	Reasons Listed as Precipitating a Dip in the Life Graph	79
Table 24	Discriminant Function of Crisis and Non-crisis Groups	81
Table 25	Comparison of Project Variables Between Crisis and Non-crisis Groups	83
Table 26	Summary of Within Category Discriminant Function Analyses	85
Table 27	Variable Comparisons Between Crisis and Non-crisis Groups	89

Mid-life is when the hormone production levels are dropping, the head is balding, the sexual vigor is diminishing, the stress is unending, the children are leaving, the parents are dying, the job horizons are narrowing, the friends are having their first heart attacks; the past floats by in a fog of hopes not realized, opportunities not grasped, women not bedded, potentials not fulfilled, and the future is a confrontation with one's own mortality (Lear, 1973).

The notion that a man in his lifetime, progresses through a series of developmental stages has been recorded throughout history. Each age and culture has produced a ladder of development describing the life of every man. Such stages typically focused on the various social roles adopted throughout the life course. Some however, were more cognitive in nature, describing the apparent waxing and waning of man's mental abilities (Doxiadis, 1974; Stevenson, 1977).

Modern conceptualizations of developmental stages are fundamentally similar to their classical precursors, emphasizing changes in cognitive functioning and role demands over the life course. Even as the relative length of the life span has increased, the nature of the stages remains essentially unchanged. The study of developmental change has become a major field in the realm of psychology (Baltes et al. 1980).

Freud was a pioneer in the field of developmental psychology, producing one of the first theories related to the development of personality. Personality development progressed through a series of five psychosexual stages. Because of the emphasis placed on the childhood years in Freud's theory with adult personality determined during childhood, most of the subsequent research in developmental psychology dealt almost exclusively with children. It was not until

Erikson, that some of the attention was diverted to the adult years. Erikson proposed eight stages of ego development, the latter three stages occurring during the adult years. The study of adult developmental psychology has since proliferated producing substantial evidence supporting a life span developmental perspective in personality psychology.

Life span developmental psychology views development as a life long process. Development has been defined as the iterative mutual accommodation between the person and his changing environmental context (Bronfenbrenner, 1977). This is in direct contrast to both the psychoanalytic and biological models of development. The psychoanalytic perspective, exemplified by Freud, is concerned primarily with antecedents in the childhood years; biological growth models regard maturity as an intrinsic end-state, where any subsequent changes are regarded as decline. The goal of life span developmental psychology is to isolate the course of behavioural changes throughout the life span, and identify their temporal order and interrelationships. As life span development extends over long periods of time, the form of behavioural evolution over the life course needs to be viewed from the dual perspectives of ontogeny and bio-cultural change (Baltes et al. 1980). Development is the

product of interaction with the changing macro-ecology and is affected by three classes of influences. Ontogenic influences are normative, environmental-biological determinants which are strongly age related. History-graded influences reflect biological and environmental effects associated with historical time. Non-normative influences are independent of age and cohort effects. They are significant events which can occur at any point during an individual's life. Non-normative influences gain increasing importance as the life course progresses. Interindividual variability tends to increase with age, thus as age becomes a less potent predictor alternative variables are required for explanatory purposes. . .

Aging is not a simple process within the individual but rather it is related to the impact of time on all aspects of one's being (Zarit, 1977). Chronological age as an index marks only the passage of time. In this respect, time is useful in a relative sense, to indicate movement through various developmental processes. The multiplicity of developmental schedules which together form the life course might be better understood if references to age, were differentiated into chronological age, biological age, social age and psychological age (Neugarten, 1977; Perun and Bielby, 1980).

Kastenbaum et al. (1972) in their discussion of personal frames of reference on aging examined three types of functional age. Personal age is a subjective self-assessment of an individual's age status; interpersonal age is the age status of an individual as others evaluate him. Consensual age expresses the relationship between personal age and interpersonal age estimates. It involves inter-rater agreement and the direction in which agreement was found. They concluded that alternative formulations of age were indeed related to chronological age though not always as a simple linear function.

Until definitions of various aspects of age can be better operationalized chronological age remains the most objectively measured and easily understood measure of time (Neugarten, 1977).

Consistency, Continuity and Growth

An important debate within the realms of personality psychology has been the question of the consistency of behaviours across situations. This issue has developed into a three-sided contest in the attribution of causality. Trait theorists favour the individual as the seat of stability; behaviourists have typically looked for situational reinforcers. The interactionalist camp regards the interpenetration of

the individual and his external context as the focus. To predict a criterion act in specific behaviour settings information is required about the composition of both the individual and the setting. The use of trait measures alone is of low value. When multiple acts are the criteria used as a basis for predictions there is impressive evidence for the temporal consistency of behaviour. Traits can thus be used to derive a general picture of a person's conduct across situations (Epstein, 1979; McClelland, 1981; Mischel and Peake, in press).

The addition of time to the consistency-inconsistency debate transforms it into an issue of continuity-discontinuity (Block, 1981). Much of the contention centers on interpretation: what aspects of personality are being investigated and what is meant by change and stability (Rubin, 1981). If the word stability is taken at face value, then party lines are split, pitting the trait theorists against just about everyone else. Stability is inferred from the high correlations between personality attributes as measured during childhood and re-assessed in adulthood (Block, 1971; Costa and McCrae, 1976). The persistence of these characteristics through the years, is seen as evidence supporting the stability of personality.

If the meaning of stability is shifted slightly to

suggest continuity, then almost unanimous consensus is possible. Any changes which occur, do so in an orderly sequence. There is a lawfulness which accounts for both continuity and discontinuity (McClelland, 1981). Disregarding differences related to the degree of change, many investigators have found qualitative differences in the types of personality change experienced by adults (Block, 1971; Knox, 1977; Lowenthal & Chiriboga, 1973; Lowenthal et al. 1975; Neugarten, 1973; Rosenberg & Farrell, 1975; Vaillant, 1977).

Evidence from the Berkeley Growth Study (Block, 1971; Maas & Kuypers, 1974) suggests that there are great variations among individuals in the degree to which their personalities are consistent from early adolescence through adulthood. Block identified several personality types which could be used to differentiate those who manifest substantial personality variations from those who exhibited high consistency over time. What is important is that the changes are recognized, although a personality type at one time may be a completely unrecognizable type years later. The evolution and changes of personality over the years is lawful but not necessarily direct or obvious. The effects of all later experiences in life depend on what the individual has already experienced

(Block, 1981).

Having progressed from consistency-inconsistency to continuity-discontinuity, one more step can be taken. Are any changes which occur over the years merely changes or do they represent growth? Change can result from adaptation or conflict resolution, but growth is seen as development allowing the expression of new aspects of the personality and facilitating the use of certain resources in the external world (Levinson, 1981).

A substantial number of researchers see the changes as part of on-going development. Most have proposed stages of development to provide a framework for examining the middle adult years. There are supporters of both age independent stages (Peck, 1968; Vaillant, 1977) and age-graded stages (Gould, 1972; Levinson, 1978; Rosenberg and Farrell, 1975; Stevenson, 1977). The stages exist as transition periods which provide a chance for solving some of the problems related to changing needs and values.

Casady (1977) has provided an integrative summary suggesting that personality remains fairly stable over the life course although healthy individuals make adjustments in their values to reflect changing commitments and roles. Traits manifest stability but with age, as changes in occupational and familial

spheres occur, a differential reliance on various traits occur. Differences in the ranking of personality traits with age reflect changing assessments of life situations.

The Middle Adult Years

The lack of emphasis and research on the middle adult years has been attributed in part to a suggestion that middle age, like adolescence, is a by-product of the twentieth century (Borland, 1978). The average life expectancy has increased by almost 50% since the turn of the century. Many women were widowed before the last child had left home. Social changes such as birth control, smaller families, closer spacing of children and children leaving home earlier, coinciding with increased longevity has lead to a situation where active parenthood makes up a smaller proportion of an individual's life. "The increased length of the... post-parental period is one of the most dramatic changes to have occurred in the family life cycle pattern in this century (Borland, 1978, p. 380)".

The nature of the changes that occur during the middle adult years have been viewed in the context of seven theoretical perspectives of midlife transition by Brim (1976). These same themes have been expressed by Stevenson (1977), in a somewhat different format. The

scope of these perspectives ranges from the biological to the social-structural. They reflect varying facets of two major themes of adult development: work and love (Rappoport, 1976; Smelser and Erikson, 1980). To summarize, they include endocrine changes, dissonance between aspirations and achievements, a resurgence of "The Dream", stagnation vs growth (generativity), confrontation with death, changing relationships within the family, and social status and role changes. The following discussion is from the summary by Brim (1976).

During middle age biological decline becomes more readily apparent. This is manifest by decreased physical strength and energy, increased reaction time and a decrease in bodily resilience. The most salient characteristic of middle age for men is their declining physical condition (Neugarten, 1968). With increased age comes an increased susceptibility to illness and fatigue. Digestive and cardiac problems also become more prevalent (Brim, 1976; Kuhlen, 1968). There is an increased monitoring of, and concern about, physical health. As men get older, life satisfaction becomes increasingly influenced by their self-rated health (Palmore and Luikart, 1974).

The late thirties appears to be a time for judging the success one has had in meeting the goals that were

set out in early adulthood.

It is through one's work that self-esteem and self-fulfillment are sought. The realization that the goals cannot be accomplished and that the desired position on the ladder has not been achieved can be very disheartening. A review of the past in the light of reality and the shadow of the future can necessitate a downward shift in aspirations. It is time for de-illusionment when long-held assumptions and illusions about the self and the world require reappraisal and adjustment (Levinson, 1978).

"The Dream", a term borrowed from Levinson (1978), is a youthful aspiration which is never lost, but throughout adulthood is often compromised. Whereas the last perspective was a quantitative assessment of the success of one's endeavours, a resurgence of "The Dream" involves a qualitative assessment: "Is what I have achieved really worth what I have given up? and Did I make the best uses of my resources in achieving it?" A man may feel that he has attempted too little or it has all been meaningless regardless of his degree of success. He must decide if the remainder of his life will be spent in the same fashion (Fiske, 1980; Gould, 1980). It is at this time that life satisfaction typically decreases.

Generativity, borrowed from Erikson, involves the

acceptance of the responsibility for guiding the upcoming generation. In opposition, stagnation is indicative of self-indulgence and concomitant personal impoverishment resulting from acute self-concern. According to Erikson (1968) acceptance of this responsibility leads to the successful adaptation to inner and outer world demands. Peck (1968) suggests several other stages are involved in the identity transition which occurs. A consequence of aging is a change in values. The use of the head takes precedence over use of the hands as a standard of self-evaluation. Physique-based values are replaced by mental-based ones as priority is given to expressive-interpersonal values (Lowenthal et al. 1975). The nature of human relationships changes as individuals are defined less in terms of sex-linked ascriptions and are identified as unique personalities (Lowenthal & Chiriboga, 1973).

Another manifestation of physical aging is the confrontation with death as a realization of one's own mortality. There is a change in time perspective. Life becomes scaled in terms of time left to live rather than time since birth (Neugarten, 1968). The individual sees himself as no longer growing up, but as growing old. Death, instead of an abstraction or event experienced by others, takes on personal meaning. For many it is a time when one's parents die. Funerals

become an increasingly common occurrence in each person's life (Jaques, 1970; Vaillant, 1977).

The nature of relationships within the family changes during midlife. Children become increasingly independent; the wife's role as mother and homemaker changes as the children leave home. A man's ~~parents~~ may become more dependent on him with the accompanying disabilities of increased age. Problems which arise at this time can result from changes in the personalities of the husband and wife. A man's dominance peaks during the late twenties and then declines. Changes in values and self-identity, and an increasing preoccupation with self and inner life (interiority) can have the net effect of decreasing the satisfaction a man gains from his occupational roles. Grant (1966) found that middle age men saw their lives as dissatisfying and sought to change their life patterns. They turn to the family and community for self-fulfillment, shifting from active to passive mastery of the environment (Back, 1974; Neugarten, 1968; Kahlen, 1968; Lowenthal et al. 1975). Men spend more time engaged in home-based activities as they get older (de Grazia, 1961).

Levinson (1978) suggests that such changes result from an integration of the masculinity-femininity, young-old and attachment-separateness polarities. Feelings of alienation from the family peak for men

during the thirties. Men become more concerned with the morality of their behaviour and the preservation of a positive self-image (Grant, 1966).

The end result is that men become increasingly receptive to their affiliative, nurturant and sensual promptings, perhaps causing them to move away from a very active involvement with the world to a more introspective position (Neugarten, 1973). Within the context of the family, the originally dominant controlling father becomes eclipsed by his wife who is becoming more instrumental, aggressive and domineering. Pineo (1968) suggests that these personality changes account for the decrease in marital satisfaction which often occurs. Since marriage is arranged on the notion of goodness of fit between individuals and not on a random basis, any change which occurs in an individual has a better than average chance of contributing to decline in the goodness of fit.

Analogous to the changing roles within the family, there is a change in the importance placed on social roles. Personal investments become more centered on the social networks related to family and community in an effort to find a balance between the opposing needs of self and society. There is a withdrawal from the large external world to a more personal world where gratification of needs is replaced by indirect

vicarious fulfillment (Kuhlen, 1968; Frenkel-Brunswik, 1968; Levinson, 1978; Neugarten, 1968; Rosenberg & Farrell, 1975). This leads to a peak and decline in the number of social relations. There is a decrease in the number of friendships and involvement in social activities. In terms of a social life-space model (Williams & Loeb, 1968) there is a decrease in the number of contacts, although the intensity and complexity increases to meet changing psychological needs.

Brim (1976) suggests there are many mediators for personality changes which occur during midlife. Social class is one such mediator. Members of different social classes have different perceptions of the phases in the adult life course (Neugarten & Peterson, 1957). For white collar workers, forty is seen as the prime of life, fifty is middle aged and seventy is old. Blue collar workers are middle aged by forty and see themselves as old by sixty. These differences are reinforced by the differences between the ages when blue- and white - collar workers leave school, get married, and become parents and grandparents.

Behaviour change is the result of the individuals perception of change, evaluated in terms of his own dominant concerns and expectations (Thomae, 1970). These concerns and expectations arise from a socially

prescribed timetable for major life events. These age-graded norms vary according to the individuals specific group membership within society (Neugarten, 1969). Age-graded expectations operate as a control system with social structures creating the prerequisite conditions for both change and stability. (Becker, 1964).

Transition or Crisis ?

The scope of the changes which can occur during the middle adult years is indicative of their complexity. Adults, because of their longer life histories and complicated patterns of social and personal commitment, are much more complex than children. The tasks and challenges facing adults during these years, within an equally fluid social context, have just recently become topical. From a life span perspective, the gap in the body of knowledge between adolescence and senescence is being explored.

An important issue in the study of the facets of midlife transition is the question of its contingency with age. When is midlife? This is not easy to ascertain when midlife is not consistently defined across studies. Lowenthal et al. (1975) interpreted midlife as falling during the late forties and early fifties. This is based on the reasoning that at age

fifty, a man has approximately 25 more years of life ahead. As such, this might be better interpreted as a mid-adult-life period. Stevenson (1977) divided the adult years into two eras, age fifty being the borderline. Frenkel-Brunswik (1968), based on her biographical studies, appears to also favour the latter half of the forties as the midlife years. Levinson (1978) opts for a midlife transition during the forty to forty-five age interval, whereas Gould (1972) suggests an interval ranging from thirty-five to forty-five years. The only generalization that can be drawn is that any transition in midlife appears likely during the fifth decade of life.

Mid-life seems akin to the "growing pains" of adolescence, indicative of a period of transition from one relatively steady state to another. The middle age period forms a bridge between two generations yet it is distinct from both of them. It is a time of growth and change: a necessity for any living, interactive system.

Often in the popular press, the term midlife crisis is used interchangeably with midlife transition. This was no doubt aided by the flood of survival manuals on the market, one of the first and most popular being Gail Sheehy's Passages: Predictable Crises of Adult Life. It is an unfortunate choice of

words since the connotations of a crisis as opposed to a transition are quite different! Lawrence (1980) attributes the success of the idea of midlife crisis to its timeliness. It appeared at a time in history when both the public and academia were ready. Researchers had just started collecting data on the vast expanse between adolescence and senescence, while men, finding that events they perceived as uniquely personal crises were actually widely experienced, could legitimize the experience: "It's easier to face life's difficulties when you know everyone else faces them too".

There is little evidence supporting the concept of midlife as a necessary time of crisis. The psychological and interpersonal withdrawal during the midlife years is common: in retrospect many see it as a time of rebirth. Only a few experience psychological disturbance leading to breakdown (Rosenberg & Farrell, 1975). For men there are no reliable biological or behavioural events demarcating midlife. Age appears arbitrary: there is no magical year associated with midlife crisis since job dissatisfaction, divorce and depression are equiprobable throughout adulthood. Crisis is an exception rather than a rule (Bromly, 1974; Vaillant, 1977). Brim (1976) suggests that a midlife crisis can occur if there are multiple simultaneous demands for personality change. The

"crisis" is experienced as a loss. It is seldom identified as a crisis as it occurs privately, gradually over several years (Raynor, 1971; 1978).

The Personal Project as a Unit of Analysis

The adult creates a sense of life cycle by internalizing consensually validated expectations graded by age. Life span investigation requires a set of dimensions that are appropriate and valid ways of capturing reality (Neugarten, 1969). Levinson (1981) suggests an evaluation of the life structure. The life structure governs the engagement of the self and the world. It is a boundary structure, not totally independent from the systems it connects.

Brim's (1976) summary suggests that any personality changes which occur during adulthood are mediated by a complex interaction between the changing individual and the changing social environment. Studies of these changes typically focus on a single perspective and refer only in conclusion to the complex interactions involved. The assessment, representing a frozen instant in time, is subsequently placed within a time-stream context with an intensive interview. The goal, which varies in its degree of success with respect to the assessment technique, is to reconstitute the interactive exchange between self and environment

in an effort to determine the nature of the factors influencing behavioural change.

Perhaps a more effective way of determining the interactive dynamics of middle age is by taking a sample of the interchange, rather than reconstituting it. Personal projects analysis (Little, Note 1) provides a framework to accomplish this task. A project, conceived as an interrelated sequence of actions intended to achieve some personal goal (Little Note 1, p. 4) is a unit of assessment derived by the individual from his social context. As an analytic unit it is not as limited in scope as standard assessment devices, capturing the indelible interaction of affect, cognition and behaviour. In the light of the complicated changes that can occur in all spheres during the middle years, such a unit of analysis may better capture the complexities of the real world in a way amenable to study.

Personal project methodology involves the elicitation of a list of ~~projects or current concerns~~ from each subject. Typically, such lists include activities in the realms of self-improvement, personal achievement, hobbies, domestic and occupational tasks. Respondents then rate each project on several dimensions. These dimensions, based on previous research, were chosen to achieve a broadband inquiry

into factors which affect behaviour, such as perceived importance, value congruency, difficulty and stressfulness. A complete list of the dimensions used in this study is given in Appendix A. From ratings on such dimensions ipsative indices characterizing an individual project matrix can be calculated. Normative indices can also be derived providing a means of comparison among individuals.

Previous studies have used this method to investigate life satisfaction (Palys, Note 2), human resource utilization and sex differences in project management (Sheng, Note 3), performance in laboratory stress situations (Morrison, Note 4), and job performance and satisfaction (Yard, Note 5). Yard (Note 5) in considering the consistency of past studies using project methodology, calculated Spearman rank-order correlations between pairs of dimensions in several studies. These values ranged from 0.19 to 0.77, the lowest intercorrelation occurring for two studies which involved adolescent and elderly subjects respectively. Yard's sample of middle aged men correlated 0.27 with the elderly sample, 0.68 with the adolescent sample and an average of 0.58 with an undergraduate sample. Although it does not provide any proof in the direct sense, it brings to mind the analogy of "growing pains" and highlights the

differences found with samples of different ages.

Runyan (1978) has added time to the discussion of interactions and suggests that the life course can be seen as a sequence of person-situation interactions. Successive behaviours are mediated by temporal changes in the person and the situation. A longitudinal study of projects over the middle adult years would yield a great deal of information on individual change and the changing nature of P x S interactions. The benefits of such studies are counterbalanced by the considerable cost in time and resources.

A more practical approach is a cross-sectional investigation. The major limitation of this type of study is the inability to determine the extent of what has been called history-graded effects or cohort effects (Baltes et al. 1980; Neugarten, 1977). Any conclusions reached as a result of this kind of investigation must be interpreted with this possibility in mind. The study is justified due to the inadequacies of the existing information. Neugarten suggests that the present body of knowledge does not even permit identification of any sequential changes in personality that may occur with the passage of time. Current research should concentrate on ascertaining the course of personality development-- descriptive research aimed at discovery rather than confirmation (1977, pg 632).

Personal Projects as Indicators of Change

Because of the inconsistencies in the research on the dynamics of midlife, this study attempted to interpolate from what is known about early adulthood and late adulthood. Somewhere in the forties it appears that personality changes occur. A cross-sectional design should focus on isolating any changes that occur during that period of time. Hypotheses can be made about the net result of changes from the thirties to the fifties, but the actual mechanics of these changes remains a mystery.

During the middle adult years, age related but not necessarily dependent changes in the frequencies of various types of projects should occur. The focus of the projects should come closer to an individual's more immediate spheres of influence as he changes his focus from the world at large to his own back yard. With respect to overall ratings on project dimensions, there should not be any changes with age in most cases. Rather ratings with respect to various categories of projects should change.

Based on the literature on adulthood, possible changes in various projects dimensions can be hypothesized. The overall importance of projects should not change although a change should occur in the various categories of projects. The reported change in

the nature of interactions with the environment suggests that activities related to family and community take precedence over other types of projects. In a similar sense, the overall enjoyment of projects should not change although certain types of projects may come to be seen as more enjoyable than others.

Overall project visibility should increase as the projects become more home centered, which is presumably where most of those people who are important are located.

The evidence indicates that there are changes in one's sense of control or mastery which accompany age. Internal locus of control increases from adolescence through adulthood eventually stabilizing (Staats, 1974). In middle age one expects higher overall control of projects compared to the earlier years as one becomes part of the controlling generation (Neugarten, 1968). Research indicates that senior citizens perceive less control in the domain of social and physical activities, but not with respect to intellectual pursuits (Lowenthal et al. 1975). With increasing age and a decline in commitments to the world at large, the overall initiation of projects should increase. With an increased sense of control and initiation, the overall stress of the project system should decrease. This again may be mediated by

the type of project being engaged in.

With increasing emphasis on a passive mastery of the external world self-initiated projects should become more self-prototypical. This may not be apparent to others since this is in part due to the emergence of parts of the self that have been previously neglected (Levinson, 1978; Kuhlen, 1968; Lowenthal et al. 1975; Neugarten, 1973).

Research indicates that values change with time, therefore overall project value congruency should remain essentially unchanged (Lowenthal et al. 1975; Fiske, 1980). It may be the changing values which affect the nature of the projects engaged in and therefore the other project dimensions. Project categories related to external commitments become less value congruent, but also less numerous.

If there is increased value congruency, initiation, control, enjoyment and self-identity, then it would seem that the overall project congruency should increase: positive impact increasing while negative impact decreases.

The overall progress of activities, like perceived difficulty, is for the most part independent of personality influences, being more affected by the overall congruency of the project system and the nature of external influences and resources in the

individual's environment.

There may be an increase in challenge of the projects due to an increase in the vested control and the interest in the projects. This may be related to the individual's desire for challenge in his life. The nature of the others involved in the projects changes. With increasing age the focal interdependence of the project system will increase while the diffuse interdependency will decrease (Williams and Loeb, 1968). This too may be mediated by the nature of the activity.

METHOD

Subjects

The total sample consisted of 134 men ranging in age from 33 to 58 years, with a mean of 41.8 years. Approximately half of the subjects were solicited from the Ottawa area via personal contact networks, university courses, service organizations and local business. Of the 219 individuals receiving the forms, 63 (29%) returned usable protocols. Another sample was similarly obtained by Brock University in St. Catharines, Ontario as part of a larger research project. A total of 71 men in their sample met the age and occupational requirements of this study. All subjects sampled were from middle and upper-middle socioeconomic groups, as determined by their occupations. The occupational groups sampled included insurance salesmen, teachers, Peace officers, physicists and civil servants.

Procedure

The response package used consisted of five sections. A sample response package is presented in Appendix B. The first section was the Personal Projects Analysis. Each participant was asked to write down a list of current activities and select 10 from

this elicitation list. Each activity was rated by the respondent from 0 to 10 on sixteen dimensions. In this study, the dimensions used were importance, enjoyment, difficulty, visibility, control, initiation, stress, time adequacy, outcome, self-identity, others' view of importance, value congruency, positive impact, negative impact progress and challenge. In addition, they were asked to indicate how many other people were involved in the project and how old they felt when they were engaged in the activity.

Indices of life quality and satisfaction used were taken from Palys (Note 2) who modified them from Cantril (1965). These measures are based on the assumption that expressions of life satisfaction are a partial consequence of comparisons between aspirations and actual achievements. Presumably an individual could perceive a high quality of life yet be dissatisfied, as well as the converse.

A Ladder of Life was used to elicit subjective evaluations of life quality for the past, present and future. The Life Satisfaction index was used to estimate men's present level of satisfaction with their lives. Both were 11 point scales ranging from 0 to 10.

Since the utility of chronological age has been questioned, measures of subjective age were adapted from the interview schedule used by Kastenbaum et al.

(1972). The questions were selected to provide insight into the various aspects of personal age. As well, two questions were selected to determine what were the salient characteristics of men's perceptions of their own aging. Men were asked to list what about themselves was characteristically young or old for their age.

To provide a perspective of how men viewed the course of their lives, a Life Graph (Back and Bourque, 1970) was included. Each man was asked to represent his life as seen from age 20 and to project it through until the age of 80. Such a technique indicates how lives are shaped by different issues and events; how past events are reflected in the anticipation of the future.

The package concludes with a demographic summary providing personal information on the respondent. In addition, facts about the family were ascertained, since time measured with respect to the family could prove to be a useful measure.

Each respondent was given the self-administering response package and a stamped self-addressed envelope for its return. Subjects obtained through Brock University did not receive the Life Graph and "Ages" portion of the form.

RESULTS

The sequence of the data analysis was divided into four sections representing different aspects of the study. The goal was to achieve an integrated picture of the middle adult years for men, and to determine if any systematic changes occurred over the course of time. Thus, the first section examines chronological age and its relationship to subjective age estimates and alternative measures of the passage of time. Afterwards, content-structure relationships of Personal Projects were examined to determine how men view various aspects of their lives. Issues regarding quality of life and life satisfaction were studied using the global assessments of the self-anchoring scales and the Life Graph. Finally the question of midlife crisis was explored to provide a focal point about which to integrate the results.

One item which should be reiterated is the change in units of analysis when referring to content-structure relationships. This is a study of men and how they look at their lives at one point in time. As such, many of the analyses were normative in that they referred to "the average man". However to go beyond how men view aspects of their lives in a general sense to reveal how they consider specific components of

their existence necessitates going beyond the men themselves and looking at their activities -- interactions within the context of the external world. An individual may list several activities of the same type; each project is treated as a discrete unit of analysis, rather than being averaged for each individual. Therefore, whenever results are presented which refer to specific classes of activities, they are normative in the sense that they refer to what is normative for that type of activity. The change in units of analysis can be conceived as analogous to the difference in using weighted and unweighted means in the analysis.

Table 1 provides a summary of the major variables used as well as the means, standard deviations, number of valid cases and abbreviations. Subjects recruited through Brock University did not receive the "Ages" and Life Graph portion of the package accounting for the discrepancy in sample sizes for some of the variables. Several protocols contained incomplete information for some sections but none had to be eliminated completely.

Subjective Evaluations of Age

The results of the general questions related to subjective age indicate that most people regard themselves as young for their age with respect to how

Table 1

Means and Standard Deviations of All Variables

<u>Variable Name</u>	<u>Mean</u>	<u>S.D.</u>	<u>N</u>
Number of Projects Elicited- NPROJ	12.48	4.28	134
Number of Cultural Projects- CULTURE	.75	.92	134
Number of Interpersonal Projects- INTERP	.57	.81	134
Number of Intrapersonal Projects- INTRAP	.56	1.20	134
Number of Recreational Projects- REC	1.36	1.29	134
Number of Vocational Projects- VOC	.26	.57	134
Number of Occupational:social Projects- OCCSOC	.15	.42	134
Number of Occupational:Task Projects- OCCTASK	1.36	1.66	134
Number of Estate Projects--ESTATE	3.49	2.58	134
Number of Family Projects- FAMILY	.94	1.31	134
Number of Spiritual Projects- SPIRIT	.13	.41	134
Number of Health-Body Projects- HEALTH	.97	.99	134
Number of Community Projects- COMM	.46	.81	134
Number of Financial-Consumer Projects- FIN	1.13	1.35	134
Number of Metaprojects- META	.19	.43	134
Importance of Project- IMPORT	7.27	1.28	133
Project Enjoyment- ENJOY	6.21	1.48	132
Difficulty of Project- DIFF	5.13	1.87	133
Project Visibility- VISIB	6.05	1.98	133
Control over Project- CONTROL	7.54	1.48	133
Initiation of Project- INIT	7.69	1.67	132
Project Stress- STRESS	4.22	1.73	132

Table 1 (cont.)

Means and Standard Deviations of All Variables

<u>Variable Name</u>	<u>Mean</u>	<u>S.D.</u>	<u>N</u>
Time Adequacy- TIME	5.26	2.00	132
Anticipated Project Outcome- OUTCM	7.60	1.33	132
Self-Identity with Project- SELF	6.94	1.53	132
Others' View of Importance- OTHERS	6.44	1.62	132
Value Congruency- VALUE	7.66	1.46	129
Positive Impact of Project- POSIT	5.71	2.35	129
Negative Impact of Project- NEGAT	3.07	2.31	129
Project Progress- PROG	4.98	1.73	131
Challenge of Project- CHAL	6.10	1.94	131
Focal Interdependency- INTERF	4.09	9.28	129
Diffuse Interdependency- INTERD	7.49	12.44	129
Total Interdependency- INTERT	10.84	13.69	129
Life Satisfaction- LIFESAT	7.12	1.78	134
Past Quality of Life- QOLPAST	6.11	1.82	133
Present Quality of Life- QOLNOW	7.12	1.44	133
Future Quality of Life- QOLFUT	8.40	1.34	133
Age - AGE	41.75	5.92	134
Number of Children- CHILDN	2.30	1.23	134
Years Married- YRSMAR	9.89	8.51	63
Age of Oldest Child- OLDEST	14.52	5.93	58
Age of Youngest Child- YOUNGEST	9.33	5.21	46
How Old Men Feel- AGEFEEL	35.69	6.78	58

Table 5

Classification of Salient Age Characteristics For Men (N= 60)"Young For My Age"

<u>Type</u>	<u>N</u>	<u>Mean Age</u>	<u>S.D.</u>	<u>Age Range</u>	<u>Examples</u>
Mental	24	39.9	6.93	33 - 58	ambition, energy, need to discover, open mind
Physical	21	40.7	5.45	33 - 52	good health, athletic ability, stamina
Activity	11	39.1	4.06	33 - 45	interest in sports, music, enjoy competition
Interpersonal	6	39.3	5.47	35 - 49	rapport with young, ability to socialize

"Old For My Age"

<u>Type</u>	<u>N</u>	<u>Mean Age</u>	<u>S.D.</u>	<u>Age Range</u>	<u>Examples</u>
Mental	36	38.7	4.33	33 - 49	maturity of outlook, wisdom, older values
Physical	8	40.1	6.60	33 - 51	grey hair, my back, baldness, thinning hair
Activity	5	39.6	7.23	35 - 52	taste in music, quiet hobbies, my interests
Interpersonal	1	49.0	---	---	ability to get along with others

they look, how they feel, and how others regard them. Only their interests and activities appear for a large number to be neither younger nor older than their chronological age (Table 2).

The five measures of subjective age reiterate these findings. The subjects were asked to give an age estimate of their interests and activities, how old they look, felt and performed tasks. A column was also added to the Personal Projects form asking respondents to list how old they felt when engaging in each activity. The mean value of these was called "project age". The means for all of the subjective age indices were less than the mean age of the sample (Table 1). As expected, each of the age measures correlated substantially with chronological age (Table 3).

Three measures of time passage were also used to supplement the subjective age measures. These were the number of years married, and the ages of the youngest and oldest child. Two stepwise regressions were used to determine the constituent components of chronological age. The first involved all measures of subjective age and time passage while the second only included subjective age assessments. Table 4 indicates that the relative age of a man's interests combined with how old he thinks he looks accounts for over 70% of age variance. Adding the age of oldest child for

Table 2

Frequency of Responses for Subjective Age Questions

	Quite a Bit Older	A Little Older	Neither	A Little Younger	Quite a Bit Younger
Most of the Time I Feel	1.59%	1.59%	14.29%	55.56%	26.98%
Most of the Time I Look	1.59%	4.76%	20.63%	52.38%	20.63%
My Interests & Activities Are	3.23%	11.29%	40.32%	33.87%	11.29%
People Who Know Me Think of Me	0.00	11.11%	34.92%	46.03%	7.94%

N= 63

Table 3

Intercorrelations of Subjective Age Variables (N= 63)

	AGEFEEL	AGELOOK	AGEACT	AGEINT	AGE	AGEPROJ
AGEFEEL	---	.7627	.6289	.6878	.7250	.7186
AGELOOK	.7627	---	.5599	.6025	.8071	.6550
AGEACT	.6289	.5599	---	.7161	.5546	.5941
AGEINT	.6878	.6025	.7161	---	.6862	.4487
AGE	.7250	.8071	.5546	.6862	---	.6318
AGEPROJ	.7186	.6550	.5941	.4489	.6318	---

$p < .05$ for all correlations

Table 4

Stepwise Regressions of Chronological AgeEquation 1: All Age and Time Measures

$$\text{Age} = 13.79 + .324 \text{ Agelook} + .349 \text{ Oldest} + .279 \text{ Ageint}$$

$$R = .8767 \quad F(3,47) = 52.017 \quad p < .001$$

$$R^2 = .7685$$

Equation 2: Age Measures Only

$$\text{Age} = 10.10 + .573 \text{ Agelook} + .257 \text{ Ageint}$$

$$R = .8469 \quad F(2,58) = 73.569 \quad p < .001$$

$$R^2 = .7173$$

fathers increases this to just over 75%.

A linkage analysis (McQuitty, 1967) was performed on variable inter-correlations to determine if all the "age" measures formed a cohesive cluster.¹ Three clusters emerged (Figure 1a) representing a subjective age factor upon which chronological and "look" ages loaded heavily, an "active age" cluster formed by the perceived age of an individual's interests and activities and their performance, while the third group was a "family age" cluster represented by the ages of the first and last child.

The linkage analysis was repeated using partial correlations controlling for the effect of chronological age. Significant correlations were still evident and the structure of the clusters remained intact (Figure 1b).

Three new age variables were created based on the core pair of variables in each cluster. Values for each variable were converted to z-scores and the central pair in each cluster added to create subjective, family and active age factors. The creation of these indices reduced the number of age or time variables required in subsequent analyses.

The differences between the personal age measures and chronological age were calculated and correlated with chronological age.² Only two relationships were

Figure 1

McQuitty Linkage Analysis of Age and
Time Variables

A

Years Married $\xrightarrow{.5873}$ Oldest $\xleftrightarrow{.9247}$ Youngest

Age $\xleftrightarrow{.8071}$ Agelook $\xleftarrow{.7627}$ Agefeel $\xleftarrow{.7168}$ Ageproj

Ageact $\xleftrightarrow{.7161}$ Ageint

B

Years Married $\xrightarrow{.3032}$ Oldest $\xleftrightarrow{.8706}$ Youngest

Ageint $\xleftrightarrow{.5543}$ Ageact

Agelook $\xrightarrow{.4367}$ Agefeel $\xleftrightarrow{.4881}$ Ageproj

significant. As age increases, the discrepancy between age and "how old I do most things" decreases ($r = -.219$, $p < .04$) as does the discrepancy of mean project age with age ($r = -.448$, $p < .001$).

In listing what was characteristically young or old about themselves, the men's responses fell into four general types, as shown in Table 5. About as many physical as mental attributes were listed as being characteristically "young for my age". The mean ages of the respondents for each category did not vary suggesting that the type of characteristic elicited is age independent. Most of the responses indicated that "young" was interpreted as reflecting energy and vitality.

Mental attributes were predominant as indicators of what is typically "old for my age". Fewer men answered this question and most of those who did listed mental attributes. The few physical attributes listed carried a negative valence which was not the case for the previous list of physical attributes nor the present list of mental ones. All of the items related to physical manifestations of deterioration. In contrast, most of the mental attributes emphasized a matured outlook and mellowing achieved over the years. Again, the marginal differences of the mean age of respondents for each category indicates that age was

Table 5

Classification of Salient Age Characteristics For Men (N= 60)"Young For My Age"

<u>Type</u>	<u>N</u>	<u>Mean Age</u>	<u>S.D.</u>	<u>Age Range</u>	<u>Examples</u>
Mental	24	39.9	6.93	33 - 58	ambition, energy, need to discover, open mind
Physical	21	40.7	5.45	33 - 52	good health, athletic ability, stamina
Activity	11	39.1	4.06	33 - 45	interest in sports, music, enjoy competition
Interpersonal	6	39.3	5.47	35 - 49	rapport with young, ability to socialize

"Old For My Age"

<u>Type</u>	<u>N</u>	<u>Mean Age</u>	<u>S.D.</u>	<u>Age Range</u>	<u>Examples</u>
Mental	36	38.7	4.33	33 - 49	maturity of outlook, wisdom, older values
Physical	8	40.1	6.60	33 - 51	grey hair, my back, baldness, thinning hair
Activity	5	39.6	7.23	35 - 52	taste in music, quiet hobbies, my interests
Interpersonal	1	49.0	----	---	ability to get along with others

not a major factor in contributing to the type of attribute listed.

Content - Structure Variations of Personal Projects

To determine if situational variations existed, each project was classified according to the set of categories presented in Appendix C. These categories were derived after two pretests each involving the classification of over 200 activities from a set originally proposed by Little (Note 1).

In order to determine if the categories were meaningful to others, several subjects received response packages with an additional page asking them to categorize their own projects according to the schedule. Several independent judges were also asked to categorize the projects of these subjects. The experimenter and respondents agreed 83.9% on the categorization of projects: the three judges had a mean concordance rate of 79.0% with both the respondents and the experimenter.

A total of 1334 projects were drawn from the elicitation lists and categorized as shown in Table 6. The 15 projects described as 'other' were listed in such a way that the domain of the project was uninterpretable; they were excluded from subsequent analyses.

Table 6

Frequencies of Project Categories

<u>Category</u>	<u>Frequency</u>	<u>Relative Frequency</u>
cultural-esthetic-academic	74	5.6
interpersonal	58	4.4
intrapersonal	70	5.3
recreation	140	10.5
vocational	29	2.2
occupational-social	11	0.8
occupational-task	130	9.8
estate	391	29.2
family	106	7.9
spiritual	14	1.0
health-body	118	8.9
community	50	3.8
finance-legal-consumer	114	8.6
metaprojects	17	1.3
other	15	0.5
	1334	100 %

examine the homogeneity of specific categories. Thus for example, cultural projects were subdivided to differentiate literary, musical and academic activities; recreational projects into sports, hobbies and vacations. For each resulting category, a profile was constructed by finding the mean scores on each of the 16 project dimensions. The interrelationships among the profiles were examined using Cattell's (1949; 1966) pattern similarity coefficient³ which unlike Pearson correlations, takes profile distance, shape and dispersion into account. With the exception of academic projects, the subordinate categories were most similar to their original superordinate classification. Thus academic activities were listed as a new classification and the profile for cultural activities recalculated. Although sports activities were most highly related to recreational pursuits, they were also kept as a separate classification out of interest by the experimenter. The resulting profiles are presented in Appendix D. The pattern similarity coefficients (Rp) for the final list of 16 profiles are given in Table 7.

A Linkage Analysis based on the Rp scores of the profiles was used to determine if the profiles formed meaningful clusters of activity types. As evident in Figure 2 three clusters were derived. The first

Project Profile Pattern Similarity Coefficients

[illegible]

Figure 2

McQuitty Linkage Analysis of Project
Profiles Based on Pattern Similarity Coefficients

cluster appears to represent a self-fulfillment or self-maintenance factor reflecting the two classic themes of work and love during adulthood. The second grouping suggests leisure activities insofar as the component profiles of the cluster are those activities which occupy spare time. The third factor composed of spiritual concerns and social relationships within the workplace is not readily interpretable, although to the men in this study they are two activities viewed in the same way.

Examination of the data in Table 8 provides some interesting insights into various types of activities. The data are the means of the project dimensions for each category and formed the basis of the profiles. An additional column was added consisting of the age of individuals participating in an activity subtracted from how old they felt during participation. Thus a value of -5.00 would indicate that the individuals participating felt five years younger than they actually were. Likewise, a positive value indicates "feeling older".

Family centered activities are viewed as the most important with respect to self and important others. Spiritual concerns are seen as both the most value congruent and as having the least perceived control and negative impact. Community participation received the

Table 8

Means of Project Dimensions and Age Differences by Category

	IMP	ENJ	SELF	VALU	TIME	OUTC	PROG	CONT	INIT	VIS	OTHR	DIFF	STRE	CHAL	POS	NEG AGE DIFF
Inter	6.93	6.01	6.91	7.93	5.50	7.45	5.02	7.00	6.36	5.47	6.66	5.10	4.10	5.47	6.04	2.77 -8.29
Intra	8.29	6.43	6.59	8.06	5.51	6.61	4.66	6.67	8.30	4.64	6.25	7.77	6.61	8.31	7.20	1.84 -9.35
Voc	7.72	5.59	5.90	8.00	5.28	7.79	4.07	7.45	8.76	5.17	7.59	6.28	6.10	7.31	7.07	3.93 -2.44
Occsoc	6.45	6.09	8.00	8.72	6.00	8.09	5.73	7.45	7.18	4.18	7.20	4.18	3.09	6.18	6.91	3.55 -2.80
Occtas	8.00	5.89	7.20	7.87	5.16	7.71	5.36	7.44	7.87	5.96	6.92	5.98	5.95	7.28	6.46	3.17 -4.11
Estate	6.54	5.52	6.85	7.09	5.55	8.34	4.85	8.13	7.46	6.61	6.25	4.27	3.41	4.76	4.64	2.97 -5.21
Family	8.63	7.65	7.09	8.80	4.92	7.45	5.78	6.71	7.30	6.33	8.27	5.00	4.23	7.00	6.60	2.95 -5.55
Spirit	7.64	7.14	6.57	9.00	5.86	7.43	6.07	6.43	7.43	4.50	6.93	4.42	2.36	6.08	6.38	1.31 -6.43
Health	7.69	5.02	6.42	7.51	4.68	6.70	4.84	7.51	8.27	5.74	6.28	6.51	4.84	7.30	6.55	2.60 -2.87
Commun	7.64	6.70	7.34	8.31	6.28	7.88	5.64	6.58	7.06	7.12	6.88	4.82	4.70	6.96	5.70	3.66 -4.50
Financ	7.33	4.98	6.68	7.20	5.32	7.26	4.08	6.75	7.94	5.34	6.02	6.04	5.45	6.02	5.31	3.34 -1.17
Meta	7.53	6.53	7.29	8.18	4.65	7.47	5.11	7.29	8.71	5.29	7.11	5.76	5.00	7.18	7.29	3.76 1.00
Sports	6.34	8.62	8.07	8.04	5.52	7.17	5.97	8.38	9.17	7.21	4.79	3.59	2.10	6.83	5.03	2.86 -10.22
Academ	7.69	6.00	6.88	7.62	5.03	7.38	5.31	7.59	8.16	5.31	5.28	5.59	5.50	7.16	6.28	3.66 -9.13
Rec	6.36	7.92	7.15	7.54	4.58	7.41	4.31	7.46	7.51	5.34	5.47	4.06	2.05	5.85	4.75	3.29 -7.59
Cultur	6.14	7.31	6.67	7.28	4.61	6.64	4.68	8.17	8.29	4.76	4.34	4.67	2.36	5.71	4.48	2.40 -6.00

highest time adequacy while estate projects have the highest likelihood of success, and the lowest challenge and value congruency. Vocational plans have the highest negative impact, and the lowest progress and self-identity. Intrapersonal projects are the most difficult, stressful and challenging and rate the lowest chance of success while interpersonal projects have the lowest initiation ratings. Metaprojects have the highest positive impact but also make men feel the oldest, actually adding a year on average to chronological age. Cultural activities are rated as the least important to all parties concerned and as having the lowest general positive impact. Recreation activities have the lowest rated stress and the lowest time adequacy; it is of note that sport activities are perceived as yielding the highest enjoyment, self-identity, control, initiation, visibility and progress, as well as the lowest difficulty. In addition, they make men feel 10 years younger on average.

Because of the implications of the profile for sports activities, the participation overlap of various low frequency "spare-time" activities was calculated to determine if those who do not participate in sports seek self-expression via other means. Table 9 lists five low frequency spare-time activities and when read

across, indicates the number of people who participated in both types of activity. The average overlap was 19.6%. Spiritual concerns are the only ones which deviated from this. It does not appear generally that participation in one of these activities leads to the exclusion of others, with the exception of spiritual and academic participation which are almost mutually exclusive.

The ANOVA's presented in Table 10 were used to determine if the profile dimensions showed significant variations with respect to age or category of activity. The analyses used a regression analog of the classical analysis of variance model to allow for unequal cell sizes and to provide maximal use of age as a continuous variable (Kerlinger and Pedhauzer, 1973).

For time-adequacy, self-identity and progress the amount of variance accounted for by age and category was not significant at an alpha level of .05. Subsequently they were dropped out of the analysis and considered invariant with respect to category and chronological age. The remaining dimensions were each tested for main effects and interactions requiring three tests of significance, resulting in 39 significance tests overall. Two conceptual units for error rate can be used (Kirk, 1968). An error rate based on families of comparisons using an alpha level

Table 9

Participation Overlap For Selected Activities

Sports	---	5	5	3	7
<u>N</u> = 26		(19)	(19)	(12)	(27)
Academic	5	---	4	1	5
<u>N</u> = 28	(18)		(14)	(4)	(18)
Community	5	4	---	4	8
<u>N</u> = 34	(15)	(12)		(12)	(24)
Spiritual	3	1	4	---	5
<u>N</u> = 10	(30)	(10)	(40)		(50)
Cultural	7	5	8	5	---
<u>N</u> = 36	(19)	(14)	(22)	(14)	

Numbers in parentheses indicate row percentages.

Table 10

Summary of ANOVA's of Project Dimensions By Age
and Category

<u>Dimension</u>	<u>R-SQU</u>	<u>F</u>	<u>F (A x C)</u>	<u>F (Age)</u>	<u>F (Cat.)</u>
Importance	.102	4.75*	1.30	.17	8.48**
Enjoyment	.115	5.43*	.83	.38	10.40**
Difficulty	.121	5.74*	1.80	3.59	9.91**
Visibility	.055	2.44*	1.10	2.34	3.72**
Control	.048	2.13*	.43	1.07	3.96**
Initiation	.060	2.64*	.87	18.42**	2.95**
Stress	.168	8.39*	1.17	.31	15.99**
Time adequacy	.032	1.38			
Outcome	.085	3.87*	1.91	5.38	5.87**
Self-Identity	.026	1.09			
Others' View	.090	4.04*	2.32*	2.70	5.77**
Value Congruency	.052	2.23*	1.02	.39	3.49**
Positive Impact	.080	3.51*	1.14	2.80	6.03**
Negative Impact	.051	2.19*	2.05*	9.94*	1.86
Progress	.032	1.36			
Challenge	.141	6.76*	2.39*	1.87	10.94**
<u>df (numerator)</u>		31	15	1	15

* $p < .01$

** $p < .001$

of .01 would lead to an overall alpha level for each variable of .03. A per-experiment error rate with alpha at .001 provides an alpha level across all 39 comparisons of .04. In comparing the final results using the two error levels there is little difference: three significant interactions emerge with the less stringent level.

The most noteworthy result, regardless of the criterion used is the predominance of category effects. Clearly the type of activity engaged in is a more potent indicator of dimension scores than the age of the respondent. Initiation is the only project dimension to show simple age effects. This is corroborated by a correlation between initiation and age ($r = -.214$, $p < .007$) indicating that initiation decreases with age.

Interpretation of the interaction effects for others' view of importance, negative impact, and challenge is based on the data presented in Tables 11 - 13. Cells represented by fewer than five activities were not considered for interpretation excluding automatically metaprojects, vocational, occupational-social and spiritual projects. The negative impact of cultural projects decreases with age as does others' view of importance. The challenge associated with interpersonal activities steadily

Table 11

Interaction of Others' View of Importance by Age
and Category

Category	Age Group				
	33 - 35	36 - 40	41 - 45	46 - 50	51+
Cultural (41)	5.88	3.79	5.82	3.20	3.00
Interpersonal (58)	7.75	5.56	5.40	7.38	7.88
Intrapersonal (68)	5.44	6.83	5.95	4.00	8.75
Recreation (111)	4.56	6.42	5.31	5.48	4.71
Vocational (29)	9.00	7.64	6.33	9.33	10.00
Occupational-soc (10)	9.00	8.00	8.50	6.00	3.00
Occupational-task (129)	6.31	6.24	7.41	7.06	8.11
Estate (391)	6.25	6.77	5.88	5.78	6.33
Family (106)	7.75	8.27	8.66	8.00	8.78
Spiritual (14)	5.25	6.00	6.00	9.00	10.00
Health-body (118)	5.95	6.29	5.80	6.67	7.00
Community (50)	5.64	6.07	7.64	8.14	8.20
Finance-legal (114)	4.87	6.15	6.43	5.13	7.25
Metaprojects (17)	8.20	5.83	7.33	7.67	----
Academic (32)	4.14	6.25	5.50	3.00	4.00
Sports (29)	3.33	5.89	4.67	4.75	5.00

N= 1317

Table 12

Interaction of Negative Impact by Age and Category

<u>Category</u>	<u>Age Group</u>				
	<u>33 - 35</u>	<u>36 - 40</u>	<u>41 - 45</u>	<u>46 - 50</u>	<u>51+</u>
Cultural (40)	3.50	2.79	2.00	1.40	.67
Interpersonal (56)	3.25	2.94	2.70	2.64	2.25
Intrapersonal (70)	1.28	2.39	1.17	2.00	5.25
Recreation (107)	3.81	4.19	3.14	3.05	1.15
Vocational (29)	10.00	2.50	4.44	3.00	10.00
Occupational-soc (11)	5.00	----	2.67	3.67	10.00
Occupational-task (124)	3.69	3.98	3.09	2.07	1.84
Estate (377)	2.84	3.68	3.03	2.49	1.50
Family (103)	2.52	2.79	3.04	5.10	2.00
Spiritual (13)	4.25	0.00	0.00	0.00	0.00
Health-body (117)	1.76	3.02	2.55	2.80	2.18
Community (50)	5.55	4.50	2.50	3.50	.60
Finance-legal (113)	2.57	3.47	3.70	3.54	3.38
Metaprojects (17)	5.60	2.67	4.00	2.67	----
Academic (32)	2.29	3.58	5.10	2.50	2.00
Sports (28)	2.83	2.22	3.25	2.50	7.00

N= 1287

Table 13

Interaction of Challenge by Age and Category

<u>Category</u>	<u>Age Group</u>				
	<u>33 - 35</u>	<u>36 - 40</u>	<u>41 - 45</u>	<u>46 - 50</u>	<u>51+</u>
Cultural (41)	6.13	4.57	6.00	5.40	9.33
Interpersonal (58)	7.14	6.00	5.60	4.93	3.75
Intrapersonal (68)	8.50	8.04	8.71	9.00	6.50
Recreation (110)	6.69	6.74	6.14	5.00	3.57
Vocational (29)	9.00	7.07	6.11	10.00	10.00
Occupational-soc (10)	8.50	7.00	7.67	4.00	2.00
Occupational-task (129)	6.75	7.02	7.19	7.07	8.68
Estate (391)	6.15	4.50	4.33	4.63	4.96
Family (106)	7.42	7.48	6.52	5.00	7.89
Spiritual (14)	6.00	1.75	8.00	10.00	10.00
Health-body (118)	7.14	7.44	7.45	6.85	7.55
Community (50)	7.20	7.36	6.93	7.17	5.20
Finance-legal (114)	6.22	5.47	5.50	7.77	6.44
Metaprojects (17)	8.20	6.83	5.00	8.33	----
Academic (32)	6.43	7.42	7.00	7.50	10.00
Sports (28)	6.83	6.11	7.67	6.00	8.00

N= 1304

declines with age while others' view of importance decreases only for the 36 - 45 age group.⁴ Recreational activities steadily decline in terms of being seen as challenging although it is only for the oldest sample, men in their fifties, that the negative impact associated with them decreases. The negative impact of work related projects decreases with age; family related activities are seen as being of increased negative impact and lower challenge for the 46 - 50 age group. The negative impact of health related concerns generally decreases with age while others' view of importance shows an increase as men enter their forties. Financial activities show an increase in perceived challenge for men in their late forties. For men in the 41 - 45 age group academic endeavours show high negative impact: others' view of sports activities is lowest in the youngest group while the challenge is the highest in the 41 - 45 age group.

Since these profiles represent a total of 256 data points and the interactions described above affect only 15 points (5.9%) these results suggest that the profile for a specific activity is relatively stable with respect to age.

When projects dimensions are correlated with age factors within content categories, a different pattern

Table 14

Significant Variable Correlations With Age and
Age Factors

Variable	Age	Subj. Age	Family Age	Active Age
Initiation	-.214**		.252*	
Time Adequacy			.283*	
Positive Impact		.248*		.310*
Negative Impact	-.148*		-.347**	
Challenge	-.144*			
Future Quality of Life			.302*	
Project Diversity				.355**
Subjective Age	.943**		.689**	.777**
Family Age	.685**	.689**		.426**
Active Age	.789**	.777**	.426**	

* $p < .05$

** $p < .01$

Note: For correlations with Age, $N = 63$

All others, $N = 46$

Table 15

Significant Correlations of Project Dimensions
and Age Variables ($p < .05$)

	<u>Age</u>	<u>Subj. Age</u>	<u>Family Age</u>	<u>Active Age</u>
Cultural Projects (20)				
Enjoyment		-.673		
Stress		.648	.704	
Outcome			-.590	
Others' View	-.444			
Negative Impact				.644
Intrapersonal Projects (51)				
Enjoyment		.303	.316	
Initiation			.399	
Time Adequacy			.493	
Outcome			.301	
Positive Impact			.325	
Negative Impact				-.353
Progress			.281	.319
Recreation (43)				
Importance		-.377	-.477	-.316
Control	-.273			
Initiation			.399	.321
Positive Impact				.295
Negative Impact	-.270		-.307	

Table 15 (cont.)

Significant Correlations of Project Dimensions
and Age Variables ($p < .05$)

	<u>Age</u>	<u>Subj.</u> <u>Age</u>	<u>Family</u> <u>Age</u>	<u>Active</u> <u>Age</u>
Interpers. Projects (27)				
Difficulty	-.360			
Visibility	.400		.433	
Initiation	-.504			-.583
Stress	-.353			
Value Congruency	.385			
Positive Impact				-.558
Challenge	-.502			
Vocational (18)				
Importance	-.489		-.577	
Initiation			.598	
Negative Impact				.653
Occupation:task (73)				
Importance	.265	.299	.254	.251
Difficulty	.295	.338	.303	.239
Initiation				-.260
Time Adequacy		.231	.327	
Others' View			.337	
Value Congruency			.247	
Positive Impact		.217	.202	.373

Table 15 (cont.)
 Significant Correlations of Project Dimensions
 and Age Variables ($p < .05$)

	<u>Age</u>	<u>Subj.</u> <u>Age</u>	<u>Family</u> <u>Age</u>	<u>Active</u> <u>Age</u>
Occupation task (cont.)				
Negative Impact	-.163		-.265	
Challenge		.218	.237	.221
Estate Projects (126)				
Outcome			-.178	
Others' View			-.166	
Value Congruency		-.291	-.205	
Positive Impact	.231			.293
Negative Impact			-.200	-.167
Progress				.276
Family Projects (63)				
Importance			.216	
Initiation	-.225		.247	
Time Adequacy			.304	
Self-Identity			.302	
Others' View	.266		.229	
Value Congruency			.378	
Negative Impact			-.283	
Academic Projects (9)				
Control			.540	

Table 15 (cont.)

Significant Correlations of Project Dimensions
and Age Variables ($p < .05$)

	<u>Age</u>	Subj. <u>Age</u>	Family <u>Age</u>	Active <u>Age</u>
Health-body (62)				
Enjoyment			.314	.276
Control			.398	
Self-Identity				-.352
Others' View		.285	.269	
Positive Impact		.357		.287
Negative Impact			-.334	-.349
Challenge		.274	.376	
Community Projects (24)				
Enjoyment			-.472	
Time Adequacy			.382	
Negative Impact	-.414			-.452
Progress				-.556
Finance-legal (58)				
Control		.263		.262
Outcome		.263		
Negative Impact				.351
Metaprojects (12)				
Initiation			.602	
Negative Impact			.582	

Table 15 (cont.)
 Significant Correlations of Project Dimensions
 and Age Variables ($p < .05$)

	<u>Age</u>	Subj. <u>Age</u>	Family <u>Age</u>	Active <u>Age</u>
Sports Activities (9)				
Others' View				.787
Positive Impact		.839		.908
Challenge				-.750
Total No. of Significant r 's.	20	17	46	29

of results becomes apparent (Tables 14-15). In almost every case where a dimension correlated with chronological age and an age factor, the correlation with the age factor was greater. Family age appears to be the best indicator of change. It is evident that activities vary in their degree of stability. While preliminary analysis supported the stability of the profiles with age, these data suggest that the exploration of age trends might be facilitated by the use of indices other than age.

The frequency of each type of activity was examined to determine if participation rates varied with age. Table 14 lists the relative frequency of each activity by age group; activities comprising less than 5% of the total were not listed. Minor variations in the frequencies were found due to age. A stepwise technique was used to determine what cells accounted for the significant results ($\chi^2 = 69.75$, $df=52$, $p < .05$). The removal of a single cell produced results which indicated that the null hypothesis could not be rejected ($\chi^2 = 57.75$, $df=51$, $p < .24$). The cell representing intrapersonal projects in the fourth age group was the cause of the significant results; since the results are attributable to a single cell the analysis suggests that the frequency within project categories do not vary with age.

Table 16

Relative Frequencies of Activities by

Age Groups			
30 - 35	36 - 40	41 - 45	46 - 50
24.3 Estate	29.3 Estate	29.4 Estate	34.5 Estate
10.6 Family	10.5 Occupation-task	11.6 Recreation	12.5 Recreation
10.2 Finance	10.5 Health-body	9.7 Occupation-task	10.5 Health-body
9.7 Recreation	9.4 Recreation	8.8 Family	8.5 Occupation-task
9.3 Health-body	8.0 Finance	8.5 Finance	8.0 Interpersonal
8.0 Intrapersonal	7.7 Family	7.3 Intrapersonal	6.5 Finance
7.1 Occupational-task	6.1 Cultural	6.4 Cultural	5.5 Family
6.6 Cultural	5.4 Intrapersonal	6.1 Health-body	5.7 Interpersonal
85.8	86.9	87.8	88.5

51 +

32.1 Estate

14.3 Occupation-task

11.4 Finance

10.7 Recreation

7.9 Health-body

6.4 Family

Examination of the structural relationships among project dimensions can be used to infer what constructs men use to evaluate their activities. A linkage analysis of the dimension intercorrelations across categories is presented in Figure 3. Five relatively clear factors emerge, suggesting that men evaluate their activities in terms of their difficulty, the time investment required, its relation to self-identity, how enjoyable they are, and the amount of imposed structure or control. The structural analysis was repeated for each category to determine how structural relationships are influenced by the nature of the interaction. The results are presented in Appendix E. Three types of factors typically emerge reflecting difficulty, control, and self-identity. It is the variations of the structural components of these clusters which determine the subtle differences in how different types of activities are construed.

Life Satisfaction and Quality

The three indices of life quality demonstrated an upward progression from the past through to the future. Past quality of life correlates with present life quality and present quality of life correlates with future life quality. The life satisfaction index also correlates with the quality of life index ($r = .779$, $p <$

.001).

Based on the information provided by the Life Graph, the average or typical life graph suggests that most men see their lives as continually improving until the peak is reached around age 70 (Figure 4). For each individual, the mean height of the retrospective part of the life graph, the current height and the height of the projected portion of the life graph were calculated and correlated to the indices of life quality and satisfaction. Past quality of life did not correlate with the "past" as represented in the life graph, although present life quality was related to the present life graph height and the future quality of life estimate was correlated with the projected course of the life graph (Table 17):

Table 18 shows life graph heights expressed in eighths of an inch at five year intervals for each age group of respondents. Most of the life graphs peak during the sixties or early seventies. A repeated measures ANOVA, shown in Table 19, was used to test for differences between age groups and the mean fluctuations within curves (Back and Bourque, 1970). There were no significant effects due to age itself although curve height and its interaction with age were both significant. The interaction effect could result from the fact that men seem to rate their life higher

Figure 4

Prototypical Life Graph (Eighths of an Inch)

Table 17

Intercorrelations of Indices of Life

Quality and Satisfaction

	<u>QOL</u> <u>Past</u>	<u>QOL</u> <u>Now</u>	<u>QOL</u> <u>Future</u>	<u>Life</u> <u>Satisfaction</u>
QOL Past	---	.2708**	.0193	.1078
QOL Present	.2708**	---	.6209**	.7793**
QOL Future	.0193	.6209**	---	.6001**
Life Satisfaction	.1078	.7793**	.6001**	---
Life Graph: HTBEFORE	.0835	.1129	.1229	-.0319
Life Graph: HTNOW	-.0335	.3004*	.1991	.1814
Life Graph: HTAFTER	-.0597	.1158	.2976*	.0345

* $p < .01$ ** $p < .001$

Table 18

Mean Life Graph Heights by Described Year
and Age of Respondent

Described Age	Age of Respondent					Mean
	33 - 35	36 - 40	41 - 45	46 - 50	51 +	
20	9.69	9.06	12.74	7.00	10.40	11.35
25	11.13	10.00	12.91	9.00	13.20	11.09
30	10.50	12.59	13.64	9.17	15.00	12.04
35	11.94	12.76	13.45	10.50	15.60	12.67
40	14.31	15.06	14.27	10.50	14.00	14.09
45	15.50	15.83	15.00	11.83	14.40	15.00
50	16.06	16.17	15.45	13.50	14.60	15.56
55	16.38	16.47	15.55	14.83	16.40	16.07
60	16.69	16.11	16.64	15.33	18.00	16.47
65	16.81	15.41	17.36	15.83	18.40	16.62
70	17.00	15.24	17.64	16.50	19.00	16.71
75	16.56	14.71	17.18	17.17	19.60	16.45
80	16.25	14.35	16.36	18.00	19.20	16.15

Table 19

Analysis of Variance for Mean Graph
Heights (All Data)

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Age Group	574.243	4	143.561	.65	.63
Error	11058.133	50	221.163		
Height	2597.310	12	216.443	10.08	.001
Height x	1473.956	48	30.710	1.43	.033
Age Group					
Error	12880.974	600	21.468		

in anticipation than in retrospect and the proportion of retrospective data increases with age. The analysis was repeated (Table 20) using a subset of retrospective data points and as indicated in Table 18 includes the evaluations of the past for all men over 40 years of age. Reanalysis suggests that Life Graph height increases over time, with no significant effects due to the respondent's age or interactions.

An examination of age trends with respect to the life quality and satisfaction variables reveals no cohort effects. The means for each age group are presented in Table 21 and suggest that the individuals in the 36 - 40 age range see their lives as being of lower quality and satisfaction than other age groups. The analysis of variance for each variable was not significant however.

Correlations of the life satisfaction and life quality measures with age and the three age factors reveal only a single relationship. Future life quality is related to family age ($r = .302$, $p < .021$) indicating that as their children grow older men anticipate their future as increasingly satisfying.

"Midlife Crises"

The Life Graph was used to explore a phenomenon called a midlife crisis. Forty-one subjects had life

Table 20

Analysis of Variance for Mean Graph

Heights (Age 40 +)

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Age Group	380.701	2	190.350	1.35	.29
Error	2544.747	18	141.375		
Height	140.393	4	35.098	8.29	.001
Height x Age Group	37.194	8	4.950	1.10	.37
Error	340.787	72	4.233		

Table 21

Life Satisfaction and Quality

by Age Group

	Total Group	33 - 35	36 - 40	41 - 45	46 - 50	51+	F	p
QOL Past	6.11	6.23	5.67	6.21	6.33	6.66	1.23	.30
QOL Now	7.12	7.00	6.73	7.18	7.86	7.20	2.32	.06
QOL Future	8.40	8.52	8.07	8.50	8.71	8.47	1.15	.34
Life Sat.	7.12	7.09	6.76	7.15	7.67	7.33	.77	.55
<u>N</u>	134	21	42	34	21	15		

graphs which at some time during its course evidenced a substantial drop from its previous level followed by a return. The age of occurrence of the dip in the life graph was taken as the age where the lowest point of the dip occurred. Regrouping the age of the subjects and the age of occurrence of the dip into 5 year intervals, the analysis in Table 22 suggests that the two are statistically independent. Thus although set-backs do occur during adulthood which are perceived as negative by the individual, they are not systematically related to age. It is interesting to note that no one in the youngest sample, comprised of men under 36 years of age, anticipated a negative event in their future which would cause a dip in their life graph. The mean age of those men not having a dip in their life graphs was 40.4 years, which is fractionally less than the mean age of the total sample.

Reasons for the dips found in the life graphs are listed in Table 23. Totals sum to more than 41 since some individuals listed multiple causes. With the exception of job dissatisfaction, the average age of the individuals reporting these events is the same as the mean age of the total sample suggesting that these causes are not over represented in any age group. The average age of the occurrence of these events is 36.6 years, which is to be expected as the information is

Table 22

Age of Dip in Life Graphs by Age of
Respondent

Age Group	Age When Dip Occurs in Life Graph					
	25 - 29	30 - 35	36 - 40	41 - 45	46 - 50	51 - 56
33-35	4.88%	17.07%	0.0%	0.0%	0.0%	0.0%
36-40	7.32	17.07	7.32	2.44	2.44	2.44
41-45	2.44	2.44	7.32	2.44	2.44	0.0
46-50	0.0	2.44	4.88	2.44	0.0	0.0
51+	0.0	0.0	4.88	0.0	4.88	2.44

N = 41

Chi-square = 26.53, df = 20, p < .15

Table 23

Reasons Listed as Precipitating

a Dip in the Life Graph

Reason	N	<u>Age of Respondent</u>			<u>Age of Occurance</u>		
		<u>Mean</u>	<u>S.D.</u>	<u>Range</u>	<u>Mean</u>	<u>S.D.</u>	<u>Range</u>
1. Job Dissatisfaction	9	37.3	4.09	33-45	32.9	4.08	27-39
2. Health	7	42.7	7.76	35-52	35.6	7.50	26-49
3. Change in Marital Status	7	42.4	8.18	35-58	34.4	8.44	26-47
4. New Job	4	42.5	7.23	34-49	35.0	7.87	26-43
5. Coping With Death	3	42.7	8.33	36-52	42.3	11.24	30-52
6. Change in Family Size	4	41.5	4.04	38-45			
-increase	2				33.0	4.24	30-36
-decrease	2				48.5	2.12	47-50
7. Finances	1	45.0	--	---	45.0	--	---
8. Other	11	40.7	5.46	36-52	36.3	10.94	27-64

retrospective in nature. Exceptions are job dissatisfaction which occurs on average slightly earlier at 33 years of age and confrontation with death which occurs in the early forties.

Six individuals had more than a single dip in their life graphs. These men had a mean age of 41.7 years with the first dip occurring at 31 years of age and the second at 36.5 years of age. The mean time in years between these two dips was 8.7 years with a standard deviation of 6.3 suggesting that these occurrences are not spaced at regular intervals.

Subjects were divided into two groups based on their proximity in time to the dip in their life graph. All individuals who had a dip in their life graph within the last five years were compared to the remaining group including those whose graph did not have any dips. A stepwise discriminant function analysis was used to determine if differences existed between the two groups based on their project dimension scores. The results of the analysis are presented in Table 24 and show that real differences do exist. The target group is characterized by projects which are very important both to themselves and to those around them, yet the likelihood of success of these projects is very low. These activities are neither stressful nor time-pressured, but interfere with other

Table 24

Discriminant Function of Crisis and

Non-crisis Groups

Standardized Discriminant

Function Coefficients

Importance	-.9285
Enjoyment	.2932
Visibility	.6689
Stress	.4286
Time Adequacy	-.6730
Outcome	1.1635
Others' View	-.7153
Negative Impact	-.4513
Eigenvalue	1.0390
Canonical Correlation	.7138
Wilks' Lambda	.4904
Chi-Square	34.198
Significance	.001
F (8,45) Between Grp.	5.844
Significance	.001
Crisis Group Centroid	-1.415
Other Group Centroid	.707

activities.

Univariate t-tests between the two groups reveal no significant differences on any individual scale except outcome (Table 25). It is the configuration of scores described by the discriminant function which differentiates the two groups and not individual variables. The overall classification accuracy of the discriminant function was 89.09% (Figure 5).

To determine if a particular group of activities exemplifies the discrimination, the analysis was repeated within categories of activities. These results are summarized in Table 26. No single category of activity provides as good an overall discrimination as the total mean scores, although reasonable classifications can be achieved with respect to family, job, health, finance and intrapersonal projects.

Family activities, during this time of distress are extremely enjoyable, unstressed and not particularly related to self-identity. They are not time pressured but are perceived as both challenging and difficult with a very uncertain outcome. Job related projects are very important, visible to others and challenging. They can also be characterized as unenjoyable, of low value congruency and of uncertain outcome. Again stress is not a factor. Health related projects are self-initiated and seen as important by

Table 25

Comparison of Project Variables Between
Crisis and Non-crisis Groups

Variable	<u>Crisis</u>		<u>Non-crisis</u>		t	p
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>		
Importance	18	8.01	39	7.46	1.71	.09
Enjoyment	18	6.11	38	7.73	-1.42	.16
Difficulty	18	6.16	39	5.25	1.71	.09
Visibility	18	5.65	39	6.34	-1.23	.22
Control	18	6.72	39	7.4	-1.71	.09
Initiation	18	8.26	38	8.09	.37	.71
Stress	18	5.07	38	4.36	1.55	.13
Time Adequacy	18	5.42	38	1.81	.74	.46
Outcome	18	6.61	38	7.72	-3.11	.01
Self-Identity	18	6.83	38	7.45	-1.29	.20
Others' View	18	6.78	38	6.51	.56	.58
Value Congruency	18	7.74	36	7.94	-.45	.65
Positive Impact	18	5.81	37	5.90	-.14	.88
Negative Impact	18	3.37	37	3.06	.55	.59
Progress	18	4.76	37	5.01	-.52	.61
Challenge	18	7.47	37	6.83	1.57	.12
Sociability	18	5.61	36	5.42	.25	.81
Focal Interdep.	18	6.33	36	6.42	-.02	.98
Diffuse Interdep	18	9.72	36	15.03	-1.26	.21
Total Interdep.	18	16.06	36	18.72	-.49	.62

Table 26

Summary of Within Category Discriminant

Function AnalysesStandardized Coefficients

Family

Enjoyment	1.1727	Multiple R	.7499
Difficulty	.4863	Significance of Wilks' U	.001
Control	-.2637	Group 1 Centroid	1.2189
Stress	-.4333	Group 2 Centroid	-1.0158
Time Adequacy	.9914	Classification Accuracy	86.27%
Outcome	-1.5000	Group 1 N= 26	92.30%
Self-Identity	-.4082	Group 2 N= 25	80.00%
Challenge	.8561		

Occupational: task

Importance	1.0432	Multiple R	.6526
Enjoyment	-.6779	Significance of Wilks' U	.001
Visibility	.5185	Group 1 Centroid	1.199
Stress	-.7472	Group 2 Centroid	-.599
Outcome	-.5710	Classification Accuracy	79.41%
Value Congruency	-.4818	Group 1 N= 22	86.4%
Challenge	.5944	Group 2 N= 46	76.1%

Group 1: Crisis Group

Group 2: Non-crisis Group

Table 26 (cont.)

Summary of Within Category Discriminant

Function Analyses

<u>Standardized Coefficients</u>			
Health-body			
		Multiple <u>R</u>	.5885
Enjoyment	.5000	Significance of Wilks' <u>U</u>	.001
Initiation	-.5656	Group 1 Centroid	-.9811
Time Adequacy	-.5523	Group 2 Centroid	.5194
Others' View	-.7002	Classification Accuracy	78.85%
Negative Impact	-.4118	Group 1 <u>N</u> = 18	100.00%
		Group 2 <u>N</u> = 34	67.60%
Finance-legal			
		Multiple <u>R</u>	.5982
Importance	.6586	Significance of Wilks' <u>U</u>	.003
Difficulty	-.5515	Group 1 Centroid	1.1292
Visibility	-.5325	Group 2 Centroid	-.4754
Stress	1.4608	Classification Accuracy	77.78%
Outcome	-.2887	Group 1 <u>N</u> = 16	75.00%
Negative Impact	-.3919	Group 2 <u>N</u> = 38	78.90%
Challenge	-.8889		
Intrapersonal			
		Multiple <u>R</u>	.6081
Enjoyment	.4165	Significance of Wilks' <u>U</u>	.003
Control	.3984	Group 1 Centroid	-.7832
Outcome	.9683	Group 2 Centroid	.7151
Self-Identity	-.9890	Classification Accuracy	78.72%
Value Congruency	.6200	Group 1 <u>N</u> = 22	77.30%
		Group 2 <u>N</u> = 25	80.00%

Table 26 (cont.)

Summary of Within Category Discriminant
Function Analyses

Standardized Coefficients

Estate

Visibility	.4492	Multiple R	.3611
Stress	-.3719	Significance of Wilks' U	.025
Value Congruency	-.9090	Group 1 Centroid	-.6050
Positive Impact	-.5192	Group 2 Centroid	.2420
		Classification Accuracy	57.41%
		Group 1 N= 27	59.30%
		Group 2 N= 81	56.80%

Recreation

Visibility	.8071	Multiple R	.3275
Control	.5153	Significance of Wilks' U	.092
		Group 1 Centroid	-.5042
		Group 2 Centroid	.2277
		Classification Accuracy	63.04%
		Group 1 N= 14	64.30%
		Group 2 N= 32	62.50%

22
OF / DE 22

others. The men see them as unenjoyable. They are not time pressured but disrupt other activities. Financial - legal endeavours are very important and very stressful, but neither challenging nor difficult. They are activities of low visibility and tend to have a negative impact on other activities. Intrapersonal activities are highly related to self-definition at this time. Again outcome is seen as being uncertain. These activities are neither enjoyable nor value congruent and are not seen as being under the control of the individual. There is little difference between the groups in their perception of recreational and estate projects. Other categories of activities were of insufficient size to allow analysis.

With the exception of cultural activities, the two groups did not differ in their patterns of projects since there were no differences in the number or types of projects elicited (Table 27). Therefore, if any differences do exist, they are in the cognitive aspects of the activities. A comparison of the structural relationships among project dimensions for the two groups reveals a substantial difference (Figure 6). The group of men who had a dip six or more years ago are represented by clusters essentially the same as those for the total group presented earlier. Their activities are evaluated in terms of their meaning,

Table 27

Variable Comparisons Between Crisis
and Non-crisis Groups

<u>Variable</u>	<u>Crisis</u>		<u>Non-crisis</u>		<u>t</u>	<u>p</u>
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>		
No. of Projects	18	14.72	40	12.58	1.31	.20
Cultural Proj.	18	1.07	40	.46	2.66	.01
Interpersonal	18	.46	40	.53	-.27	.79
Intrapersonal	18	1.15	40	.70	.93	.36
Recreational	18	1.38	40	1.13	.56	.59
Vocational	18	.31	40	.37	-.29	.78
Occ: social	18	.23	40	.17	.42	.67
Occ: task	18	1.54	40	1.83	.45	.66
Estate	18	2.09	40	3.13	1.54	.06
Family	18	2.08	40	1.23	1.01	.08
Spiritual	18	.05	40	.17	-.97	.30
Health-body	18	1.00	40	1.00	.00	1.00
Community	18	.23	40	.43	-1.02	.09
Finance-legal	18	1.50	40	1.16	1.28	.24
Metaprojects	18	.23	40	.33	-.60	.55

Table 27 (cont.)

Variable Comparisons Between Crisis and
Non-crisis Groups

Variable	Crisis		Non-crisis		t	p
	N	Mean	N	Mean		
QOL Past	17	6.47	40	5.93	.98	.33
QOL Now	18	6.78	39	7.13	-1.14	.26
QOL Future	18	8.22	40	8.58	-1.15	.25
Life Satis.	18	6.56	40	7.28	-1.55	.13
Age	18	39.33	40	40.78	-.83	.41
Subjective Age	13	.19	30	.60	-.62	.54
Family Age	13	.12	30	.23	-.17	.87
Active Age	13	.23	30	.34	-.18	.85

difficulty, challenge, perceived control and performance. The target group shows an unusual arrangement focussed on time adequacy. Activities which are self-initiated, of low visibility and seen as important, challenging and value congruent are seen as independent of other activities. Projects under someone else's control are seen as difficult and stressful. Therefore time adequacy is the key determinant itself based on a multidimensional evaluation.

These clusters suggest time management difficulties related to "spreading oneself too thin". It is interesting to note that perceived life satisfaction and future life quality are both negatively related to project diversity ($r = -.32$, $p < .006$; $r = -.32$, $p < .006$). There is no apparent external cause for the time pressure: demographic data show that there is no differences in the marital status, years married, number or age of children, or age as measured by any index.

Figure 6

Linkage, Analysis of Project

Dimensions for Crisis and Non-crisis Groups~~Non-crisis Group~~

Negative — .495 → Outcome — .502 → Importance $\longleftrightarrow$.698 → Enjoyment

Value Con. — .463 → Self-Identity — .498 → Stress $\longleftrightarrow$.690 → Diff.

Visibility — .440 → Others Vw — .582 → Positive $\longleftrightarrow$.635 → Challenge

Initiation $\longleftrightarrow$.539 → Control

Time Adequacy $\longleftrightarrow$.513 → Progress

Figure 6 (cont.)

Linkage Analysis of Project Dimensions
For Crisis and Non-crisis Groups

Crisis Group

Stress $\xrightarrow{.892}$ Difficulty $\xleftarrow{-.602}$ Control

DISCUSSION

The study was initially conceived as an exploratory investigation using the content of personal projects as indicators of the changes that occur through the adult years. The idea of a midlife crisis provided an interesting focal point for investigation. It became increasingly apparent from the literature that age was a convenient index, but that is all. Many of the inferences in the literature are based on pre-retirement men. The men in this study have not yet reached that stage of their occupational life cycle thus direct comparability is not always possible. What is provided is a glimpse into how a man's world changes, what parts change and what orchestrates those changes. The idea of change is then used to explore what is known about male "menopause", the myths and realities.

Limitations of the Subject Pool

Because participation was on a mail-back return basis, some obvious questions about selective returns arise, ie. who responded? The sample was biased toward men in the early middle adult years in part due to the fact that the researcher's contacts were also biased in this fashion. The sample may also be over represented.

with extroverts, men who were not time pressured and men who could empathize with subjective age ratings -- a task some reported as impossible. Finally, the results are biased towards married men with children. There are several couples without children, but very few men who are not or never were married. This is an imposing list of qualifiers, however after comparing the this study to past research in the field, the data gained by this exploratory investigation is richer than many of the other cross-sectional studies in this area (Borland, 1978).

Personal Age and Aging

The study was undertaken as an investigation into the use of personal projects to delineate the changes that occur through the middle adult years. In this respect age would seem to be the most useful indicator of passage through this time period. While, age is a convenient index, it's utility has been questioned (Kastenbaum et al. 1972; Neugarten, 1977; Perun and Bielby, 1980). The items used to survey personal age provided insight into men's perceptions of their own aging.

Most men see themselves as younger than their chronological ages indicate. On average, men feel and rate their performance six years younger than they are;

men think they look about three years younger; they rate their activities and interests as being those of an individual four years their junior. These results are consistent with thoughts expressed by Buhler (1935). She suggested that a psychological curve of development analogous to a biological curve exists. The psychological curve lags behind the biological curve until the latter part of the life course when both curves become parallel. Evidence to this effect was found in that the discrepancy of performance age and projects age with chronological age decreased with age. If chronological age can be taken as roughly equivalent to biological age, then as physical manifestations of aging become increasingly self-evident, personal or subjective age becomes more closely associated with physical well-being.

Overall estimates of the various aspects of personal age are congruent with the results of Kastenbaum et al. (1972) although differences exist with respect to specific "ages". Both studies found "look" age to be most closely related to chronological age, however Kastenbaum found "feel" age to be least related to age whereas the present study found "interests" age to be the most age independent index. Kastenbaum also found that the discrepancy between personal age measures and chronological age increased

with age.

These differences may be due to differences in the samples studied. Kasstenbaum and associates pooled the results of both men and women, with the proportion of women increasing after forty years of age. The addition of women into the sample combined with their increased weighting for older groups could influence the results insofar as what is known about sex differences in self-identity formulation during adolescence. During adolescence, a girl's identity is reified through interpersonal and social channels, thus girls are more concerned about physical appearance and social skills. Males gain a sense of identity via their achievements whether in school, sports or the work place. If these modes of identity formation and maintenance are relatively stable throughout the life course, then the discrepancy between personal age -- especially "look" age -- and age would tend to increase with time. This is certainly congruent with the informal taboo of asking a woman about her age. Conversely, men relying on their performance in various activities to maintain a sense of self may become more aware of their aging as physical capacities begin to decline. This awareness may result in a convergence of personal and chronological ages during the latter years. This would explain the age ratings of interests

and activities converging with age for older subjects in this study.

Characteristics typifying "old and young for my age" support the claims of physical well-being as a salient indicator of a man's aging (Kuhlen, 1968; Neugarten, 1968). Indicators of youthfulness were evenly divided between physical and mental attributes; variations were likely due to individual differences in job requirements and leisure preferences. Most of these attributes, although not all, had positive associations with the vigour of youth, whether it be physical or mental agility. Conversely, all the physical characteristics listed as being "old" indicated biological decline. It is conceivable that items such as a decline in memory retention could be an indicator of aging, however mental attributes captured the grace of aging-- a maturing. This is reminiscent of the assertion that physique-based values are replaced by mental-based ones as priority is given to expressive-interpersonal values (Lowenthal et al. 1975). Use of the head takes precedence over use of the hands.

The interrelationship among various conceptualizations of age suggests that while chronological age is a common underlying factor, each alternative adds its own contribution to the

understanding of age. Three age indices -- subjective, family and active age-- were created to determine if alternative formulations of age might be of better predictive utility than chronological age: although highly interrelated examination shows that together they are of more utility in understanding aspects of change than simple chronological age.

Content Categorization

The final list of categories used in this study was intended to circumscribe the major spheres of activity that together form the backdrop of life. The level of analysis represented by the categories is not consistent. While recreational, cultural, sports and estate projects were listed as separate categories, conceivably a superordinate leisure category encompassing all of these could have been created. However divisions so broad as to provide four megacategories would provide a level of analysis of such molarity that smaller systemic changes would be lost. It is also true that categories at too molecular a level are in danger of becoming meaningless. As well, the analytical level may be too close to uncover relationships which exist in an interactive system and the sample size required to adequately represent each category rapidly increases. The extant category scheme

was chosen as being sufficiently detailed to allow excursion into fairly specific realms of behaviour, still allowing for subdivisions as required. It was found that most of the subcategories examined were insufficiently represented to be of value or were not of particular interest in this study.

Two other points require mention in passing. All projects categorized were assigned to a single class. For a majority of activities listed, this strategy was sufficient. Some categories did fall into more than a single domain. "Learning French" can be both an occupational requirement and a cultural and/or academic experience. Since this was an exploratory investigation attempting to delineate structural differences among the groups of activities, the heterogeneity of the activities was forced to some degree by the placing of projects in a single category.

The types of activities elicited as personal projects may not be completely representative of all aspects of day to day existence although the major domains are clearly present. Items which are typically not elicited are passive intrapersonal concerns such as "worrying about my health". There are several points of consideration. One could declare that these are purely affective states and not within the definition of Personal Projects. Such states or concerns may be

transient never being formally crystallized but subtly influencing the patterns of activities engaged in. A persistent, or recurrent state theoretically could manifest itself in a project system either through specific activities or by configurations of scores. Such limitations are not uncommon in research; in clinical applications the use of any test or assessment device in isolation is liable to yield incomplete information.

A Priori Hypotheses

The pattern of activities and concerns comprising the adult years show both constancy and change. Change can be manifest either behaviourally affecting the actual patterns of activities, or cognitively as the view towards commitments change with time.

The hypotheses listed were predominantly expressed in terms of changes occurring with chronological age. In this respect, these hypotheses were not validated by the study. One redeeming aspect is that these hypotheses were prefaced as being age related but not necessarily age dependent.

Predictions related to changing patterns of activities were not substantiated. Behaviour patterns were found to be stable with respect to age and alternative age factors. The patterns of activities

did not reflect a shift in focus to a more personally oriented world. Job involvement did not decrease, nor did community or family concerns increase as revealed by the frequency of elicitation. It could not be ascertained if the amount of time apportioned to each type of activity changed over the years. To completely understand the nature of patterns of activities as they change through the life course, this kind of information is necessary.

As predicted, overall ratings on project dimensions did not show much variability with respect to age. Only three dimensions demonstrated effects due to age. It was found that personal age factors provided better estimates than chronological age although even these were not numerous. It is very evident that the category of activity acts as a moderator, with some categories showing change while others remain stable.

The change in focus of activities thought to occur with age was indirectly supported by cognitive changes that occurred over time -- most of these in relation to family age. Activities related to the family and job, both major sources of identity for men, become increasingly important over time. Similarly intrapersonal and health related activities become sources of enjoyment. Only interpersonal activities increase in

their visibility while at the same time decrease in initiation. Thus an alternative interpretation of the literature on the decrease in active involvement in the external world with age is supported in that certain classes of activities close to the individual increase in their intrinsic values while interpersonal activities seen as increasingly value congruent, are more often initiated by others.

Hypotheses related to increased mastery and control accompanying age were supported insofar as activities seen as important typically increased in perceived time adequacy and initiation as family age increased. Occupational activities are exceptions to this, decreasing in initiation through the years. Within family and recreational activities, an interesting counterbalance effect moderates perceived initiation. As family age increases, initiation is seen to increase: simultaneously initiation decreases as a function of more physically-based age factors. As time constraints within the family ease to allow more freedom, certain activities are constrained by physical limitations related to aging. Intrapersonal, academic and meta-projects all show increased control or initiation with family age. These results substantiate the finding of decreased perceived mastery in physical and social activities but not intellectual pursuits

(Lowenthal et al. 1975). Initiation was the only project dimension to demonstrate unequivocal variation with time.

In terms of stress and difficulty, there is little change over the years. Most activities were seen as becoming more integrated with positive impact increasing and/or negative impact decreasing. As the family matures, life is seen as more balanced and the disruptive effects of multiple commitments have diminished. Occupational and cultural activities are the most noteworthy exceptions to this finding.

Hypotheses predicting increased value congruency over time received support. Social, family and job related concerns all increase in their value congruency. As occupational stability and economic security are achieved, gratification can be derived from other sources such as the family or community; gratification comes through interests that are less instrumental and more interpersonal with age (Kuhlen, 1968; Lowenthal and Chiriboga, 1973; Neugarten, 1973).

Interdependency measures did not indicate changes over time as had been predicted. In fact interpersonal projects were seen as increasingly positive and value congruent with age. Since their perceived challenge decreased with age these types of activities may be seen as more personal and warm. The nature of the

others involved in these projects may change with age, friends becoming more the focus of interpersonal activities over casual acquaintances. Interpersonal activities were the only category to exhibit changes with chronological age. It appears that as a man grows older his nature becomes more affiliative.

The Family Life Cycle

The relative stability of the activity patterns across the middle adult years is in accordance with the findings of Harry (1976). In exploring the adaptations made by men in the course of orchestrating their commitments in various societal institutions, he concluded that it was not practical for men to restrict the number of extra-familial obligations through behavioural adaptation. The primary mode of adaptation was seen to be attitudinal. Harry concluded that attitudinal adaptation to structurally induced strain could be best understood through the examination of the family life cycle.

This conclusion augers well for this study since the best correlate of change was found to be family age. While family life cycle stages correlate highly with age, their effects are not age dependent. Studies have found family life cycle to be a more meaningful variable than age in understanding an individual's

behaviour (Lansing and Kish, 1957; Thompson and Streib, 1961). With this in mind it would seem fruitful to interpret the results of this study with reference to the family life cycle. Aspects of the family life cycle abstracted here are taken from de Grazia (1961), Harry (1977), Thompson and Streib (1961), Vaillant (1977) and Wilensky (1961).

The course of the family life cycle affects the positions men hold in various institutions in society. The family tends to constrict the interests of men during the earlier stages. Later stages allow for more outward directedness.

For young couples with no children happiness has been found to be defined in part from excitement derived from leisure activities. It is also related to the difference in satisfactions derived from work and the family. With the occurrence of preschool children, this difference becomes correlated with unhappiness as events previously defined as exciting are seen as stressful. Through their work men try to consolidate their aspirations and provide for their family. This is the time of the "financial crunch" (Harry, 1977) when the demands for consumer durables, job security and money are very high. Any leisure time which exists is highly structured and constrained by family obligations.

The "time crunch" occurs as the children become school aged. As the field of commitments of the children enlarges, parents feel a certain amount of pressure to participate in activities which express the linkages between the family and the community. More time is spent with the children, both in leisure activities and in transporting them to their commitments. It is at this time that the "malintegration" (Harry, 1976) of multiple institutional demands can become a source of distress.

As children reach the teenage years and eventually start moving out of the house, there is a return to interpersonal and familial orientations. Social activities increase and leisure activities may become more active. Men become less preoccupied with their jobs and start to explore other venues of their lives. Income and job security are usually at a peak. Familial obligations and career aspirations subside leaving time for self. The potential sources of happiness at this time increase to encompass family and friends.

The findings of this study generally support the family life cycle model. Certainly as family age increases, men seem to have more control over their family activities. They also see the family as increasingly important and as a continuing source of

self-identity. The negative impact of family activities on other activities decreases as the children get older. Job-centered activities are also seen as increasingly important and value congruent. Neugarten (1968) has suggested that women define age status in terms of events within the family whereas men perceive middle age by extra-familial cues such as the differential behaviour accorded them at work. As the family matures men feel increased control over their job although it is both more difficult and challenging. The overall congruency in terms of impact increases as the family gets older. Financial concerns are omnipresent though as men feel older they gain an increased sense of control over them. In all three areas, time adequacy is related to aspects of perceived control. Projects externally imposed become a source of time pressure with slow progress and a variable outcome.

Recreation activities, which de Grazia (1961) found to be stable over the adult years, are related to both family and subjective age. Although there is increased time and opportunity as family obligations decrease, factors related to increased age counterbalance. Wilensky (1961) found that while adults favour the active use of leisure time for older people, older people themselves withdraw from more

strenuous activities seeking more passive ways of passing the time. The time and outcome of recreational activities is related to their perceived difficulty, enjoyment and control. As the family grows older, estate projects involving routine maintenance appear to become more of a chore than anything else. There is nothing particularly aversive about them; they just lose many of the intrinsic rewards they may have held.

Interpersonal projects, related to chronological age, appear to be perceived as less threatening as men grow older. They are seen as having a less negative impact, although both initiation and positive impact also decrease. They seem to become virtually independent of other activities. Interpersonal interests may reflect the spouse's increased instrumentality complimenting the husband's acceptance of interpersonal associations. Community involvement is seen as less enjoyable as the family life cycle progresses and time becomes more available. This could be the result of previous experiences during the "time crunch" when there was social pressure to participate but little time. Now that time is available, self-interests are given priority.

The increased time for personal needs in the later years of the family life cycle are reflected in health, intrapersonal and meta- projects. They are seen as

being more enjoyable and under more personal control. The negative impact of these self-related projects decreases and there is more time to enjoy them. Aspects of health-body projects are clearly related to subjective age estimates which is to be expected considering the domain of these activities.

It is interesting to note that as a classification, sports activities are seen as the highest in self-identity, initiation, control, and of lowest difficulty. The net effect is that they make men feel young. These results are consistent with what sports psychologists have long known. A man involved in a sporting event creates his own world where he feels comfortable and participation is strictly voluntary. The controlling contingencies of time and space are used to serve his own purpose. Sports create a world where basic needs are fulfilled allowing for the expression of higher needs; it is a world that can be changed at will. In sports men seek the chance to recreate the freedom of childhood (Fraleigh, 1973; Lasch, 1979).

Men's View of Their Lives

Based on the correlations of the life quality and satisfaction indices with segments of the Life Graph, it is reasonable to conclude that a life graph provides an

index of perceived life quality. In formulating the instructions on administering the Life Graph, Back (1974) stated that the vertical axis should not be identified to subjects so that they will describe their lives in relation to the indicators which seem the most meaningful to them. It seems that the index used by respondents in this study is closely related to perceived quality of life.

All respondents generally see their present life as being of higher quality than the past; the future in turn promises to be better than the present. The prototypical life graph indicates that life quality is seen to successively increase over the years, peaking during the late sixties and early seventies. These results differ slightly from those of Back and Bourque (1970) who found that the life graph for their sample reached its maximum during the early sixties. Within the frame of reference of this study, this is not an important difference. What is important is that life quality is seen to increase throughout the middle adult years.

This same conclusion is not readily apparent from the examination of ladder scales. None of the four indices varied over time. Each group sees their present degree of life quality and satisfaction as equivalent, the past as less than the present and the

future as better. It appears that as men pass through their lives, their evaluation of it is continually revised in terms of the present. Anchored in the present, evaluations are based on the current level of quality: the past is seen to be of lower quality and the future is anticipated to be better. Thus the lack of significant correlations with various indices of time passage does not reveal a complete picture of the variability which can occur over the years. The only correlational evidence of change was the relationship indicating that as the family matures, men see their futures as potentially more satisfying. Lowenthal et al. (1975) found that values most influencing well-being were related to work and the family: interpersonal and expressive values being linked with increases in life satisfaction.

Mancini (1980) reported that life satisfaction was related to contentment with respect to family life, and financial and leisure satisfactions. Demographic variables such as age, marital status or number of children were found to be of little utility. In light of the present study, as the children get older, the family and job become increasingly important as sources of self-identity for men. It is reasonable to expect that these activities become a source of satisfaction, they might also influence the perceived quality of

life.

The men in the 36-40 age group had lower scores on the four indices of life quality and satisfaction. On a pragmatic level, though not statistically significant, these differences may be indicative of the "time crunch" of the family life cycle. The multiple time demands on a man's resources and commitments may act to decrease his contentment with his life at this time. Since the data show that the distance between past and present, and present and future are fairly constant, a decrease in contentment at this time could be manifest by a downward shift in present life quality. As the two other indices are linked to this one, they would also evidence a shift. Time pressures in the early family years may create demands which ultimately lead to decreased perceived life quality. Such effects are related to stages of the family life cycle.

Cohort Effects

There was no conclusive evidence to suggest the existence of cohort effects influencing the data. Back and Bourque (1970) used retrospective Life Graph data to isolate a consistent pattern of effects identified as generational. Their study based on data collected in the 1960's found a consistent decline in life graph

height associated with the years of the Depression. The sample in this study did not show any systematic changes between successive age groups indicative of an effect associated for any described year.

For men in the 36 - 40 age period there was a decline in the indices of life satisfaction and quality of life although these were not found to be statistically significant. There was no corroborative data from older samples reflected by their past life quality indicators.

On a statistical basis there is little evidence of a cohort differences affecting the life quality and satisfaction measures. The stability of the activity patterns could in fact be an artifact of cohort differences although these findings have been substantiated by others. Whether the cognitive changes identified are real or confounded cannot be determined from these data. The existence of confirmatory data on attitudinal changes would tend to support the genuine nature of these effects. However, a longitudinal or lagged panel design is required to more clearly isolate the nature and extent of these effects.

Men and Midlife Crises

A midlife crisis was operationalized as an isolated dip in the life graph. In a longitudinal

study involving the Life Graph and the Holmes and Rahe Social Readjustment Scale (Bourque and Back, 1977) it was found that previously anticipated events such as children leaving home had little effect on the shape of the life graph. In contrast, unanticipated events such as illness had a disruptive effect on individual lives causing a reorganization of the view of one's life reflected as dips in the life graph. The researchers concluded that the life graph "is especially fitted to exploring the impact of unanticipated large life crises (p. 674)".

Based on the information provided by the life graphs of the men in this study, there was no evidence to suggest that midlife "growing pains" are temporally fixed, nor that they are an inevitable part of adult development. Only two-thirds of the men in the study experienced an event which caused a dip in their life graphs, thus the universal nature of the event is questionable. The age dependence of such events was not supported as there was wide variation in the ages at which they were experienced.

This is not to suggest that some of the men in the group whose life graphs did not dip may not have experienced similar events to those which caused dips in the graphs of other groups. In fact it is possible that this did occur, however for these men such events

did not cause a change in how they viewed their lives as reflected in the life graph. This supports the view that crisis is not a necessart part of development (Bromley, 1974; Rosenberg and Farrell, 1975; Vaillant, 1977).

The mean age of occurrence of the mid-life stressors suggests that perhaps the results would be more interpretable within the family life cycle model. A young family man trying to take advantage of all possible opportunities to create a secure future for his family and facing multiple pressures related to familial, community, occupational, and financial obligations would seem to be a prime candidate for a "crisis". Yet the data on family age, and ages of children did not distinguish those who experienced changes in life quality from those who did not. Also, events such as a death or illness can occur quite independently from the family life cycle. The events responsible for these crises appear to be unanticipated non-normative events possible at any time.

Several authors suggest (eg. Jaques, 1970) that the occurrence of such events act as triggers for an individuation process whereby clarification and self-definition occurs. The results of this study indicate that some aspects of a man's relationships with the world undergo change with particular facets

becoming more important as sources of identity and gratification. Such processes appear to be a part of on-going adaptive development and the occurrence of a highly stressful event may simply serve to force awareness of these changes. The changes occur gradually: nowhere did indices show quantum leaps signaling overnight "self-actualization".

The perspectives summarized by Brim (1976) are well represented as causes listed by the men in this study. Job dissatisfaction, changes within the family, health problems, and coping with death were all listed as related to changes in life satisfaction. One subject even listed personal reevaluation as precipitating the dip. Complimenting this was evidence of changing sources of values, and in the nature of social relationships inside and outside the family. Family and intrapersonal relationships have become more enjoyable and important indicating increasing interiority. Men seem to take a more passive approach where initiation of many types of activities are attributed to others. The qualitative and quantitative assessment of achievements most often relates to occupational experiences and may result in the job dissatisfaction found in this study. Overall the seven theoretical perspectives provided useful and valid interpretations of the results documented.

The adult years can be conceptualized as a relatively stable period insofar as the changes suggested in the literature occur gradually and in an ordered fashion. Men over the years shift the focus of many activities closer to home. The family and job become more important. There is an increased sense of control and time adequacy although its passive nature is marked by decreased initiation. Interpersonal activities are seen as less threatening and focus on the family network (Fiske, 1980). These are gradual changes which occur in the attitudes men have towards the commitments that are their lives. It is the unforeseen that is the cause of disruption of this orderly progression. These are events which by their very nature are unpredictable and thus non-normative with respect to when they may influence an individual's life.

Coping With Distress

Though the existence of a normative midlife crisis is doubtful, the reality of the fact that unforeseen events can cause significant changes in how one views their life is evident. That men who had a crisis within the last five years could be so readily distinguished from the rest of the sample on the basis of project dimension scores attests to this fact. It

also suggests that many of the resultant effects are not enduring.

The dimension clusters describing the crisis group are by definition results of the crisis since the criterion was a crisis within the past five years. Comparison of the structural relationships of the project dimensions between the two groups suggests that the constructs generally used in active commerce with the phenomenological world are inadequate, forcing their reformulation to facilitate adaptation.

The clusters representing the non-crisis group are virtually identical to the clusters describing the total sample. They represent dimensions relating to difficulty, control, performance, self-identity and importance. Men in evaluating their commitments and obligations construe them in terms of these general dimensions. Depending on the nature of the activity, some structural variations exist, but the general themes remain unchanged.

The clusters representing the crisis group are atypical in that clusters usually linear in nature have coalesced into a dense time-centered configuration. Difficulty is seen in terms of control: activities seen as being in the control of someone else are seen as stressful. Time adequacy becomes a key issue where time priorities are set by the perceived importance,

self-identity and value congruency of the project. Together, these two clusters suggest that self-reevaluation is in progress where activities seen as being under control and related to self-definition are sanctioned as worthy of time -- other concerns are difficult and use up time.

The reduction or reintegration of five clusters into two creates a bidimensional system where a person's construction of their activities is in terms of two sets of contrasting poles. The closer the individual system approaches a unidimensional status, the fewer available interpretations available for activities. This suggests a cognitively simple system where evaluations are based on an "either-or" policy (Adams-Webber, 1970).

One possible interpretation of the cognitively simplistic arrangement evident in the crisis group is that it is adaptive for self-assessment. Activities can be quickly screened as either necessary or unnecessary to the task at hand. Some degree of support is offered by the category-based discriminant function analyses. Intrapersonal projects are seen as essential to self-identity but in most other aspects are negatively valenced. Family activities are seen as enjoyable and under no time pressure. Health related concerns are also unconstrained by time and although

not a source of enjoyment, are seen as necessary. Occupational commitments appear as crucial within the work context, but creating conflict, being low in enjoyment and incongruent with values. The men coping with crisis withdraw from the workplace seeking support at home. Physical well-being becomes a real concern and self-definition via intrapersonal explorations painful. All of this suggests a personal stocktaking.

It is the low probability of a successful outcome which characterizes the crisis group and their projects. Adams-Webber (1970) writes "that changes within a construct system occur only in response to validation or invalidation of a person's predictive inferences (p. 40)" where invalidation is conceived as the incompatibility of prediction and outcome. When events are ambiguous with the existing structures, reintegration is required to create a new substructure. During crisis resolution, it appears that men isolate themselves cognitively, deriving satisfaction and support from the family, living in the here and now until a new sense of order emerges and direction is evident. According to Rosenberg and Farrell (1975) it is at this time that the reception a man receives from his family dictates whether psycho-social decline will result.

RECAPITULATION

This study was conceived as an investigation into a fairly new area of research using a relatively new research tool in a new way. The available research on the middle years of adulthood suggests that any changes in personality that may occur during these years are mediated by the interaction between a changing individual and a changing social environment. In this respect, Personal Projects Analysis provides an ideal medium for investigation as it is based on an individual's perceptions of his own involvement within a societal context. Taking this a step further, a new methodological approach was used where classes of interactions were evaluated as units to provide an overview of the multiplicity of commitments which together create a life structure.

This method of analysis provided meaningful insight into the issues relating to constancy and change. Both constancy and change were evident: the degree of change related to the type of activity considered and the measure of time used. Changes that occurred appear to be gradual and continuous. Over the course of time men become increasingly home-centered and less instrumental, based on their changing perceptions of their commitments. Actual patterns of

activity remain stable over time.

At any point in time an unanticipated disruptive event can change the view men have of their lives. These events vary in their nature but all seem to have the same net effect. They cause men to take inventory of their lives and assess a course for the ensuing years. A majority of men in the sample experienced events such as these. As men get older, the probability of illness, death or job dissatisfaction affecting their lives increases. The universality of such events has not been demonstrated just as the universality of their effects has not been ascertained.

The methodology used has proven to be useful in examining differences in the structural relationships of the various interlocking facets comprising life structure. The use of the framework based on commitments transcends the oversimplifications that result from a simple work-leisure dichotomy. Such a rigid compartmentalization of activities often blurs their interactive nature. Fiske (1980) has written "if we ask people an open-ended question about their... (commitments) and the contexts in which they occur, we are very likely to find themes common to work and non-work spheres alike, themes denoting meaning which is the essence of commitment (p. 249)".

Future Research

In the classic tradition of experimental investigation as many questions have been raised as have been answered. Some are derived from the limitations of the information provided by the current research; others involve a logical extension of this paradigm.

There are two modifications that future explorations would benefit from, should they be adapted. They would provide a clearer and more complete picture of the dynamic properties of life structure. The first involves measuring the amount of time invested in various activities to determine if the time spent in each type of activity changes with age. This information is essential for a better understanding of how aging effects activity patterns. A second enhancement would be the addition of a social networks analysis (eg. Little, Note 6) to more accurately describe the changes of interdependency and support which occur over the life course. Both these improvements would lessen the ambiguity of the research data and provide a more powerful tool.

Within the realm of adult development, an upward extension of the period covered to include the retirement years would likely provide for easier interpretation of the results. This would also enhance

the continuity past research has provided much data on the young and the old to the exclusion of those in the "void" between.

Perhaps the most fruitful study to succeed the present one is a study of families and the changing interaction of their projects and commitments over the years. With evidence of the efficacy of family age as an indicator of the changes which affect life structure, cross-section or longitudinal investigation of a family's projects would provide a fascinating glimpse of the parallel yet interrelated personal development of members within the family. To be sure, it would provide a more comprehensive view of the factors influencing personal development covering the complete life cycle from infancy to old age.

Footnotes

1. A McQuitty Linkage Analysis involves identifying the correlation of greatest magnitude in each column of a correlation matrix. The overall highest correlation is taken as the central pair of the first cluster. All other identified column high scores which fall within the rows of the central pair are linked to the variable in whose row it is found. These newly isolated variables are removed from the matrix and the process is repeated until all variables have been used.

2. All correlations reported were evaluated using the computer's default option of a one-tailed test of significance.

3. The equation used for calculating the pattern similarity coefficients was:

$$r_p = \frac{2k - \sum d^2}{2k + \sum d^2}$$

where k is twice the median Chi-square value with 16 degrees of freedom and d is the difference between two profiles on each dimension.

4. Since there was no a priori basis for dividing the men into age groups, five equal intervals of five years were used. Larger intervals could lead to a loss of information of possible trends; smaller intervals were not possible due to the sample size.

Reference Notes

- 1 Little, B.R. Personal Projects: A Method and Rationale for Investigation. Unpublished manuscript, Carleton University, Department of Psychology, 1979.
- 2 Palys, T.S. Personal Project Systems and Perceived Life Satisfaction. Unpublished Doctoral Thesis, Carleton University, Department of Psychology, 1979.
- 3 Sheng, D. Personal Project Systems and Human Resource Utilization. Unpublished Honour's Thesis, Carleton University, Department of Psychology, 1979.
- 4 Morrison, M.S. Personal Projects Analysis as a Methodological Tool for the Assessment of Stress. Unpublished Master's Thesis, Carleton University, Department of Psychology, 1979.
- 5 Yard, G.F. Personal Project System Variables as Predictors of Job Satisfaction and Performance Effectiveness in Members of the Royal Canadian Mounted Police. Unpublished Master's Thesis, Carleton University, Department of Psychology, 1980.
- 6 Little, B.R. (Chair), Personal Projects and Social Networks. Symposium presented at the meeting of the Canadian Psychological Association, Toronto, July 1981.

References

- Adams-Webber, J.R. Actual structure and potential chaos: Relational aspects of progressive variations within a personal construct system. In D. Bannister (ed.), Perspectives in Personal Construct Theory, London: Academic Press, 1970.
- Back, K. The perception of self and the study of whole lives. In E. Palmore (ed.), Normal Aging II, Durham, NC: Duke University Press, 1974.
- Back, K. & Bourque, L. Life graphs: Aging and Cohort effects. Journal of Gerontology, 1970, 25, 249-255.
- Baltes, P., Reese, H. & Lipsitt, L. Life span, developmental psychology. Annual Review of Psychology, 1980, 30, 65-110.
- Becker, H.S. Personal change in adult life. Sociometry, 1964, 27, 40-53.
- Block, J. Lives Through Time. Berkeley: Bancroft Books, 1971.
- Block, J. Some enduring and consequential structures of personality. In A. Rabin, J. Aronoff, A. Barclay & R. Zucker (eds.), Further Explorations in Personality. New York: Wiley and Sons, 1981.
- Borland, D. Research on middle age: An assessment. The Gerontologist, 1978, 18(4), 379-386.
- Bourque, L. & Back, K. Life graphs and life events. Journal of Gerontology, 1977, 32(6), 669-674.
- Brim, O.G. Theories of male mid-life crisis. The Counseling Psychologist, 1976, 6, 2-9.
- Bromley, D.B. The Psychology of Human Aging. 2nd ed. Penguin Books, 1974.
- Bronfenbrenner, U. Toward an experimental ecology of human development. American Psychologist, 1977, 32, 513-531.
- Buhler, C. The curve of life as studied in biographies. Journal of Applied Psychology, 1935, 19, 405-409.
- Cantril, H. The Pattern of Human Concerns. New Brunswick, NJ: Rutgers University Press, 1965.

Casady, M. If you're active and savvy at 30, you'll be warm and witty at 70. In S. Zarit (ed.), Readings in Aging and Death: Contemporary Perspectives. New York: Harper & Row, 1977.

Cattell, R.B. Rp and other coefficients of pattern similarity. Psychometrika, 1949, 14, 279-298.

Cattell, R.B. The taxonomic recognition of types and functional emergents. In R. Cattell (ed.), Handbook of Multivariate Experimental Psychology. Chicago: Rand McNally, 1966.

Costa, P. & McCrae, R. Age differences in personality structure: A cluster analytic approach. Journal of Gerontology, 1976, 31, 564-570.

de Grazia, S. The uses of leisure time. In R. Kleemeier (ed.), Aging and Leisure. New York: Oxford University Press, 1961.

Doxiadis, C. Anthropopolis: City for Human Development. New York: W. Dutton & Co., 1974.

Epstein, S. Explorations in personality today and tomorrow. American Psychologist, 1979, 34, 649-653.

Erikson, E. Generativity and ego integrity. In B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Fiske, M. Changing hierarchies of commitment in adulthood. In N. Smelser & E. Erikson (eds.), Themes of Work and Love in Adulthood, Cambridge: Harvard University Press, 1980.

Fraleigh, W. The moving "I". In R. Osterhoudt (ed.) The Philosophy of Sport, Springfield, Il: Charles Thomas, 1973.

Frenkel-Brunswik, E. Adjustments and reorientations in the course of the life span. In B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Gould, R. The phases in adult life: A study of developmental psychology. American Journal of Psychiatry, 1972, 129, 521-531.

Gould, R. Transformations during the early and middle adult years. In N. Smelser & E. Erikson (eds.), Themes of Work and Love in Adulthood, Cambridge: Harvard University Press, 1980.

Grant, C. Age differences in self-concept from early adulthood through old age. Proceedings of the 77th annual convention of the American Psychological Association, 1969, 4(2), 717-718.

Harry, J. Evolving sources of happiness for men over the life cycle: A structural analysis. Journal of Marriage and the Family, 1976, 38, 289-296.

Jaques, E. Work, Creativity and Social Justice. London: Heinemann, 1970.

Kastenbaum, R., Derbin, V., Sabatini, P. & Artt, S. "The ages of me": Towards personal and interpersonal definitions of functional aging. Aging and Human Development, 1972, 3, 197-211.

Kerlinger, F. & Pedhauzer, E. Multiple Regression in Behavioural Research. New York: Holt, Rinehart & Winston, 1973.

Kirk, R. Experimental Design: Procedures for the Behavioural Sciences. Belmont CA: Wadsworth, 1968.

Knox, A. Adult Development and Learning. San Francisco: Jossey-Bass, 1977.

Kuhlen, R. Developmental changes in motivation during the adult years. In B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Lansing, J.B. & Kish, L. Family life cycle as an independent variable. American Sociological Review, 1957, 22, 512-519.

Lasch, C. The Culture of Narcissism. New York: Warner Books, 1979.

Lawrence, B. The myth of the midlife crisis. Sloan Management Review, 1980, 21, 35-49.

Lear, M. Is there a male menopause? New York Times Magazine, January 28, 1973.

Levinson, D. The Seasons of a Man's Life. New York: Ballantine Books, 1978.

Levinson, D. Explorations in biography: Evolution of the individual life structure in adulthood. In A. Rabin, J. Aronoff, A. Barclay & R. Zucker (eds.), Further Explorations in Personality, New York: Wiley & Sons, 1981.

Lowenthal, M. & Chiriboga, D. Social stress and adaptation: Toward a life course perspective. In C. Eisdorfer & M. Lawton (eds.), Psychology of Adult Development and Aging, Washington DC: American Psychological Association, 1973.

Lowenthal, M., Thurner, M. & Chiriboga, D. Four Stages of Life. San Francisco: Jossey-Bass, 1975.

Maas, H. & Kuypers, J. From thirty to seventy. San Francisco: Jossey-Bass, 1974.

Mancini, J. Life satisfaction among middle-aged adults: A research note. Long Term Care and Health Services Administration Quarterly, Winter 1980, 290-295.

McClelland, D. Is personality consistent? In A. Rabin, J. Aronoff, A. Barclay and R. Zucker (eds.), Further Explorations in Personality, New York: Wiley & Sons, 1981.

McQuitty, L. A mutual development of some typological theories and pattern-analytic methods. Journal of Educational and Psychological Measurement, 1967, 27, 21-46.

Mischel, W. & Peake, P. In search of consistency: Measure for measure. In M. Zanna, E. Higgins & C. Herman (eds.), Consistency in Social Behaviour: The Ontario Symposium of Personality and Social Psychology (Vol. 2), Hillsdale NJ: Lawrence Erlbaum, in press.

Neugarten, B. The awareness of middle age. In B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Neugarten, B. Continuities and discontinuities of psychological issues in adult life. Human Development, 1969, 12, 121-130.

Neugarten, B. Personality change in later life: A developmental perspective. In C. Eisdorfer & M. Lawton (eds.), Psychology of Human Development and Aging, Washington DC: American Psychological Association, 1973.

Neugarten, B. Personality and aging. In J. Birren & K. Schaie (eds.), Handbook of the Psychology of Aging, New York: Van Nostrand Reinhold Co., 1977.

Neugarten, B. & Peterson, W. (1957) A study of the American age-grade system. Cited in A. Knox (ed.), Adult Development and Learning, San Francisco: Jossey-Bass, 1977.

Palmore, E & Luikart, C. Health and social factors related to life satisfaction. In E. Palmore (ed.), Normal Aging II, Durham, NC: Duke University Press, 1974.

Peck, R. Psychological developments in the second half of life. In B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Perun, P. & Bielby, D.V.V. Structure and dynamics of the individual life course. In K. Back (ed.), Life Course: Integrative Theories and Exemplary Populations, Boulder: Westview Press, 1980.

Pineo, P. Disenchantment in the later years of marriage. In B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Rappoport, L. Adult development: Faster horses... and more money. Personnel and Guidance Journal, 1976, 55, 106-108.

Raynor, E. Human Development. London: George Allen & Unwin, 1971.

Raynor, E. Human Development 2nd ed. London: George Allen & Unwin, 1978.

Rosenberg, S. & Farrell, M. Changes in the life course at midlife: A pattern of psycho-social decline. Paper presented at the American Sociological Association, San Francisco, 1975.

Rubin, Z. Does personality really change after 20? Psychology Today, 1981, 15, 18-27.

Runyan, W. The life course as a theoretical orientation: Sequences of person-situation interaction. Journal of Personality, 1978, 46, 569-593.

Sheehy, G. Passages: Predicatable Crises of Adult Life. New York: Dutton & Co., 1976.

Smelser, N. & Erikson, E. Themes of Work and Love in Adulthood. Cambridge: Harvard University Press, 1980.

Staats, S. Internal versus external locus of control for three age groups. International Journal of Aging and Human Development, 1974, 5, 7-10.

Stevenson, J.S. Issues and Crises During Middlecence. New York: Appleton-Century-Crofts, 1977.

Thomae, H. Theory of aging and cognitive theory of personality. Human Development, 1970, 13, 1-16.

Thompson, W. & Streib, G. Meaningful activity in a family context. In R. Kleemeier (ed.), Aging and Leisure, New York: Oxford University Press, 1961.

Vaillant, G. Adaptation to Life. Boston: Little, Brown and Co., 1977.

Wilensky, H. Life cycle, work situation, and participation in formal associations. In R. Kleemeier (ed.), Aging and Leisure, New York: Oxford University Press, 1961.

Williams, R. & Loeb, M. The adult's social life space and successful aging. In B. Neugarten (ed), Middle Age and Aging, Chicago: University of Chicago Press, 1968.

Zarit, S. Gerontology -- Getting better all the time. In S. Zarit (ed.), Readings on Aging and Death: Contemporary Perspectives, New York: Harper & Row, 1977.

APPENDIX A

Listing of Project Dimensions
Used in this Study

Explanation of Project Dimensions

IMPORTANCE: The extent to which a project is currently important to the respondent.

ENJOYMENT: How much the respondent enjoys engaging in each project.

DIFFICULTY: The extent to which a project is seen as difficult to carry out.

VISIBILITY: The extent to which relevant people close to the respondent are aware of the respondent's project.

CONTROL: The degree of control over the project felt by the respondent.

INITIATION: The extent to which the respondent feels he has initiated the project.

STRESS: A measure of how stressful an activity is for the respondent.

TIME ADEQUACY: The degree to which the respondent feels that the amount of time spent on each project is adequate.

OUTCOME: The respondent's anticipation of the success of the project.

SELF-IDENTITY: The degree to which the project reflects the kind of person the respondent sees himself to be.

OTHERS' VIEW: A reflection of how important the project is seen to be by other people close to the respondent.

VALUE CONGRUENCY: The consistency of the project with the values guiding the respondent's life.

POSITIVE IMPACT: An estimation of how a project facilitates other projects.

NEGATIVE IMPACT: An estimation of how a project interferes with other projects.

PROGRESS: A rating of how successful your performance in the project has been up to the present.

CHALLENGE: The extent to which each project is demanding or challenging for the respondent.

AGE: A subjective evaluation of how old the respondent "feels" when engaged in the project.

WITH WHOM: A list of the other people involved in the project. Derived from this are four indices.

SOCIABILITY: The number of projects involving other people.

FOCAL INTERDEPENDENCY: The number of times individuals are listed more than once in different projects.

DIFFUSE INTERDEPENDENCY: The number of different people listed in all projects.

TOTAL INTERDEPENDENCY: The total number of people listed in all projects.

APPENDIX B

The Response Package

Carleton University
Ottawa, Canada K1S 5B6

To Study Participants:

The purpose of the study in which you are being asked to participate is to investigate the nature of activities and concerns that are a part of men's lives and to determine how these projects are perceived by them. Being an adult male, you are a member of one of the least studied groups of individuals, especially now when issues regarding women's changing roles and the rights of children are very topical. It is hoped that the present study will shed some light on men's perceptions of the satisfaction and quality of their lives. The eventual goal of this study will be to determine how an individual's projects change with age, by comparing the results of this study with data already collected from samples of children, adolescents and senior citizens.

Participation is, of course, strictly voluntary but I hope you will seriously consider taking the time to complete the package. In the past, many respondents have found the experience to be informative and interesting because the method used is both novel, and meaningful on an individual level. The information gained from you as a participant will be kept strictly confidential. Although there is space for you to identify yourself, your name and address are optional. You might consider filling this in however if you would like to receive a general summary of the research project or if you think that at some time in the future you may have questions regarding your own responses.

The package itself is designed to be completely self-administering and can often be thoughtfully completed within an hour. Although we have tried to anticipate any problems which may develop, should any questions or uncertainties arise, please feel free to contact me. I can often be reached at 231-7485 (Room A829 Loeb) during the day, or messages can be left at the Psychology Department main office (231-3636). In the evenings, you can contact me at 835-2268. A stamped self-addressed envelope has been provided for you to return the completed Personal Projects package.

In addition, if you know of any other men who may be interested in taking part in this study, I would appreciate it if you would pass my phone number along to them.

Your assistance in this study is truly appreciated.

Sincerely,

Brian Mavis

Department of Psychology □ Loeb Building □ (613) 231-3636

INSTRUCTIONS FOR PERSONAL PROJECTS ANALYSIS

We are interested in studying the kinds of activities and concerns that people have at different stages of their lives. We call these personal projects. All of us have a number of personal projects at any given time that we think about, plan for, carry out and sometimes (though not always) complete.

Here are some examples of projects:

- Trying to help Brian get along better with others.
- Overcoming fear of meeting new people.
- Getting more outdoor exercise.
- Completing the Johnstone file.
- Finishing the book Allan loaned me.
- Redecorating my bedroom.
- Trying to clarify my religious beliefs.
- Losing ten pounds.
- Buying a new car.
- Working on my tennis game.
- Finding a part-time job.
- Spending more time with my son.
- Organizing office management more efficiently.

We are also very interested in finding out how people feel about these personal projects, how enjoyable they are and so on. We would appreciate it if you could begin by just writing down in the next ten minutes as many personal projects as you can that you are engaged in or thinking about at the present time -- remember these are not necessarily formal projects, or important ones -- we would prefer you to give us more of the everyday kinds of activities or concerns that characterize your life at present.

PLEASE GO AHEAD AND WRITE DOWN AS MANY AS YOU CAN IN TEN MINUTES.

PLEASE GO AHEAD AND WRITE DOWN AS MANY AS YOU CAN IN TEN MINUTES.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are several small dark spots or smudges scattered across the surface, most notably one near the top left and another near the center right. The overall appearance is that of a clean but slightly worn piece of stationery.

O.K. Now copy the projects in as brief a form as possible on PAGE 6. Just make your description long enough to keep each project clearly in mind. As you can see, there is space for 10 projects. If your initial list contains more than 10, select the 10 that you are most likely to engage in over the next month or so. If you wrote down fewer than 10, see if you can think of several more, or break down some of those you listed into several projects. It is important for everyone to try to fill in 10 projects.

In columns 1 to 16 please rate each one of your projects using any number from 0 to 10 on the following dimensions. Remember that numbers between 0 and 10 can also be used.

- 1.- Importance : how important each project is to you at the present time (use 10 if the project is very important to you and 0 if it is not at all important to you)
- 2.- Enjoyment : how much you enjoy working on each project (use 10 if you enjoy it a great deal and 0 if you do not enjoy it at all)
- 3.- Difficulty : how difficult you find it to carry out each project (use 10 for a project that you find very difficult to carry out and 0 for one that you do not find difficult at all)
- 4.- Visibility : how visible each project is to the relevant people who are close to you, that is how aware are they that you are engaged in this project (use 10 for a project which is very visible to those around you and 0 for a project which is not at all visible to those around you)
- 5.- Control : how much you feel you are in control of each project (use 10 for a project over which you feel in complete control and 0 for a project over which you feel you have no control at all)
- 6.- Initiation : how much you feel responsible for having initiated each project (use 10 if you feel fully responsible for having initiated a project and 0 if you feel you have taken no part whatsoever in initiating a project)

- 7.- Stress : how stressful it is for you to carry out each project
(use 10 if a project is very stressful to carry out
and 0 if a project is very relaxing to carry out)
- 8.- Time adequacy : how much you feel that the amount of time you spend
working on each project is adequate
(use 10 if you feel that the amount of time spent on
a project is perfectly adequate and 0 if you feel,
for one reason or another, that the amount of time
you spend working on a project is not at all adequate)
- 9.- Outcome : what you anticipate the outcome of each project to be
(use 10 if you think that a project will be extremely
successful and 0 if you think that a project will
turn out to be a total failure)
- 10.- Self-identity : how typical of you each project is, that is the extent
to which a project reflects what kind of a person
you really are (use 10 if a project is very typical
of you and 0 if it is not at all typical of you)
- 11.- Others' view : how important each project is seen to be by
relevant people who are close to you
(use 10 if a project is seen by others as very
important and 0 if it is seen as not important at all)
- 12.- Value congruency: to what extent is each project consistent with the
values which guide your life
(use 10 if a project is totally consistent with your
values and 0 if a project is totally at odds with
them)
- 13.- Positive impact : how much you feel that each project helps the others.
Don't worry whether it hinders or not, we'll get to
that on the next dimension (use 10 to indicate that
a project greatly increases your chances of working on
other projects and 0 to indicate that a project has no
positive effect)
- 14.- Negative impact : how much you feel that each project hinders other
projects (use 10 to indicate that a project seriously
hinders your chances of working on other projects and
0 to indicate that it does not have any negative effect)
- 15.- Progress : how successful you have been in a project so far, or if
you have not yet started the project, how successfully
have you thought about it (clearly, confused, etc.)
(use 10 to indicate that you have been very successful
or have thought about it successfully and 0 to indicate
that you have had no success at all or have not thought
about it very successfully)
- 16.- Challenge : to what extent is each project demanding and challenging
to you (use 10 if a project is most challenging and 0
if it is not challenging at all)

You have probably heard the expression "you are as old as you feel".

Typically, how old we feel depends on various aspects of the activity we are engaged in. Think about the activities you have listed. In column 17, indicate in years "how old you feel" when you engage in each of the projects listed

In column 18, please write down the names of the other people involved in each project with you. You may use only the first names but include the initial of the last name to differentiate people who share the same first name. If there is no one else involved in the project with you, leave the corresponding space blank. If the project involves a large number of people, such as a team, class or community group, just name the group and indicate approximately how many people are involved (eg. class27, team16 etc.)

List of Projects										Personal Projects Analysis	
1										Importance	1
2										Enjoyment	2
3										Difficulty	3
4										Visibility	4
5										Control	5
6										Initiation	6
7										Stress	7
8										Time Adequacy	8
9										Outcome (likelihood of Success)	9
10										Self Identity (How typical of you?)	10
										Others' View (of importance)	11
										Value Congruency (consistency with your values)	12
										Positive Impact	13
										Negative Impact	14
										Progress	15
										Challenge	16
										Age	17
										With whom	18

LADDER OF LIFE SCALE

Below is a picture of a ladder of the quality of life. The top of the ladder represents the best quality of life that you hope to attain for yourself--your ideal state of life quality. The bottom of the ladder represents the worst quality of life that you could expect to attain--a situation where all your fears and worries come true. Think about those two situations for a moment, and try and imagine what each of them would be like.

Now, if the best quality of life that you hope to attain for yourself is represented by the number ten (10) at the top of the ladder, and if the worst quality of life that you could expect to attain is represented by the number zero (0) at the bottom of the ladder, where on the ladder would you place your present life situation? Mark this number with an N (Now).

Now try to imagine what life was like 5 years ago using the same scale. Indicate this with a P (Past).

Finally, imagine what your life will be like five years from now. Mark this with an F (Future).

10
9
8
7
6
5
4
3
2
1
0

Best quality of life you hope to attain

Worst quality of life you could expect to attain

LIFE SATISFACTION SCALE

Below is a scale that we would like you to use to tell us how satisfied you are with your life as a whole right now, regardless of how you rated your quality of life as being.

If you're completely satisfied with your life as a whole as it is now, you would circle the number ten (10). If you are completely dissatisfied with your life as a whole as it is now, you would circle the number zero (0). If you are neither completely satisfied nor completely dissatisfied, you would use one of the numbers from 1 to 9 to indicate your current level of satisfaction. Remember, the higher the number, the more satisfied you feel with your life as a whole as it is right now.

In general, how satisfied or dissatisfied
are you with your life as a whole as it is
right now? Circle the number on the scale
below that comes closest to how you feel.

0 1 2 3 4 5 6 7 8 9 10

Completely
Dissatisfied

Neutral

Completely
Satisfied

LIFE GRAPH

Visualize how your life could be put into a graph. That is, ups and downs, level periods, rises and declines, etc. Assuming that you live until at least 80 years of age, how do you think a graph of your life would look? Indicate this by completing the graph below. The graph is divided into 5 year intervals. If you wish to include an event which occurred more towards the middle of a five year interval, do so, indicating the appropriate age on the horizontal axis.

In the space below (and on the back if necessary) describe the particular events responsible for the various peaks and valleys on your life graph.

"AGES"

Most people have other 'ages' besides their official or chronological age. We may feel or look younger or older than our chronological age. The questions below all have something to do (directly or indirectly) with the various possible ages of you.

1. Most of the time I feel:

- ☐ quite a bit older than most people my age
- ☐ a little older than most people my age
- ☐ neither younger nor older than most people my age
- ☐ a little younger than most people my age
- ☐ quite a bit younger than most people my age.

2. Most of the time I look:

- ☐ quite a bit older than most people my age
- ☐ a little older than most people my age
- ☐ neither younger nor older than most people my age
- ☐ a little younger than most people my age
- ☐ quite a bit younger than most people my age.

3. My interests and activities are most like those of:

- ☐ people who are quite a bit older than myself
- ☐ people who are a little older than myself
- ☒ people who are neither younger nor older than myself
- ☐ people who are a little younger than myself
- ☐ people who are quite a bit younger than myself.

4. People who know me well regard me as:

- ☐ quite a bit older than most people my age
- ☐ a little older than most people my age
- ☐ neither younger nor older than most people my age
- ☐ a little younger than most people my age
- ☐ quite a bit younger than most people my age.

5. I feel as though I were about age _____. (fill in an approximate age)

6. I look as though I were about age _____.

7. I do most things as though I were about age _____.

8. My interests are mostly those of a person about age _____.

9. If there is anything about me that is "young for my age", it is probably:

10. If there is anything about me that is "old for my age", it is probably:

DEMOGRAPHIC INFORMATION

Age: _____

Sex: _____

Marital Status:

single _____

married _____ How many years have you been married? _____

separated _____

widowed _____ How many years were you married? _____

divorced _____

Number of Children: _____

Age of Each Child . / / / / / / / _____

Occupation: _____

Educational Background: (check highest level attained)

high school (grade completed) _____

certificate (training school) _____

college (applied arts & technology) _____

university _____

graduate school / _____

professional certification _____

***** THIS SECTION IS OPTIONAL *****

Please Print

NAME _____

ADDRESS _____

IF THERE ARE ANY OTHER POINTS THAT YOU FEEL ARE IMPORTANT IN ORDER FOR OTHERS TO UNDERSTAND THE COURSE YOUR LIFE HAS TAKEN, USE THE BACK OF THIS PAGE TO DISCUSS THEM OR ANY OTHER PERSONAL COMMENTS YOU WISH TO MAKE.

APPENDIX C

Categories Used in Classifying
Personal Projects.

Category Classification

CULTURAL-ESTHETIC-ACADEMIC: dealing with cultural-esthetic pursuits; the acquisition of new knowledge or technical skills; leisure reading, music, literature.

INTERPERSONAL: deals with other people on a personal basis (eg. friends), but excluding members of the immediate family living in the same house or coworkers on the job.

INTRAPERSONAL: dealings with changes relating to yourself such as outlook, habits and attitudes; psychical changes as opposed to physical changes.

RECREATION-HOBBIES: most types of leisure activities, hobbies, collections and sports; includes vacations etc.

VOCATIONAL: relating with future plans in the present or another occupation; finding another job; looking for a job; starting a second business.

OCCUPATIONAL-SOCIAL: dealing with people and their relationships within the workplace; interpersonal job-related activities.

OCCUPATIONAL-TASK: dealing with the actual work and task completion on the job; maintenance, organizing files; report writing, planning meetings.

ESTATE: repair and maintenance of the home, lawn, garden, car, boat or any other material assets; "working around the house".

FAMILY: projects which involve other members of the family as the focus, either individually or in a group; where being with them is the important aspect.

SPIRITUAL: the clarification or expression of religious beliefs.

HEALTH-BODY: projects relating to physical fitness and health; improving one's appearance or health; an expression of a concern about health eg. losing weight.

COMMUNITY: involvement in activities related to other groups of people such as church or service clubs; volunteer work; coaching children's sports.

FINANCE-LEGAL-CONSUMER: relating to investments, legal documents, taxes, spending money in the acquisition of

services, money management, purchasing or selling items.

METAPROJECTS: projects focussing on the orchestration and organization of other projects; planning timetables eg. organizing my time better; plans for vague future goals eg. planning for my retirement.

OTHER: a project that cannot be classified as any above.

APPENDIX D

Project Profiles

Table 27

Profiles for Interpersonal, Intrapersonal
Recreational and Cultural Projects

Table 28

Profiles for Family, Spiritual,
Health and Community Projects

Table 29
 Profiles for Vocational, Estate,
 and Occupational Projects

Table 30

Profiles for Financial, Sports,
Academic and Meta- Projects

APPENDIX E

McQuitty Linkage Analysis of Project Dimensions
Within Categories

Figure 7

McQuitty Linkage Analysis of
Project Dimensions for Interpersonal
Projects

N= 58

Figure 8

McQuitty Linkage Analysis of
Project Dimensions for Intrapersonal
Projects

N= 70

Figure 9

McQuitty Linkage Analysis of
Project Dimensions for Vocational Projects

Initiation $\leftarrow$.50 $\leftarrow$ Negative $\longleftrightarrow$.60 $\longleftrightarrow$ Stress $\leftarrow$.59 $\leftarrow$ Difficulty

Control $\leftarrow$.33 $\leftarrow$ Time Adequacy $\longleftrightarrow$.58 $\longleftrightarrow$ Progress $\leftarrow$.45 $\leftarrow$ Outcome

N= 29

Figure 10

McQuitty Linkage Analysis of
Project Dimensions for Occupational- Social
Projects

N= 11

Figure 11

McQuitty Linkage Analysis of
Project Dimensions for Occupational- Task
Projects

Difficulty $\xleftrightarrow{.57}$ Stress $\xleftarrow{.29}$ Negative Impact

Importance $\xleftrightarrow{.54}$ Challenge $\xleftarrow{.35}$ Enjoyment

$\uparrow$
.49

Others Vw

$\uparrow$
.46

Visibility

Positive Impact $\xrightarrow{.43}$ Self-Identity $\xleftrightarrow{.45}$ Value Congruency

Outcome $\xleftrightarrow{.41}$ Control $\xleftarrow{.29}$ Initiation

Progress $\xleftrightarrow{.39}$ Time Adequacy

N = 129

Figure 12

McQuitty Linkage Analysis of
Project Dimensions for Estate Projects

N= 391

Figure 13

McQuitty Linkage Analysis of
Project Dimensions for Family Projects

N = 106

Figure 14

McQuitty Linkage Analysis of
Project Dimensions for Spiritual Projects

N = 14

Figure 15.

McQuitty Linkage Analysis
of Project Dimensions for Health Projects

N = 118

Figure 16

McQuitty Linkage Analysis of
Project Dimensions for Community Projects

N = 50.

Figure 17

McQuitty Linkage Analysis of
Project Dimensions for Financial Projects

Negative — .47 → Stress $\xleftrightarrow{.59}$ Difficulty ← .53 — Challenge

Others' View $\xleftrightarrow{.54}$ Visibility ← .27 — Enjoyment

Control — .41 → Outcome — .48 → Time Adequacy $\xleftrightarrow{.49}$ Progress

Self-Identity $\xleftrightarrow{.48}$ Value Congruency ← .44 — Positive Impact

$\uparrow$.32 $\uparrow$.32
 | |
 Initiation Importance

N = 114

Figure 18

McQuitty Linkage Analysis of
Project Dimensions for Metaproject

N = 17

Figure 19

McQuitty Linkage Analysis of
Project Dimensions for Sports Projects

N= 29

Figure 20

McQuitty Linkage Analysis of
Project Dimensions for Academic Projects

N = 32

Figure 21

McQuitty Linkage Analysis of
Project Dimensions for Cultural Projects

Positive Impact $\rightarrow$.32 $\rightarrow$ Self-Identity $\xleftrightarrow{.70}$ Value Congruency

Negative Impact

.39

Outcome

.44

Control

$\xleftrightarrow{-.61}$

Difficulty

.57

Challenge

.48

Importance

$\leftarrow$.55

Stress

$\leftarrow$.53

Enjoyment

Others Vw $\rightarrow$.30 $\rightarrow$ Progress $\xleftrightarrow{.54}$ Time Adequacy $\leftarrow$.39 $\rightarrow$ Initiation

.45

Visibility

N= 42

END

0	8	0	6	8	3
---	---	---	---	---	---

FIN